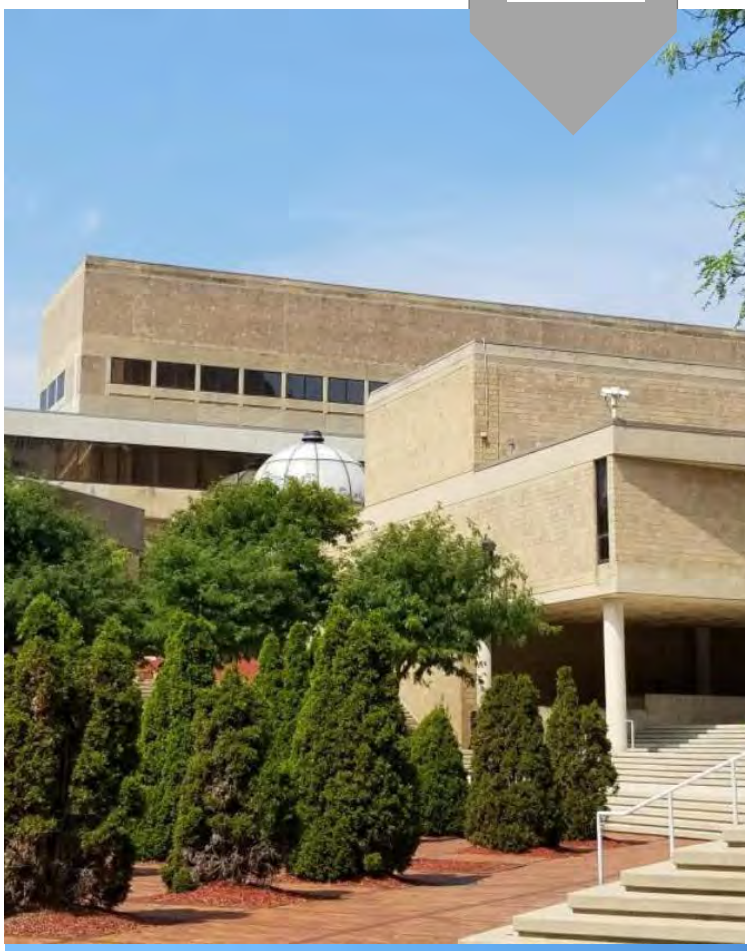
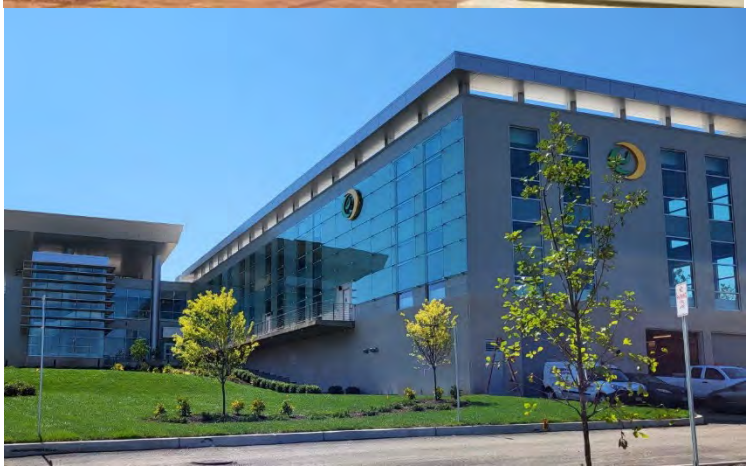
ESSEX COUNTY COLLEGE

CATALOG 2025 - 2026

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Essex County College
essex.edu
(973) 877- 3100

Main Campus
303 University Ave
Newark, NJ 07102

West Essex Campus
730 Bloomfield Avenue
West Caldwell, NJ 07006

June 30, 2026

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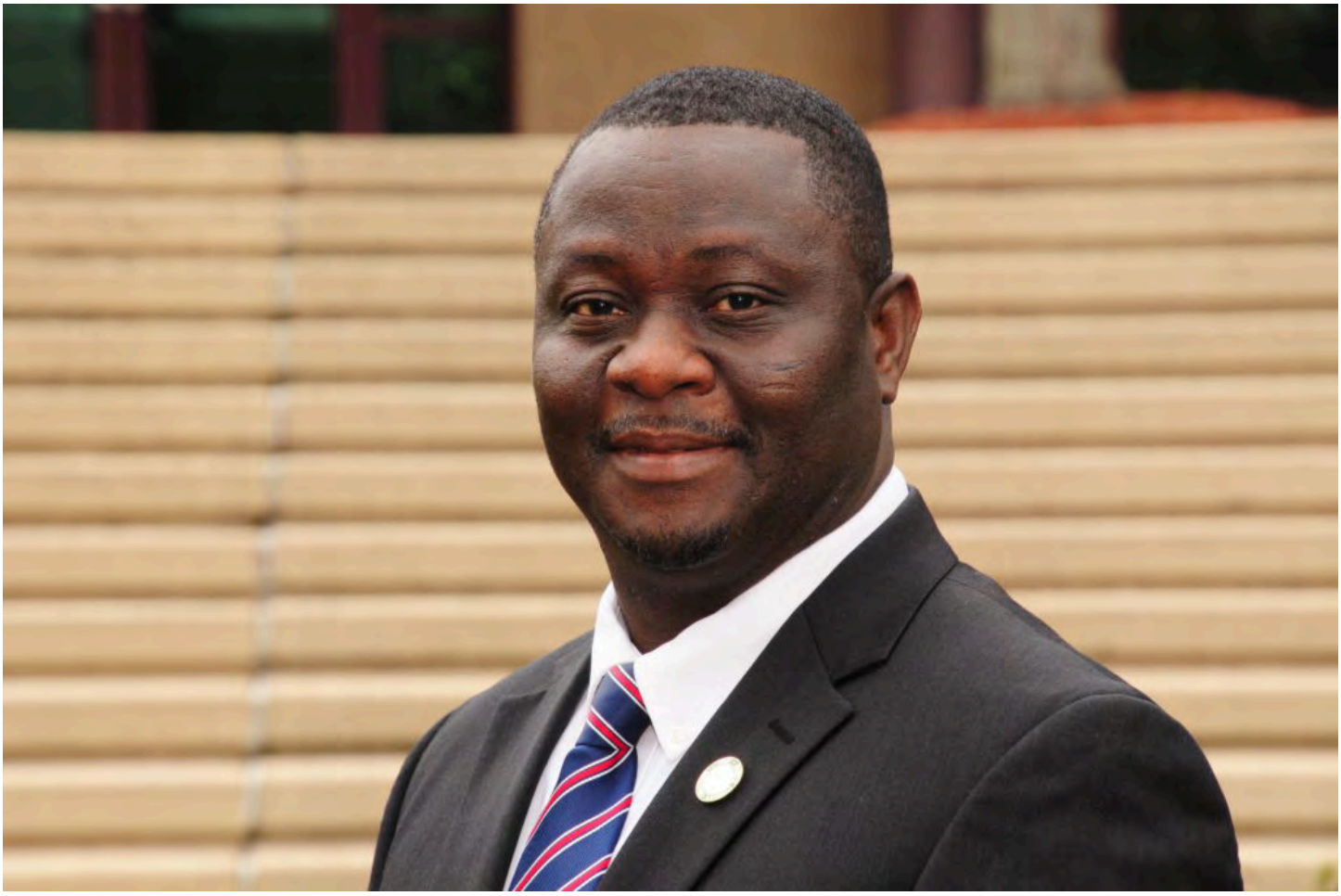
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HOME

A Message From Dr. Augustine Boakye, President



Welcome to Essex County College (ECC). The faculty and staff of this institution have served the diverse needs of New Jersey residents as well as those from other states and nations around the world for over 50 years. We are fully committed to our open access policy of equity and inclusion.

We have much to offer at ECC. Here, you can earn an associate degree that can be transferred to a four-year institution or receive training to help secure employment. Our graduates transfer to Rutgers University, Montclair State University, New Jersey Institution of Technology (NJIT), William Paterson University, Kean University and many other institutions with full junior status.

Education is about empowering students to succeed in a rapidly changing global marketplace. In addition to working on associate degrees, many students attend the College to improve their English or to learn English as a second language. Others gain skills through workforce development and short-term training. At ECC, a quality education is affordable, and we strive to help you reach your goals.

Our digital catalog is designed to provide students with an easier way to (1) locate information when applying to the College, (2) decide on a major or certificate program, or (3) determine requirements for graduation. We invite you to peruse the 2025-2026 Catalog to find a program which interests you.

We thank you for choosing ECC. I look forward to celebrating your successes as you pursue higher education or workforce training and development. As Nelson Mandela stated, "*Education is the Most Powerful Weapon Which You Can Use to Change the World*." ECC has made a difference in the lives of countless individuals. We can make a difference in your life as well.

Best wishes and be well.



Notice: The policies, requirements, course offerings, schedules, activities, tuition and fees in this catalog are subject to change without notice at any time at the sole discretion of the administration. Such changes may be of any nature, including but not limited to the elimination of programs, classes, or activities; the relocation or modification of the content of any of the foregoing; and the cancellation of scheduled classes or other academic activities. Payment of tuition or attendance in any class shall constitute a student's acceptance of the administration's rights as set forth above.



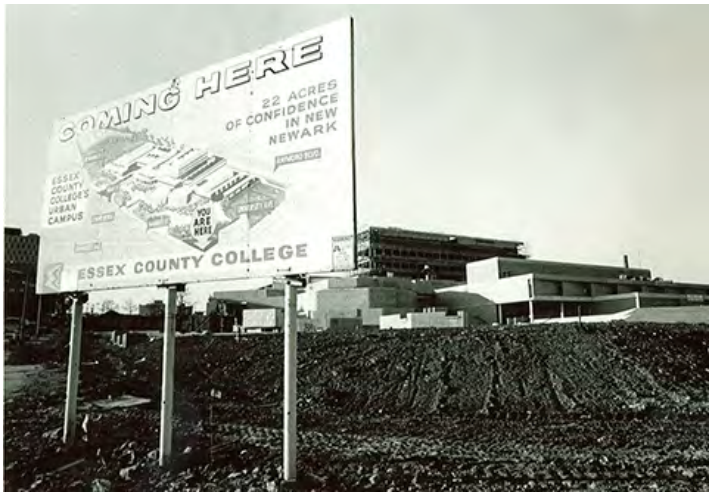


eCatalog

ABOUT ESSEX COUNTY COLLEGE

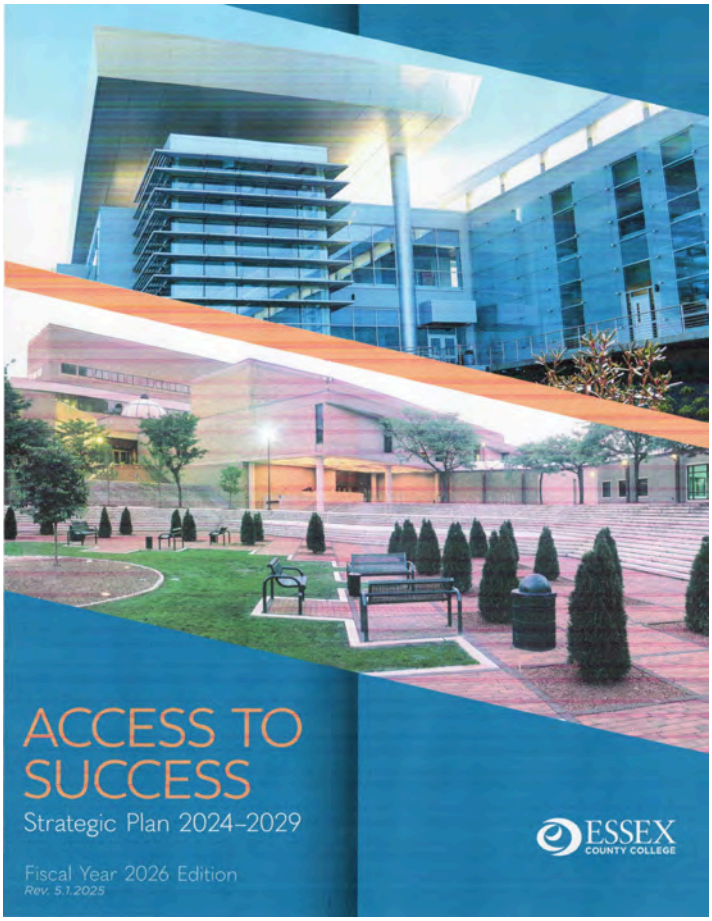


ECC was established in 1966 as the public, two-year community college of Essex County and admitted its first students in temporary quarters in downtown Newark in 1968, and moved to its current permanent site in the heart of the University Heights district of the city in 1976. Newark is New Jersey's largest city, 10 miles west of New York City.



- More than 25,000 people enroll each year in ECC's various degree and non-credit programs, including students from over 70 foreign countries.
- The curriculum features over 70 majors and 564 courses a part of a wide range of transfer and career programs.
- ECC is adjacent to Rutgers University-Newark and the New Jersey Institute of Technology.
- ECC sends more transfer students to Rutgers-Newark, New Jersey Institute of Technology (NJIT), and Bloomfield College than any other two-year college in New Jersey.
- Tuition and fees for an ECC student are significantly lower than at 4-year colleges and universities in New Jersey.


Interior renderings of the new campus



The College periodically assesses its recent history and current status to develop its future direction, resulting in a Strategic Plan to guide our efforts for the next five years. The major Strategic Goals are listed below:

GOAL I

Increase student enrollment through innovative educational programs, targeted marketing and enhanced onboarding practices built on a foundation of effective communication.

GOAL II

Increase student retention and graduation through the implementation of customized academic pathways and holistic support services.

GOAL III

Foster and promote an institutional climate of belongingness that exemplifies teamwork, embraces learning and innovation, and is committed to diversity, equity, and inclusion.

GOAL IV

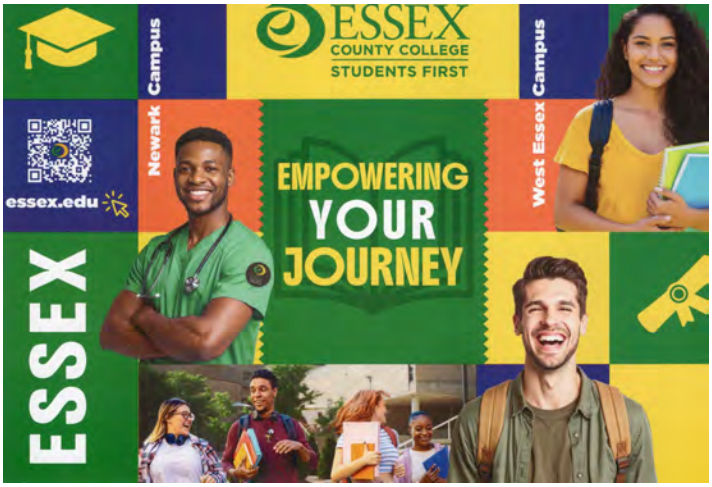
Strengthen and expand external and community partnerships to further develop student opportunities, better serve our community, and expand the College's network of support.

GOAL V

Continue to fortify the College' financial stability to foster operational sustainability, and program expansion.

GOAL VI

Continue to align the College's physical and technological infrastructure to best support student success, employee productivity, and foster creativity/innovations.



Mission and Values Statement



MISSION

Essex County College is an open access community college that serves the diverse needs of students through comprehensive educational programs, training and continuing education. Essex County College is dedicated to academic excellence and the success of its students.

VISION

A Beacon for Education and Knowledge, Essex County College attracts people who seek a better life through education. We transform lives, broaden learning and empower students to achieve their full potential. Our College community and graduates are change agents and leaders who contribute to the health, vitality and advancement of society.

VALUES

Essex County College affirms the following principles, values and beliefs:

Teaching and Learning:

We affirm teaching and learning as our primary purpose. The College seeks to instill in students general and specialized knowledge, the ability to think critically, and a commitment to civic responsibility. We value academic freedom and support the open exchange of ideas and experiences.



Excellence and Accountability:

We believe in creating a learning environment that fosters high expectations for achievement. The College is committed to rigorous academic standards, faculty excellence, and responsive support services that enable students to reach their full academic, professional and personal potential. We provide excellent programs that utilize technology, demonstrate innovation, and undergo evaluation to ensure consistent and outstanding performance.

Community and Engagement:

We support programs that enhance the economic and social development of Essex County. We value our role as a vital community resource and are dedicated to forging effective partnerships with our many constituencies.



Diversity and Access:

We embrace the rich diversity of our student population and our employees. We recognize the historical, intellectual, and artistic contributions of all cultures, and promote an atmosphere in which critical examination of perspectives is accepted and encouraged. We believe all people should have access to affordable, quality higher education that will prepare them to succeed in a dynamic world.

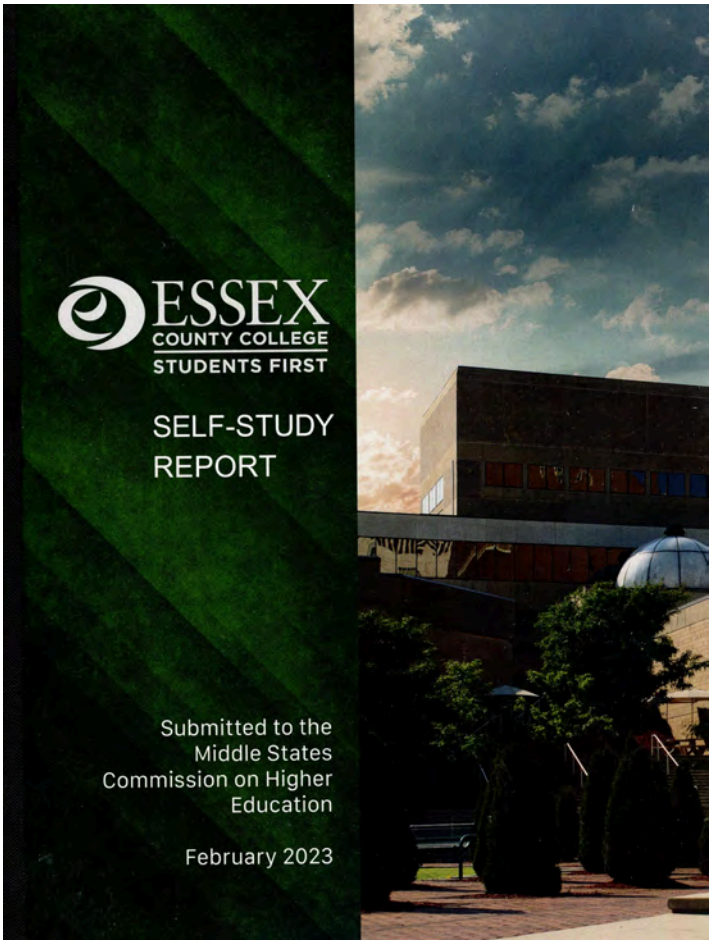
Legacy and Transformation:

We honor our history and valued traditions of Essex County College, the City of Newark and the County of Essex. We also welcome the transformative power of education to change lives. Building upon our past achievements, we eagerly embrace the future by pursuing innovations in teaching, administration, and student service.



Accreditation and Licensure

Essex County College has been accredited by the Middle States Association of Colleges and Schools since 1974. It is licensed by the United States Department of Education and the State of New Jersey to operate and award associate degrees and certificates. All professional licensure programs offered by the College are accredited by their appropriate accrediting agencies.



Business Division's Accounting and Business Programs are accredited by the **Accreditation Council for Business Schools and Programs (ACBSP),** https://acbsp.org (https://acbsp.org/)**.**

The programs in Civil Engineering Technology, Electrical Engineering Technology and Mechanical & Manufacturing Engineering Technology are accredited by the **Engineering Technology Accreditation Commission of ABET**, https://www.abet.org (https://www.ABET.org).

The A.S. degree in Paralegal Studies is approved by the **American Bar Association,** https://www.americanbar.org (https://www.americanbar.org/).

The A.A.S. degree in Human and Social Services is accredited by the **Board of the Council for Standards in Human Service Education (CSHSE)**, https://www.cshse.org/.

The Physical Therapist Assistant (PTA) program is accredited by the **Commission on Accreditation in Physical Therapy Education (CAPTE),** https://www.capteonline.org (https://www.capteonline.org/).

The Radiography program is accredited by the **Joint Review Committee on Education in Radiologic Technology (JCERT),** https://www.jrcert.org (https://www.jrcert.org/).

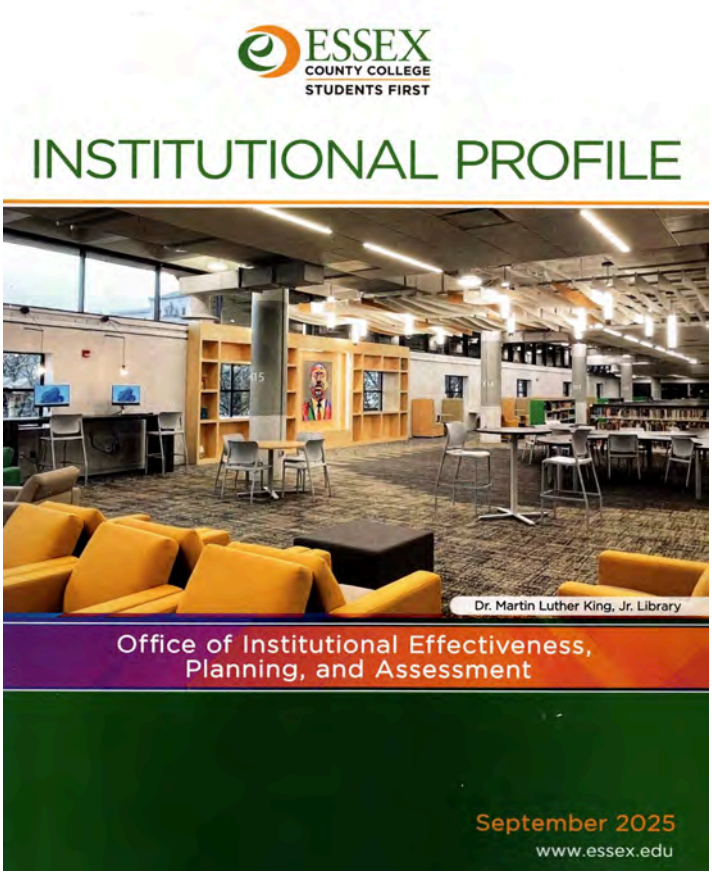
The Vision Care Technology program is accredited by the **Commission on Opticianry Accreditation (COA),** https://coaccreditation.com (https://coaccreditation.com/).

The Nursing programs are accredited by the **New Jersey Board of Nursing, (https://njccn.org/nj-board-of-nursing/)**https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the **Accreditation Commission in Nursing (ACEN),** https://www.acenursing.org (https://www.acenursing.org/).

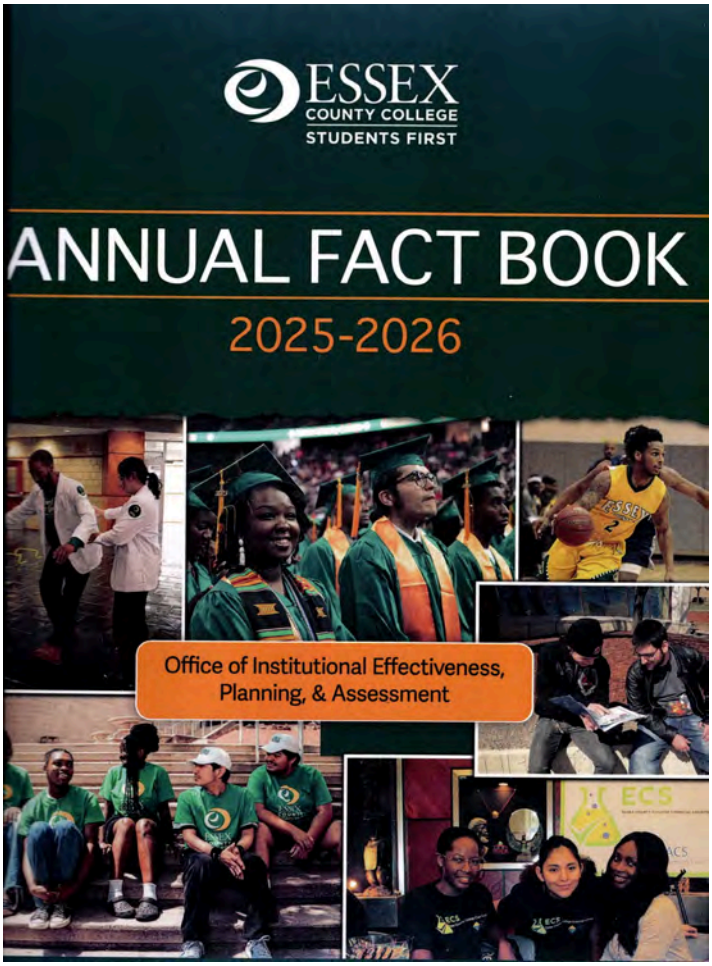


Essex Facts

Institutional Profile (https://www.essex.edu/institutional-research/)



Annual Fact Book (https://www.essex.edu/wp-content/uploads/2026/02/Fact-Book-2025-2026-Full-Web-Version.pdf)



Fast Facts (https://www.essex.edu/wp-content/uploads/2025/07/ECC-Fast-Facts-Fall-2024-updated-6.16.25.pdf)





Directions

Main Campus

303 University Avenue, Newark, NJ 07102 (973) 877-3000



BY CAR VIA MAJOR HIGHWAYS

GARDEN STATE PARKWAY TO ROUTE 280 EASTBOUND - Take GS Parkway exit 145 to Route 280 eastbound. Stay to the right on Rt. 280 following signs for Harrison. Get off at exit 14 (Martin Luther King Jr. Boulevard). Turn right onto King Blvd. and go through fourth light at Warren Street. ECC campus is located on both sides of King Blvd, and extends to the West Market Street intersection. For parking, turn right on West Market Street. Go one block and turn right into ECC Parking Deck.

NJ TURNPIKE (1-95) TO ROUTE 280 WESTBOUND - Take NJ Turnpike exit 15W and proceed on Route 280 westbound. After crossing drawbridge, take second Newark exit, which is MLK Jr. Boulevard. Turn left onto King Blvd. and go through the fifth light at Warren Street. ECC campus is located on both sides of King Blvd, and extends to the West Market Street intersection. (See GS Parkway directions for parking.)

FROM THE WEST OR EAST USING ROUTE 78 - Take Route 78 exit 56 (Clinton Avenue). Turn right onto Clinton Ave. and go less than a mile to MLK Jr. Boulevard. Turn left onto King Blvd. and proceed one mile to ECC campus located at the intersection of West Market Street. For parking, turn left onto West Market Street and go one block to make right into ECC Parking Deck.

FROM OTHER HIGHWAYS - Highways 1 & 9, 22, 3, & 46 all connect with Route 21, which becomes McCarter Highway in Newark. At junction of McCarter Highway and Raymond Boulevard, turn left onto Raymond Blvd. and proceed to University Avenue. Turn left at University Ave., go to first light, and make right onto West Market Street. Proceed uphill to ECC

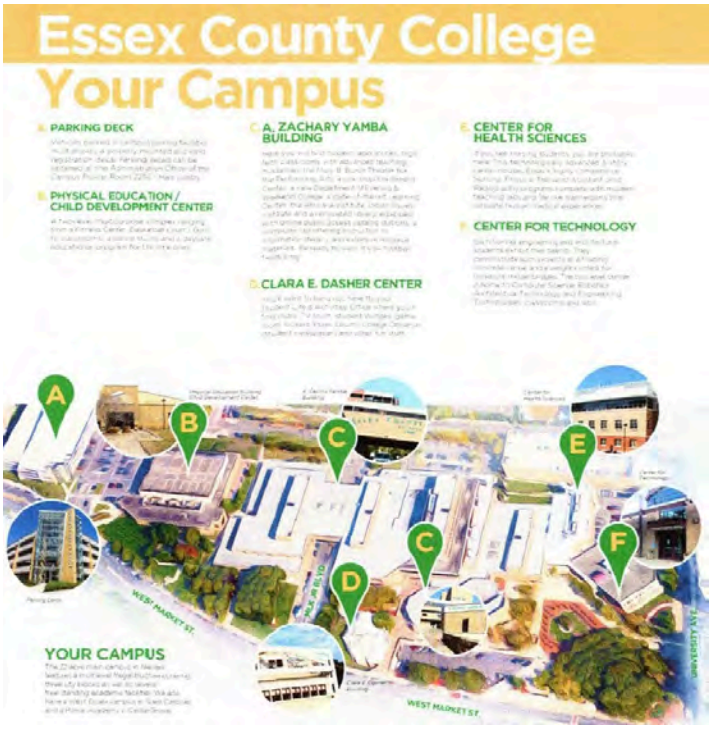
campus, located at the intersection of West Market St. and Martin Luther King Jr. Boulevard. (See Route 78 directions for parking.)

BY PUBLIC TRANSPORTATION AMTRAK, PATH, MOST NJ TRANSIT RAL LINES TO NEWARK PENN STATION - At Penn Station, take Newark City Subway to second stop, which is Washington Street. Follow signs to the University Avenue entrance to the ECC campus.

NJ TRANSIT MORRIS & ESSEX RAIL LINE - Get off at Newark (Broad Street). Walk seven blocks south on University Avenue to the ECC campus. You can also take NJ Transit bus #72 or #76, get off on University Ave. at Raymond Boulevard, and then walk one block south to ECC.

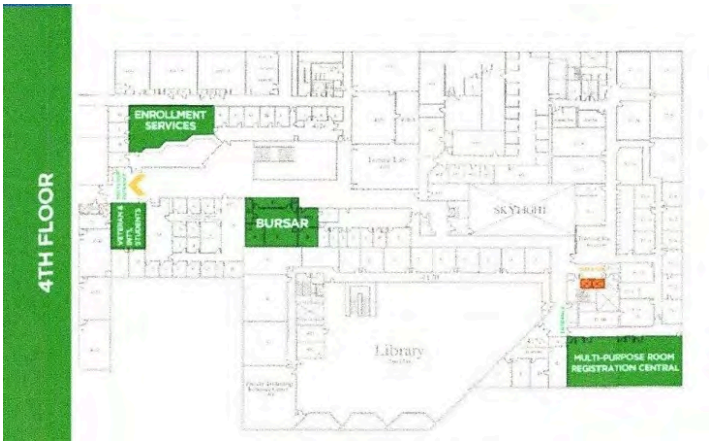
BUS TRANSPORTATION - More than 30 bus lines from suburban Essex County and other parts of the NJ/NY metropolitan area, including Newark Airport and New York City, come to downtown Newark. Follow signs to University Heights and ECC campus.











WEST ESSEX CAMPUS

730 Bloomfield Avenue, West Caldwell, NJ 07006

BY CAR VIA MAJOR HIGHWAYS

ROUTE 80 EAST TO ROUTE 46 EAST - Follow Route 46 East until it divides at sign for Newark/The Caldwells. Bear right at the sign and continue until the road becomes Bloomfield Avenue. Follow Bloomfield Avenue just past the light at Passaic Avenue. The Campus building is located on the right, just past the shopping center.

ROUTE 80 WEST - Take 80 West to exit 52 (Lincoln Park/Fairfield/The Caldwells). Keep bearing right at exit under the highway onto Passaic Avenue. Stay on Passaic Avenue and at the seventh traffic light make a left onto Bloomfield Avenue. The Campus building is located on the right, just past the shopping center.

GARDEN STATE PARKWAY TO ROUTE 280 WEST - Take GS Parkway North to exit 145 to Route 280 West and exit 4B. Turn left at the traffic

light (Eagle Rock Av) and turn left at the traffic light onto Passaic Av. Continue on Passaic Av for several miles and make a right at the Passaic Av traffic light at Bloomfield Avenue. The Campus is located just past the shopping center on the right.

BLOOMFIELD AVENUE FROM NEWARK - Proceed on Bloomfield Avenue from Newark approximately 13 miles. Continue through Bloomfield, Glen Ridge, Montclair, Verona, and Caldwell into West Caldwell. Make a left just before the light at Passaic Avenue.



BY PUBLIC BUS TRANSPORTATION FROM NEWARK –

The #29 (most direct route) and #71 buses travel from Newark Penn Station to Bloomfield and Passaic Avenues in West Caldwell. After exiting from the bus, cross Bloomfield Av at the light, turn left and walk a short distance to the Campus building.

Connections to #29 from other Bus Lines include the #11, #13, #20, #24, #27, #34, #40 and #52. Consult the individual schedules for more information.

The #7 - Newark Light Rail Subway connects to the #29 at Bloomfield Avenue in Newark.

The NJT Montclair-Boonton Train connects to the #29 in downtown Montclair.

Some relevant maps are shown below (printed maps & schedules are available at Newark Penn Station):













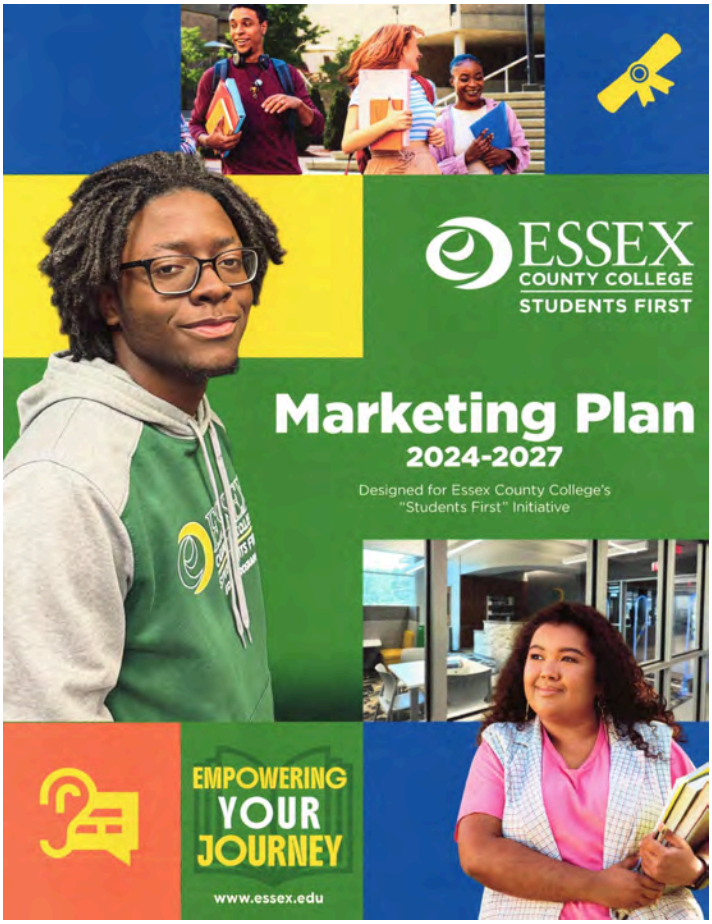
Directory

The official Essex County College Directory contains information about the major offices and personnel at the College. It is organized into the following format:

First Name	Last name	Title	Department	Phone	Location	Email

and is accessible at www.essex.edu/directory (http://www.essex.edu/directory).

The General Information phone number operates as a switchboard with the capability of connecting to any office or individual: (973) 877-3000.





Facilities & Small Classes

Outstanding Facilities



Essex County College has a **Main Campus** in Newark and a **West Essex Branch Campus** in West Caldwell, serving the western part of Essex County. Both campuses are governed by the same administration, a common faculty, and similar resources. Most differences are in scale, but not in essentials.



ESSEX COUNTY COLLEGE

FACILITIES MASTER PLAN

ADDENDUM

2025 EXTENSION



At ECC most (over 99%) classes are small, usually with no more that 24 to 30 students, ensuring that students receive personal attention. Faculty not only have outstanding mastery of their subject areas but are also known for their personal commitment to their students.

Main Campus

The 22-acre **Main Campus** in Newark features the A. Zachary Yamba multilevel megastructure covering three city blocks, the Cleo Hill, Sr. multipurpose Physical Education Building/Child Development Center complex, the Center for Health Services, the Center for Technology, and the Clara E. Dasher Student Center.



Among the resources of the 502,000-square-foot megastructure are state-of-the-art laboratories, high tech classrooms with advanced teaching modalities, the Mary B. Burch Theater for Performing Arts, and a newly renovated library equipped with online public access catalog stations, a computer lab for instruction in information literacy, and extensive resource materials.

Center for Technology



Center for Health Sciences



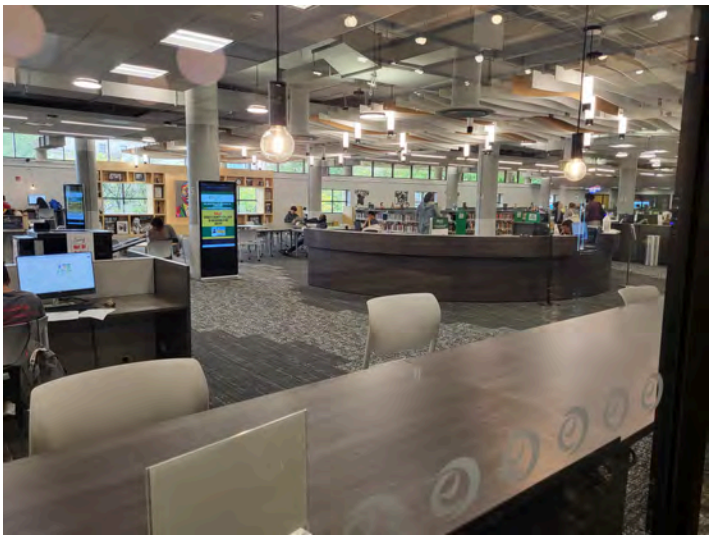
Mary Burch Theater for the Performing Arts



Martin Luther King, Jr Library



Main Campus SW Entrance



Information Commons



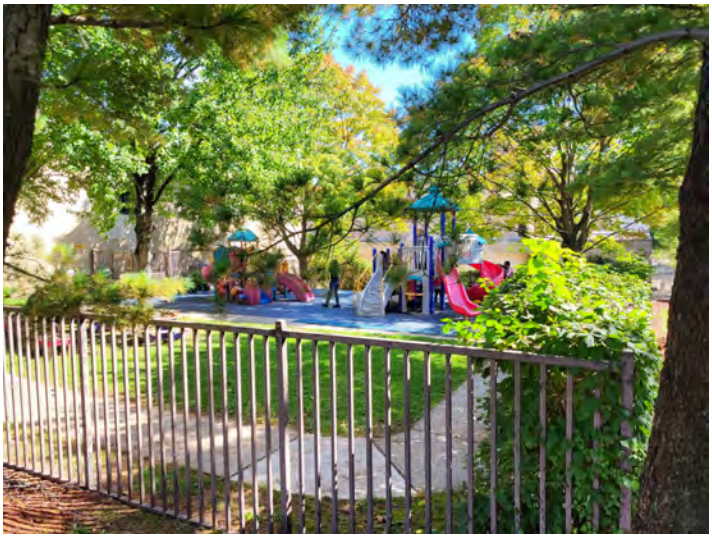
Clara Dasher Student Center



J Harry Smith Lecture Hall



Child Development Center



Cleo Hill, Sr Physical Education Building

A facility that includes a recently renovated Gymnasium, Classrooms and a Strength and Fitness Room. Dedicated in honor of Newark native, Cleo Hill, Sr, a former long serving ECC Basketball Coach as well as a renowned athlete on the NJ State and national stages. https://www.essex.edu/news/ecc-gym-dedicated-in-honor-of-legendary-coach-cleo-hill-sr/



West Essex Branch Campus

West Essex Branch Campus

The West Essex branch campus of ECC, located on Bloomfield Avenue in West Caldwell, meets the education and training needs of people who live and work in the western part of Essex County, and offers a wide range of credit and non-credit courses, as well as Degrees and Certificates.. Students attending this branch campus may complete Associates Degree requirements in the following majors: Accounting, Business, Criminal Justice, Cybersecurity, Education, General Science, Liberal Arts, and Social Sciences, as well as many certificate programs including that for Licensed Practical Nurse (LPN). The facility includes state-of-the art computer labs, science labs, a library, a student center, and the same student support services that are offered at the main campus. Ample onsite parking and access to public transportation make the campus an ideal location



New Facilities and Continuation of Academic Programs for the West Essex Branch Campus

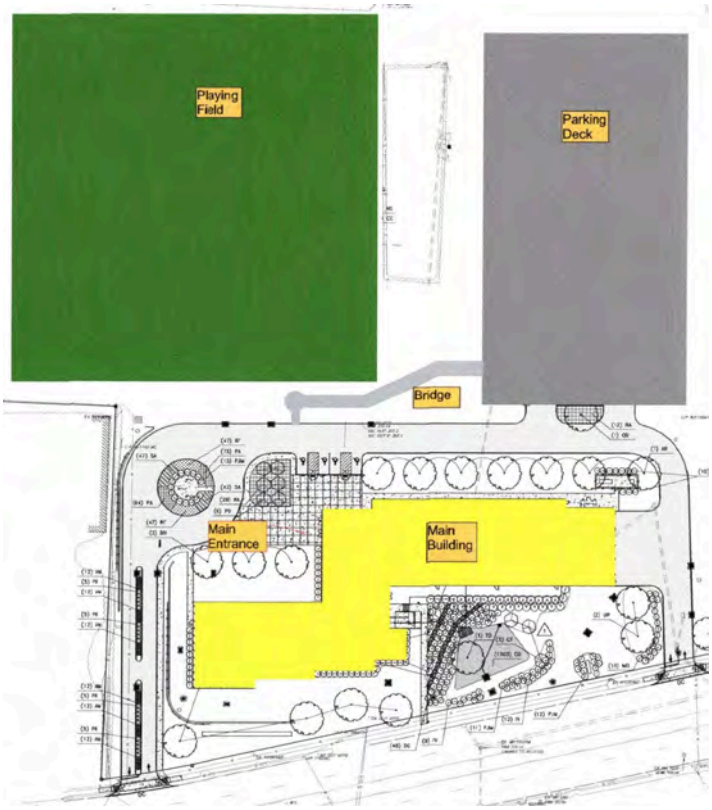
Essex County College received funding for the creation of a dramatically new, modern building, that will offer enhanced student and academic services. Work on the new building will begin in the Summer – Fall 2021 opened for classes in the Fall 2023 semester and a ceremonial Grand Opening was held on September 29, 2023.


ESSEX COUNTY COLLEGE
WEST ESSEX CAMPUS
GRAND OPENING
&
RIBBON CUTTING
Ceremony
Friday, September 29, 2023
West Caldwell, NJ











Information Technology

Information Technology



The primary goal of the IT Department is the development and use of information technology in support of Essex County College's vision for academic excellence and lifelong learning.

IT is responsible for maintaining ECC's academic and administrative systems and the information technology infrastructure that supports them. From maintaining the institution's network to ensuring critical day-to-day operations – to developing new portal applications, the support provided by IT covers a vast array of products and services.

For any question or if you need further help, please call

IT Administrative Computing Main Number: (973) 877 – 3515 – Location C400

IT Academic Computing Main Number: (973) 877 – 3096 – Location 4119

IT Service Requests: (973) 877-3582

We invite you to browse our Website at it.essex.edu (https://it.essex.edu/) and learn more about the IT department and its services.





Administrative Network

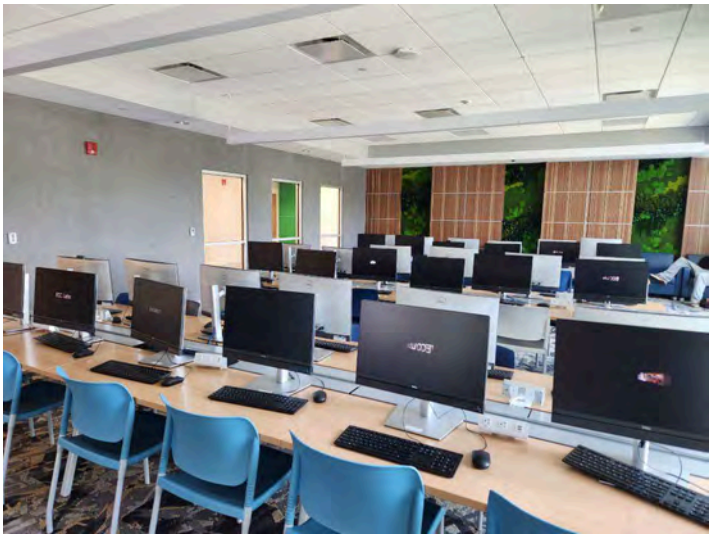
Operating System	Total	Status
Windows 11	643 (91%)	All full-time staff and student services PCs have been successfully upgraded.
Windows 10	63 (9%)	These systems are in the process of being upgraded. Some require replacement due to incompatibility with Windows 11 minimum requirements.

Academic Network

Operating System	Total	STATUS
Windows 11	1231 (82%)	All academic computing labs and classrooms have been upgraded.
Windows 10	239 (18%)	These systems are located in non-academic computer labs, including Nursing, Math Blue Area Lab, Clara Dasher Lab, and select Training Inc. and CFT labs. (please see below)

Main Campus Academic PC Labs

Z. Yamba Building	Teaching Lab	4164	Apple	20
Z. Yamba Building	Editing Lab	MPT-114	Apple	12
Z. Yamba Building	Computer Music Lab	2119	Apple	12
Z. Yamba Building	Teaching Lab	4101	Windows 11	25
Z. Yamba Building	Teaching Lab	4102	Windows 11	25
Z. Yamba Building	Teaching Lab	4103	Windows 11	25
Z. Yamba Building	Open Lab	3404A	Windows 11	54
Z. Yamba Building	Teaching Lab	4165A	Windows 11	25
Z. Yamba Building	Teaching Lab	4165B	Windows 11	25
Z. Yamba Building	Teaching/Open Lab	2114	Windows 11	26
Z. Yamba Building	Teaching/Open Lab	2117A	Windows 11	25
Z. Yamba Building	Teaching/Open Lab	2117B	Windows 11	19
Z. Yamba Building	Open Lab	3404B	Windows 11	48
Z. Yamba Building	Teaching Lab	CFT 111	Windows 11	25
Z. Yamba Building	Teaching Lab	CFT 211	Windows 11	25
Z. Yamba Building	Teaching/Open Lab	CFT 212	Windows 11	22
Z. Yamba Building	Information Commons Area	Information Commons	Windows 11	181
Z. Yamba Building	Bloomberg Lab	LC 2	Windows 11	10
Z. Yamba Building	Testing Lab	4153	Windows 11	49
Z. Yamba Building	Learning Center lab	LC 1	Windows 11	7
Z. Yamba Building	MLK Library	MLK Library	Windows 11	11
West Caldwell Main	West Caldwell	IC	Windows 11	11
West Caldwell Main	West Caldwell	212	Windows 11	25
West Caldwell Main	West Caldwell	132	Windows 11	33
West Caldwell Main	West Caldwell	224	Windows 11	33
West Caldwell Main	West Caldwell	225	Windows 11	33
CFT	Teaching/Open Lab	CFT112	Windows 11	20
CFT	Teaching/Open Lab	CFT205	Windows 11	18
CFT	METCS	CFT206	Windows 11	21
CFT	Teaching/Open Lab	CFT114	Windows 11	9
CFT	Teaching/Open Lab	CFT204	Windows 11	20
Z. Yamba Building	Astronomy Lab	3410	Windows 11	25
Z. Yamba Building	Physics Lab	3408	Windows 11	8
Z. Yamba Building	Training, Inc.	TI-15	Windows 11	15
Z. Yamba Building	Training, Inc.	TI-16	Windows 11	16
Z. Yamba Building	Training, Inc.	TI-27	Windows 11	25
Z. Yamba Building	Bilingual	1105	Windows 11	23
Z. Yamba Building	Yellow Area	3316	Windows 11	19
Z. Yamba Building	Yellow Area	3317	Windows 11	17
Z. Yamba Building	Tutorial Lab - Yellow Area	3234B	Windows 11	108
Z. Yamba Building	Classrooms	Classrooms	Windows 11	125
Z. Yamba Building	CFT	CFT105	Windows 10	25
Z. Yamba Building	Training, Inc.	TI-25	Windows 10	16
Z. Yamba Building	Training, Inc.	TI-23	Windows 10	25
Z. Yamba Building	Training, Inc.	TI-24	Windows 10	16
Z. Yamba Building	Training, Inc.	TI-22	Windows 10	25
Z. Yamba Building	Nursing	CHS213	Windows 10	38
Z. Yamba Building	Tutorial Lab - Blue Area	2212	Windows 10	26
Clara Dasher	Clara Dasher Center Lab	G09	Windows 10	83
Z. Yamba Building	Nursing mini-lab	CHS105	Windows 10	10



West Essex Branch Campus

PC Labs

Room 131

Room 132

Room 224

Room 225

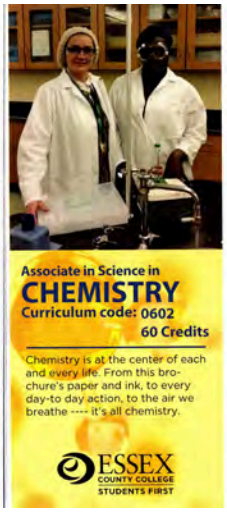
Bloomberg Lab

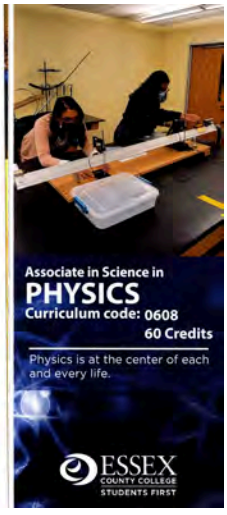
Room 221

Wide Range of Transfer and Career Programs

At ECC, students can earn Associate in Arts (A.A.) and Associate in Science (A.S.) degrees for transfer to 4-year colleges or universities, or they can pursue Associate in Applied Science (A.A.S.) degrees and certificates to prepare for immediate employment. Some A.A.S programs may also transfer; academic advisors and transfer services in Student Development and Counseling can provide additional information about the transfer process.

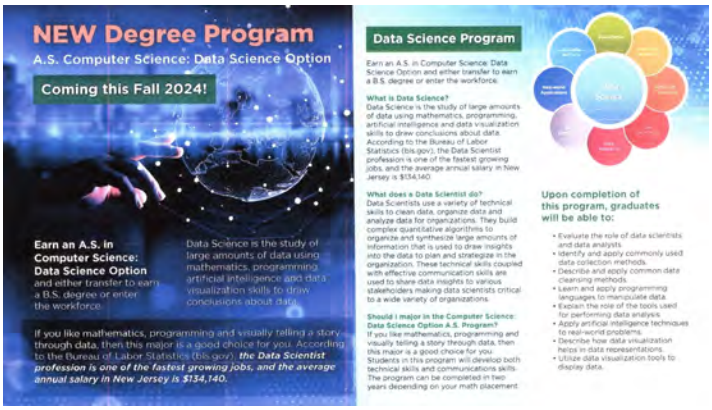






Transfer/articulation agreements exist with many institutions; these ensure that all approved courses students take at ECC will transfer to

the 4-year colleges or universities of their choice. Special joint and/or dual admission agreements have been implemented through which freshmen at ECC are simultaneously admitted to Rutgers University, New Jersey Institute of Technology, New Jersey City University, Kean University, Bloomfield College, or Thomas Edison State University. For further information see Degree Programs.



ANNUAL PUBLIC NOTICE OF CAREER AND TECHNICAL EDUCATION OPPORTUNIES

During the academic year, Essex County College offers courses that will lead to degrees or certificates in Career and Technical Education (CTE) programs; professional development as described in the College Catalog. Essex County College's admission and criteria for selection in career and technical education programs do not restrict any race, color, sex, national minority origin or student with a disability from participation in the Essex County College career programs. Applicants are required to meet the college's general admission criteria as well as the individual program's admission criteria. Applicants must contact the program chairperson/coordinator to determine eligibility and qualifications for a specific program. ECC will take steps to assure that the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

ANUNCIO PÚBLICO ANUAL DE OPORTUNIDADES DE EDUCACIÓN PROFESIONAL Y TÉCNICA

Durante el año académico, Essex County College ofrece cursos que conducirán a títulos ó certificados en programas de Educación Profesional y Técnica (CTE); desarrollo profesional como se describe en el Catálogo universitario. La admisión de Essex County College y los criterios para la selección en los programas de educación profesional y técnica no restringen la participación en los programas de carreras de Essex County College, color, sexo, origen de minorías nacionales ó estudiantes con discapacidades en los programas de carreras de Essex County College. Los solicitantes deben cumplir con los criterios generales de admisión de la universidad, así como con los criterios de admisión del programa individual. Los solicitantes deben comunicarse con el presidente/coordinador del programa para determinar la elegibilidad y las calificaciones para un programa específico. ECC tomará medidas para asegurar que la falta de habilidades en el idioma inglés no será una barrera para la admisión y la participación en programas de educación vocacional.

Continuing Education Opportunities

Community, Continuing Education and Workforce Development programs include intensive basic skills training; multilingual outreach programs; customized corporate training programs: career advancement and personal enrichment courses; high school equivalency prep; youth programs; seminars; workshops; and public forums on diverse topics of interest to local residents.



Community, Continuing Education and Workforce Development offerings include:

- An Adult Learning Center
  - Adult Literacy
  - High School Equivalency Preparation
  - Civics courses
  - English Language Learners
- Career Advancement and Personal Enrichment courses
- Customized Corporate & Business Training



- Dual Enrollment High School Diploma/Essex County College Associate Degree Program
- Intensive Basic Skills Training
- On-Campus Continuing Education Courses & Programs
- Multilingual Outreach Programs
- Non-Credit Enrollment Services
- Pre-College Readiness Programs
- Public Forums on diverse topics of interest to local residents

- Summer & After School Youth Programs
- Seminars & Workshops
- Training, Inc., a facility housing Workforce Development Certification Programs
    - Allied Health Programs
    - Technology Programs



Convenient Schedules and Academic Support

Working adults, recent high school graduates, and others can pursue full-time or part-time study for educational or career advancement or personal enrichment. ECC offers convenient day, evening, and weekend classes and a comprehensive support system that includes counseling, tutoring, computer services, financial assistance, bilingual classes, and career planning. Course sections will be offered either in-person, hybrid, virtual or purely online. The precise meaning of each of these instructional modes is available in the Schedule Book for each enrollment period. Developmental programs are offered to students who require remediation before taking college-level courses. The academic year is divided into two roughly 15-week semesters (fall and spring) and two summer terms. ECC also offers an embedded 10-week "late start" term within each of the fall and spring semesters, as well as a 10-meeting intersession during Winter Break.

A CONTACT HOURS/TIME BLOCK GENERAL SCHEDULING GUIDE

REQUIRED: 1 Contact Hour (CH) = 800 TOTAL MINUTES/ENROLLMENT PERIOD

ALWAYS USE THE APPROPRIATE SCHEDULING MODE FOR THE GIVEN ENROLLMENT PERIOD

FALL / SPRING

Fall I / Spring I	CH	MTGS/ WEEK	MIN/ MTG
(M-F)	1.0	1	55
DAY/EVE	1.5	1	80
15 WKS	2.0	1	105
		2	55
	3.0	1	160
		2	80
	4.0	2	105
		3	70
	4.5	2	120
		3	80
	5.0	2	135
	6.0	2	160

FSN	CH	MTGS/ WEEK	MIN/ MTG
WEEKEND	3.0	1	160
DAY/EVE	3.0	2	80
15 WKS	4.0	1	210
	4.0	2	105
	4.5	2	120
	6.0	2	160

Fall II / Spring II	CH	MTGS/ WEEK	MIN/ MTG
WEEKDAY (M-F)	3.0	1	240
&	3.0	2	120
WEEKEND (FS)	4.0	1	320
DAY/EVE	4.0	2	160
10 WKS	4.0	3	105
	4.5	2	180
	4.5	3	120
	6.0	2	240

SUM I 30 MTGS	CH	MTGS/ WEEK	MIN/ MTG
WK DAY	2.0	4	55
(M-R+2 F)	3.0	2	160
DAY/ EVE	3.0	4	80
30 MTGS	4.0	4	105
	4.5	4	120
	6.0	4	160

SUM II 24 MTGS	CH	MTGS/ WEEK	MIN/ MTG
WK DAY	1.0	4	35
(M-R)	2.0	4	70
DAY/ EVE	3.0	4	100
24 MTGS	4.0	4	135
	4.5	4	150
	6.0	4	200

Winter Intersession Options (3 CH Courses Only)	
Total Number of Meetings	Minutes/Meeting
10 Meetings	240
12 Meetings	200
15 Meetings	160

Essex County College's Scheduling Mode was established in 1985. It is in Compliance with the NJ Administrative Code 9A:1 - 1.2 Definition of "Semester Credit Hour"

Essex County College assigns Contact Hours to Credit Hours according to Instructional Mode as follows:

Instructional Mode	Contact Hrs to Credit Hrs
Lecture/Discussion	1 Contact Hr = 1 Credit Hr
Experiential Learning	These types of Course Components are characterized by assigning more than 1 Contact Hr per Credit Hr. Depending upon the specific course, the ratio will be either: 1.5:1, 2.0:1 or 3.0:1
Laboratories	
Science, Technology, Nursing, Health Sciences	
Studio	
Music	
Activity	
Physical Education	

Days Legend

M = Monday

T = Tuesday

W = Wednesday

R = Thursday

F = Friday

S = Saturday

U = Sunday

Example:

MW	(Monday & Wednesday)
MWF	(Monday, Wednesday, & Friday)
MTWR	(Monday, Tuesday, Wednesday, & Thursday)
TR	(Tuesday & Thursday)
TRF	(Tuesday, Thursday, & Friday)
FS	(Friday & Saturday)

Building Code Legend

M Megastructure (Main Campus)

CDC Clara Dasher Center Building (Student Center)

CFT Center for Technology Building

CHS Center for Health Sciences Building

GYM Physical Education Building

W West Essex Campus

Athletics and other Extracurricular Activities

ECC student-athletes excel in the classroom as well in intercollegiate competition. Many ECC teams have been ranked nationally and routinely win district and regional championships. Several ECC athletes have become Olympians in their respective sports representing several nations. Students may also choose to participate in a variety of student clubs and organizations, including the Student Government Association. For more information see Athletics.







Sample of Institutions to which ECC graduates have transferred to pursue Baccalaureate and Graduate Studies

Auburn University	Hofstra University	Rider University
Bard College	Howard University	Rowan University
Bethune-Cookman College	Hunter College	Rutgers University
Bloomsburg Commonwealth University	John Jay College of Criminal Justice	Saint Elizabeth University
Brown University	Johns Hopkins University	Saint Peter's University
Caldwell University	Kean University	Seton Hall University
Carnegie-Mellon University	Kent State University	Smith College
Centenary University	Long Island University	Springfield College
City University of New York	Louisiana State University	Stevens Institute of Technology
Clark Atlanta University	Massachusetts Institute of Technology	Temple University
The College of New Jersey	Montclair State University	Thomas Edison State University
Columbia University	New Jersey Institute of Technology	University of Nevada at Las Vegas
Cornell University	New York University	University of North Carolina at Chapel Hill
Drexel University	Norfolk State University	University of Pennsylvania
East Stroudsberg University	Ohio State University	University of Pittsburgh
Fairleigh Dickinson University	Pace University	University of Texas at Austin
Felician University	Parsons School of Design-The New School	University of Virginia
George Washington University	Penn State University	Wesleyan University
Georgia Tech University	Pratt Institute	William Paterson University
Georgian Court University	Ramapo College	Yale University



Essex County Board of County Commissioners & County Executive

Essex County Board of County Commissioners

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Carlos M. Pomares, Commissioner Vice President

Patricia Sebold, Commissioner At-Large

Rufus I. Johnson, Commissioner At-Large

Romaine Graham, Commissioner At-Large

Brendan W. Gill, Commission At-Large

Robert Mercado, Commissioner

Tyshammie L. Cooper, Commissioner

Leonard M. Luciano, Commissioner

County Executive

Joseph N. DiVincenzo, Jr.



Essex County College Board of Trustees

Essex County College Board of Trustees

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Jeweline Grimes, Secretary

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ESSEX COUNTY COLLEGE
GOLF



OVERVIEW OF ACADEMIC DIVISIONS

ECC offers a wide range of associate degree and certificate programs through the following academic divisions and departments:

- Division of Biology, Chemistry and Physics (p. 31)
- Division of Business (p. 37)
- Division of Humanities and Bilingual Studies (p. 44)
- Division of Mathematics, Engineering Technologies and Computer Science (p. 52)
- Division of Nursing and Health Sciences (p. 67)
- Division of Social Sciences (p. 75)



Employers of ECC Graduates

Great careers begin at ECC. Many graduates find professional positions in NJ and elsewhere with employers like:

Adecco
AFLAC
Alaris @ St Mary's
American Red Cross
American Red Cross
AmeriCorps
Anthony B. Spain, D.M.D
Apostles House
Atlantic Health System
Babyland Family Services
Bank of America
Barnabas Health
Bayada Nurses
Bloomfield College
Broadway House
Brookdale Community College
Catholic Charities of the Archdiocese of Newark
Catholic Community Services
Center @NYCHHC
Centers for Independent Living
Central high School
Cerebral Palsy League Respite
Cerebral Palsy of North Jersey
Choices, Inc.
City of Newark
Clara Mass Medical Center
Community Access Unlimited
Community Food Bank of New Jersey
Community Mental Health Services for Belleville, Bloomfield & Nutley
Continental Airlines
COPE Center
Covenant House
CURA, Inc.
CVS Health
CVS Pharmacy
Daughters of Israel
Daytop
Department of Child and Family Well-Being
Department of Health and Environmental Safety- New Jersey Institute of Technology
Division of Motor Vehicles
East Orange General Hospital
East Orange Substance Abuse Treatment Program
East Orange YMCA
Essex County College
Essex County Division of Youth Services
Essex County Surrogate Court
Essex Regional Academy
Essex Regional Educational Services Commission
Essex-Newark Legal Services
Fair Oaks Hospital
Family Connections
Family Service & Child Guidance Center of the Oranges, Maplewood, & Millburn
FedEx Express
Fellowship Civic Center
First Occupational Center
FOCUS Hispanic Center
Freedom Elder Care
Green Hill
H&R Block
Hackensack University Medical Center
Healthfirst New York
Hillside Recreation
Home Depot
Hyacinth Foundation
Independent Childcare Provider
Integrity
International Youth Organization
Irvington Health Department
Isaiah House
Jersey City Medical Center
Jewish Vocational Service
Jumpstart
Kaiser Permanente Health Plan
Kessler Institute for Rehabilitation
Kintock Group
La Casa de Don Pedro
Labcorp
Labcorp of America
Lenard Clinic
Lighthouse Community Service
Macy's
Mayor's Office of Employment & Training
Meadowlands Hospital Medical Center
Mont-Vail Daycare Center
Morristown Memorial Hospital
Mountainside Hospital
Musculoskeletal Transplant Foundation
National Council on Alcoholism
New Community Corporation
New Hope Behavioral Health
New Jersey City University
New Jersey Judiciary
Newark Beth Israel
Nework Beth Israel Medical Center

Newark Board of Education
Newark EMA HIV Health Services Planning Council
Newark Emergency Services
Newark Renaissance House
Nigerian Television Authority
NJ Division of Developmental Disabilities
NJ Division of Mental Health Services
NJ Division of Vocational Rehabilitation Services
NJ Division of Youth & Family Services
NJ Transit
Obesity Treatment Centers
Offender Aid and Restoration of Essex
Optimum HIT @ Montefiore Hospital (Bronx, NY)
Orange Board of Education
OTG Management
Overlook Hospital
Owen Home Health Care
Planned Parenthood
Police Departments (e.g., Newark, East Orange, Irvington, etc.)
Preferred Home Health Care & Nursing Services Inc.
Primark
Primerica
Prospect House
Prudential Center
Prudential Insurance
Public Health Solutions (NY)
Red Lobster
Remington Health Center
Robert Wood Johnson Hospital
Rutgers University Behavioral Health Care
Sai Medical Center
Saint Barnabas Medical Center
School Districts (e.g., Newark, East Orange, Irvington, etc.)
Securitas Inc
Senegal Technology
Seton Hall University
South Orange Rehab/Wellness
St. Michael's Medical Center
Star Pediatric Home Care Agency
State of NJ
Stellar Home Care and Staffing
Sterling Manor Home
Straight & Narrow
Sunrise of Madison
Sunrise Senior Living
T.J Max
Target Corp
TD Bank
The Bridge
The Harbor
The Leaguers
Township of Livingston
Trinitas Regional Medical Center
TRISTAR PRODUCTS INC
Turning Point
U.S. Postal Service
Union County Court House
Union Settlement Association
United Labor Agency
UNITED PARCEL SERVICE
United States Army National Guard
United States Postal Service (USPS)
Universal Rehabilitation Institute Center
Urban League of Essex County
Urban Renewal
Valley National Bank
Verizon
Veteran's Administration Hospital
Villa Enterprises Restaurant
Vitas Healthcare Hospice
Walgreens
Wal-Mart
Wells Fargo
YMWCA of Newark & Vicinity
YWCA of Essex & West Hudson

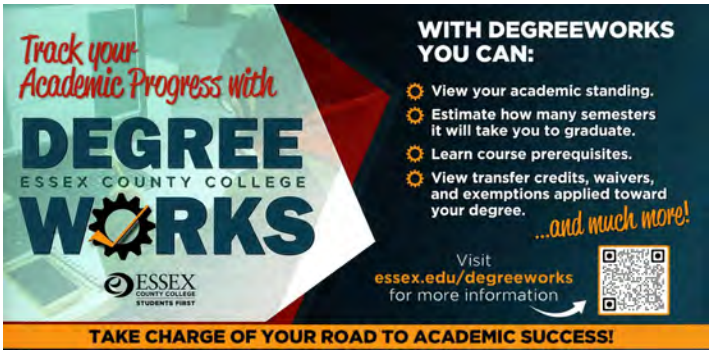
Degree Programs

Associate in Arts (A.A.) and Associate in Science (A.S.)

Degree programs specifically designed to prepare students for 4-year colleges and universities. Under NJ law, graduates from A.A. and A.S. programs are eligible to transfer 60 required college credits to State of NJ baccalaureate granting institutions with general education requirements waived; most other colleges and universities will also accept graduates of these programs.

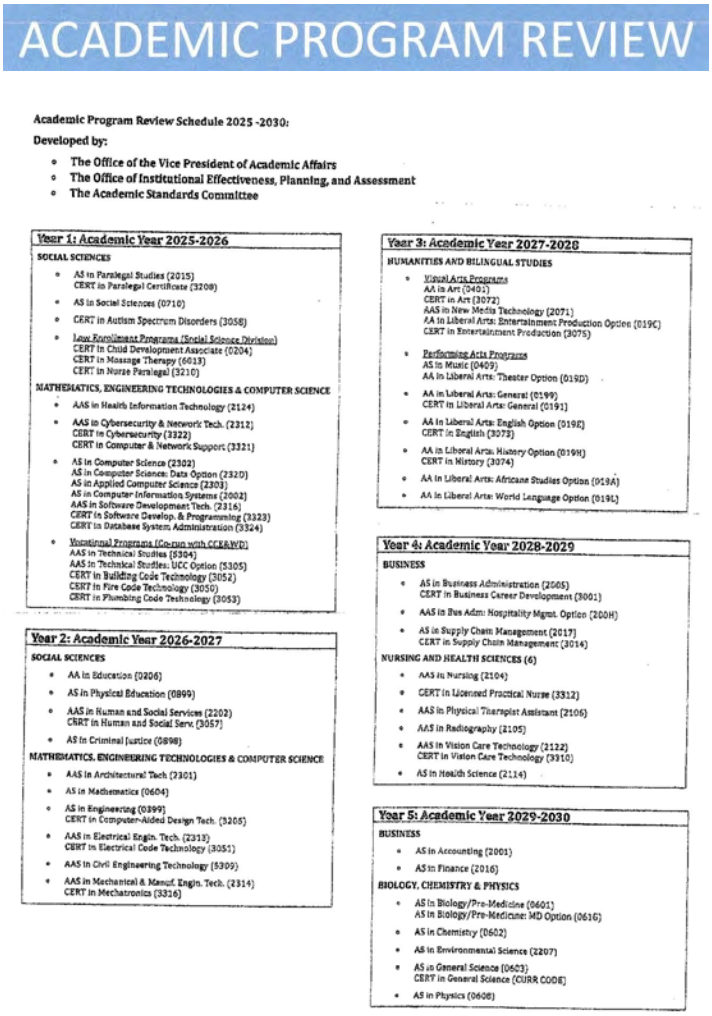
Associate in Applied Science (A.A.S.)

Degree programs designed to prepare students for employment upon program completion. Students may be able to transfer some or all of their credits to baccalaureate programs.



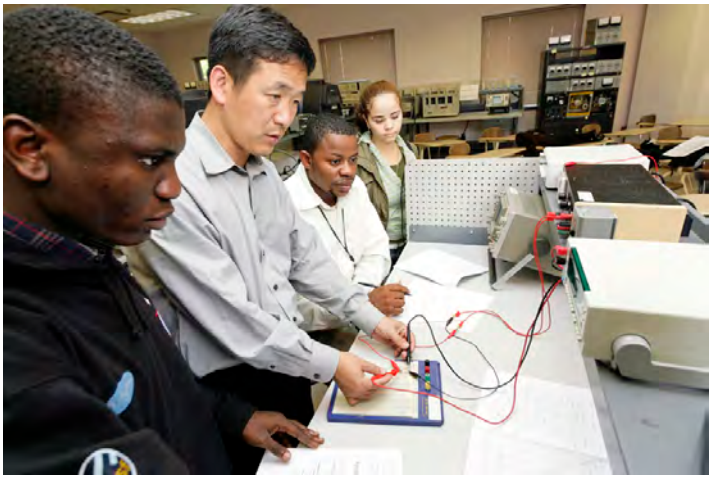
Degree majors available in:

- Accounting - AS (2001) (p. 88)
- Applied Computer Science - AS (2303) (p. 102)
- Architectural Technology - AAS (2301) (p. 103)
- Art - AA (0401) (p. 93)
- Biology/Pre-Medicine - AS (0601) (p. 85)
- Biology/Pre-Medicine MD Option - AS (061G) (p. 85)
- Business Administration - AS (2005) (p. 89)
- Business Administration: Hospitality Management - AAS (200H) (p. 89)
- Chemistry - AS (0602) (p. 86)
- Civil Engineering Technology - AAS (5309) (p. 104)
- Computer Information Systems - AS (2002) (p. 105)
- Computer Science - AS (2302) (p. 106)
- Computer Science: Data Science Option - AS (232D) (p. 107)
- Criminal Justice - AS (0898) (p. 125)
- Cybersecurity & Network Technology - AAS (2312) (p. 108)
- Education - AA (0206) (p. 126)
- Electrical Engineering Technology - AAS (2313) (p. 110)
- Engineering - AS (0399) (p. 111)
- Environmental Science - AS (2207) (p. 86)
- Finance - AS (2016) (p. 91)
- General Science - AS (0603) (p. 87)
- Health Information Technology - AAS (2124) (p. 112)
- Health Science - AS (2114) (p. 118)
- Human and Social Services - AAS (2202) (p. 126)
- Liberal Arts: Africana Studies Option - AA (019A) (p. 94)
- Liberal Arts: English Option - AA (019E) (p. 95)
- Liberal Arts: Entertainment Production Option - AA (019C) (p. 95)
- Liberal Arts: General - AA (0199) (p. 93)
- Liberal Arts: History Option - AA (019H) (p. 96)
- Liberal Arts: Theater Option - AA (019D) (p. 97)
- Liberal Arts: World Language Option - AA (019L) (p. 98)
- Mathematics - AS (0604) (p. 113)
- Mechanical & Manufacturing Engineering Technology - AAS (2314) (p. 113)
- Music - AS (0409) (p. 98)
- New Media Technology - AAS (2071) (p. 99)
- Nursing - AAS (2104) (p. 119)
- Nursing: LPN Articulation Option - AAS (2104) (p. 120)
- Paralegal Studies - AS (2015) (p. 128)
- Physical Education - AS (0899) (p. 129)
- Physical Therapist Assistant - AAS (2106) (p. 121)
- Physics - AS (0608) (p. 87)
- Radiography - AAS (2105) (p. 122)
- Social Sciences - AS (0710) (p. 130)
- Software Development Technology - AAS (2316) (p. 115)
- Supply Chain Management - AS (2017) (p. 92)
- Technical Studies - AAS (5304) (p. 116)
- Technical Studies: Uniform Construction Code Technology - AAS (5305) (p. 117)
- Vision Care Technology - AAS (2122) (p. 123)



Certificate Programs

Programs are designed to provide employment skills in 1 year or less of full-time study to enhance or supplement existing skills, or offer preparation for new career paths.



Certificate programs include those offered through various Academic Divisions and Community & Continuing Education and Workforce Development.

Academic Certificates available under Academic Divisions in:

- Art - Academic Certificate (3072) (p. 100)
- Business Career Development - Academic Certificate (3001) (p. 90)
- Business Professional - Academic Certificate (3013) (p. 90)
- Database System Administration - Academic Certificate (3324) (p. 109)
- English - Academic Certificate (3073) (p. 100)
- Entertainment Production - Academic Certificate (3075) (p. 100)
- History - Academic Certificate (3074) (p. 101)
- Liberal Arts: General - Academic Certificate (0191) (p. 101)
- Licensed Practical Nurse - Academic Certificate (3312) (p. 119)
- Massage Therapy - Academic Certificate (6013) (p. 128)

Certificates of Achievement available under Academic Divisions in:

- Autism Spectrum Disorders - Certificate of Achievement (3058) (p. 124)
- Building Code Technology - Certificate of Achievement (3052) (p. 104)
- Child Development Associate - Certificate of Achievement (0204) (p. 125)
- Computer and Network Support - Certificate of Achievement (3321) (p. 105)
- Computer-Aided Design (CAD) Technology - Certificate of Achievement (3205) (p. 107)
- Cybersecurity - Certificate of Achievement (3322) (p. 109)
- Electrical Code Technology - Certificate of Achievement (3051) (p. 109)
- Fire Code Technology - Certificate of Achievement (3050) (p. 112)
- Human and Social Services - Certificate of Achievement (3057) (p. 127)
- Mechatronics - Certificate of Achievement (3316) (p. 114)
- Paralegal - Certificate of Achievement (3208) (p. 128)
- Plumbing Code Technology - Certificate of Achievement (3053) (p. 115)
- Software Development and Programming - Certificate of Achievement (3323) (p. 115)
- Supply Chain Management - Certificate of Achievement (3014) (p. 92)
- Vision Care Technology - Certificate of Achievement (3310) (p. 124)

Division of Biology, Chemistry and Physics

This division offers A.S. degree programs to prepare students for transfer to 4-year colleges or universities. Faculty hold advanced degrees in Biology, Chemistry, Environmental Science, or Physics, are experienced in teaching and, in addition, most faculty have extensive research experience in their fields. Students have access to multimedia, computer laboratories with internet access, and state-of-the-art equipment.



Location: Level II, Blue Area, Second Floor

Divisional Contact Number: 973-877-3430

Chairperson: Eunice Kamunge (kamunge@essex.edu), (973-877-3271)

Administrative Assistant: Aissatou Barry (abarry@essex.edu, 973-877-3430)

Laboratory Manager: Kanji Ojelade (kojelade@essex.edu, 973-877-3282)

Laboratory Assistants: Samuel Amoakehene (samoakoh@essex.edu), Yuliana Castillo (ycastil1@essex.edu), Evelyn Garcia (egarcia2@essex.edu, and Nabil Kabakibi (nkabakib@essex.edu)

Faculty	Discipline
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Ahmad Ali (aali29@essex.edu, x2169)	Physics
Emmanuel Aouad (eaouad@essex.edu, x3584)	Chemistry
Martin Asobayire (asobayire@essex.edu, x1862)	Biology
Anthony Bonassisa (abonassi@essex.edu, x2149)	Environmental Science
Jose Chestnut (chestnut@essex.edu, x3573)	Biology
Frank Duroy (duroy@essex.edu, x3262)	Biology
Yasser Kabakibi (ykabakib@essex.edu, x3429)	Biology
Nicole Koribanics (nkoriban@essex.edu, x3138)	Biology
Nadezhda Lvov (lvov@essex.edu, x4428)	Physics
Nidhal Marashi (nmarashi@essex.edu, x3370)	Physics
Kanji Ojelade (kojelade@essex.edu, x3423)	Environmental Science
Philip Okoro (pokoro1@essex.edu, x4405)	Biology
Sujatha Ramakrishnan (sramakri@essex.edu, x3327)	Biology
Maria Cecilia Rozak (rozak@essex.edu, x3595)	Physics
Pablo Ramos Silva (pramossi@essex.edu, x3531)	Chemistry
Lynn Wilson (lwilson@essex.edu, x3213)	Biology

Biology/Pre-Medicine

Curriculum Code: 0601

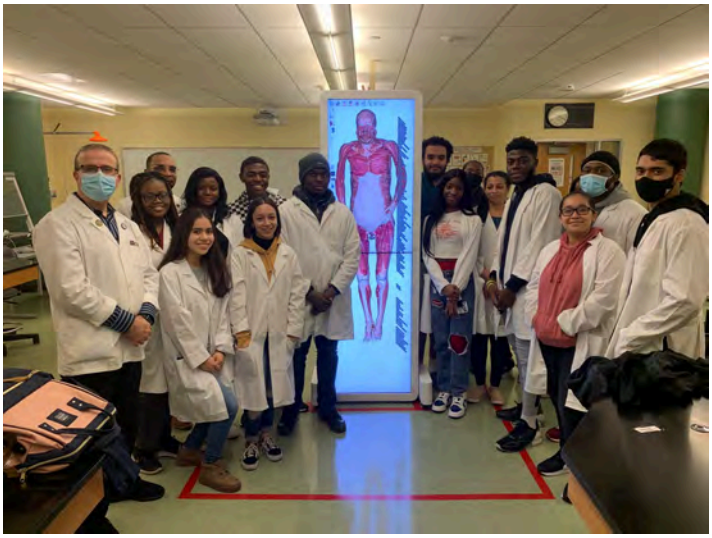
Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Biology/Pre-Medicine?

Biology is the primary life science from which students can enter specific fields of study as diverse as molecular biology, forestry, pathophysiology, neuroanatomy, and parasitology. Biology also provides foundations for students wishing to become physicians, dentists, or other medical professionals. Curriculum is equivalent to the first two years of a baccalaureate program in Biology. Emphasis is placed on scientific method and critical analysis that enables you to be a contributor to any scientific or medical team.

If I major in Biology/Pre-Medicine, can I transfer to an upper-division college or university?

The Associate in Science degree in Biology/Pre-Medicine prepares you for transfer to upper-division colleges and universities to pursue a bachelor's degree. ECC's transfer/ articulation agreements with area four-year institutions provide smooth transfer for graduates.



Are there any requirements I must satisfy before I start taking courses in my major?

Evaluation and placement is required for all majors. Major courses begin once you have completed all developmental courses. In addition, when at the final level of remediation in Mathematics and English, you can take either BIO 100 or CHM 100. While neither of these count toward graduation in this major, they introduce you to basic biology and/or chemistry that prepares you for this program.

How long will it take for me to complete this degree?

If you do not need developmental courses or College Mathematics (MTH 100), and you take an average of 16 credits per semester, you should be able to complete the program in two years. You can shorten the amount of time by taking summer courses.

Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem-solving skills, including the scientific method, qualitative and quantitative data analysis;
- Demonstrate mastery of fundamental concepts of biology at the molecular and cellular levels;
- Demonstrate mastery of fundamental concepts of biology at the organismal, community and ecosystem levels; and
- Perform scientific investigations using proper laboratory instrumentations and laboratory procedures.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.

Biology/Pre-Medicine MD Option

Curriculum Code: 061G

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Biology/Pre-Medicine MD Option?

The major in Biology/Pre-Medicine MD Option provides opportunity for students interested in pursuing careers in medicine. Upon completion of coursework, graduates are eligible to apply for admission into a 5-year M.D. program at St. George's University, Grenada, West Indies.



If I major in Biology/Pre-Medicine MD Option, can I transfer to an upper-division college or university?

The Biology/Pre-Medicine MD Option is specifically designed to meet undergraduate (pre-medicine) requirements for admission into the 5-year M.D. program at St. George's University. However, credits are also transferable to baccalaureate programs (B.S. or B.A.) in Biology or related majors at other colleges and universities.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may have to take developmental courses in English and/or Mathematics before taking core courses in your major.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 17 credits per semester, you can complete the A.S. program in two years. You can shorten the length of the time by taking summer courses.

Upon completion graduates will be able to:

- Utilize critical thinking and problem-solving skills to become avid learners; and
- Apply for entry into a 5-year M.D. program by demonstrating mastery in biology, inorganic chemistry, organic chemistry, and physics.

Through its administration by the Division of Biology, Chemistry and Physics, the Biology/Pre-Medicine MD Option program demands academic rigor. The minimum required GPA is 3.5.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.



Chemistry

Curriculum Code: 0602

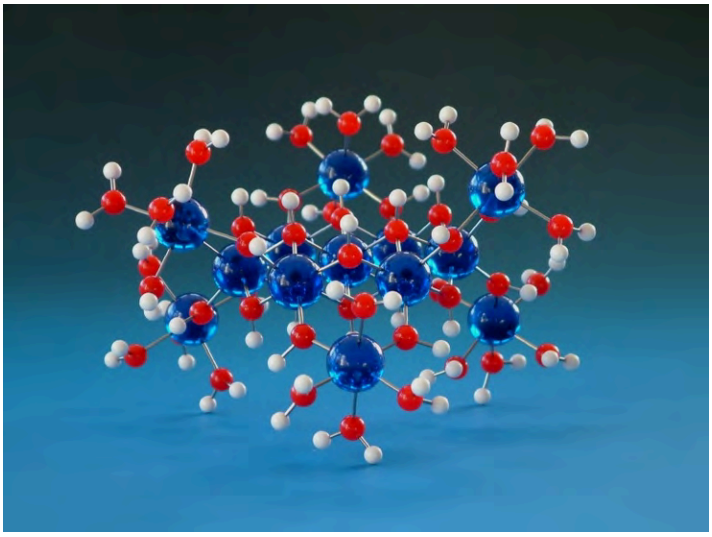
Will Earn Upon Program Completion: Associate in Science (A.S.) Degree





Why major in Chemistry?

Chemistry is essential to fields such as biology, medicine, dentistry, chemical engineering, pharmacology, forensics, and polymer science. Chemists are in high demand and often go on to senior leadership levels in corporations. Curriculum is equivalent to first two years of a baccalaureate Chemistry program.

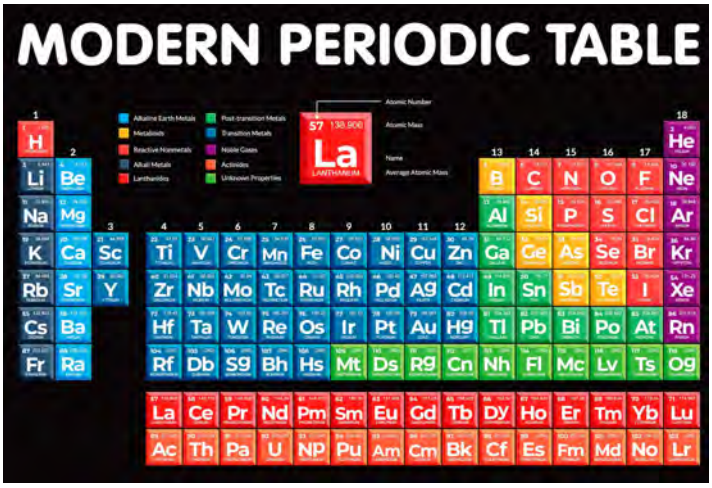


If I major in Chemistry, can I transfer to an upper-division college or university?

The A.S. degree in Chemistry prepares you for transfer to upper-division bachelor's degree programs. ECC's agreements with area four-year institutions provide smooth transfer.

Are there any requirements I must satisfy before I start taking courses in my major?

Basic skills testing is required for all majors. Major courses begin once developmental ones are completed. In addition, when at final remediation levels, you can take CHM 100. While this does not count toward graduation in this major, it introduces basic chemical principles and theories that you will be learning in this program.



How long will it take for me to complete this degree?

If remedial courses are not needed and you average 16 credits per semester, program can be completed in two years; which can be shortened by taking summer courses.



Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem solving skills, including the scientific method and method of scientific conversion;
- Understand fundamental concepts of inorganic chemistry, including the chemical laws of nature, solutions, acids & bases, kinetics, equilibrium, and thermochemistry, thermodynamics, electrochemistry, and nuclear chemistry;
- Demonstrate mastery of fundamental concepts of organic chemistry, including functional groups, reactions, syntheses, and mechanisms;
- Perform chemical experiments in a safe and scientific manner, using proper scientific and laboratory safety procedures.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.

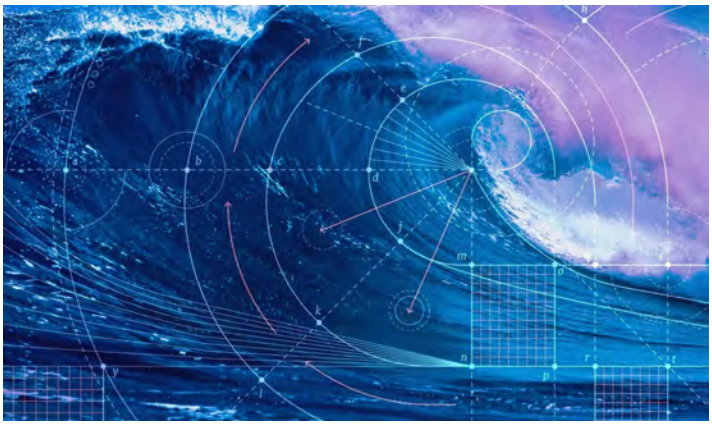
Environmental Science

Curriculum Code: 2207

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Environmental Science?

The Environmental Science Program provides opportunities for students interested in the environment and related fields. This major begins to prepare you for careers in environmental, remediation, petroleum and civil engineering fields as laboratory technicians, field analysts, and environmental technicians. With experience, you may find positions in additional areas such as research, production, and consumer service.



If I major in Environmental Science, can I transfer to an upper-division college or university?

The A. S. degree in Environmental Science prepares you for transfer to upper-division colleges and universities to pursue a

bachelor's degree. ECC's transfer/ articulation agreements with area four-year institutions provide smooth transfer for our A.S. graduates.

Are there any requirements I must satisfy before I start taking courses in my major?

Basic skills testing is required for all majors. Major courses begin once all developmental courses are completed. When at final levels of remediation in Mathematics and/or English, you can take either BIO 100 or CHM 100. While neither of these courses count toward graduation in this major, they introduce you to basic biology and chemistry that prepares you for this program.

How long will it take for me to complete this degree?

If you do not need developmental courses and an average of 16 credits per semester, the program can be completed in two years; which can be shortened by taking courses in summer session.

Upon completion of this program, graduates will be able to:

- Students will be able to describe the fundamental concepts of Geology and Environmental Science, including the origin,

composition; and evolution of the Earth, and how the Earth system responds to internal and external forces, including the forces of humans;
- Students will be able to effectively communicate and critically evaluate scientific observations, analyses and ideas;
- Students will be able to scientifically collect, analyze, and interpret geologic, geoscience, and earth systems data.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.

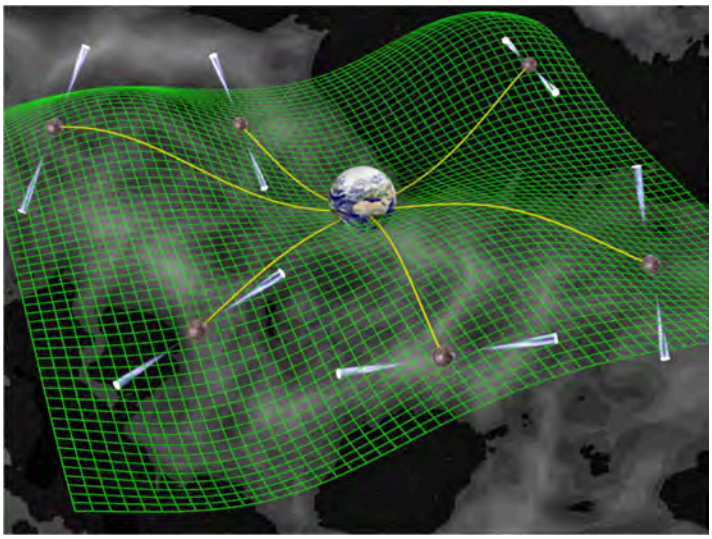
General Science

Curriculum Code: 0603

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in General Science?

The General Science program provides opportunities for students interested in health care-related fields as well as those interested in teaching science in grades K-12 to complete a general basic science associate's degree. Students applying to Nursing & Health Sciences programs can complete prerequisites for these programs, while in this major. While waiting for acceptance into a professional program, students can pursue remaining degree requirements. Curriculum provides a foundation in core courses needed to major in many areas of science and health care. Emphasis is placed on the scientific method and critical analysis that enables you to be a contributor to any scientific or medical team.



If I major in General Science, can I transfer to an upper division college or university?

The A. S. degree in General Science prepares you for transfer to upper-division colleges and universities to pursue a bachelor's degree. ECC's transfer/articulation agreements with area four-year institutions provide smooth transfer for our A.S. graduates.

If I major in General Science, how do I apply to Nursing or Health Sciences Programs?

See the curriculum guides in this catalog for specific admissions requirements for each program. You may also call the Nursing & Health Sciences Division at (973) 877-1868.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may have to take developmental courses in English and/or Mathematics before taking the core courses in your major.

How long will it take for me to complete this degree?

If you do not need developmental courses and you take an average of 16 credits per semester, you can complete the program in two years. You can shorten the amount of time by taking summer courses.

Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem-solving skills, including the scientific method and methods of scientific conversion;
- Demonstrate mastery of fundamental concepts of biology, chemistry, and/or physics; and
- Perform scientific investigations using proper scientific and laboratory safety protocols.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.

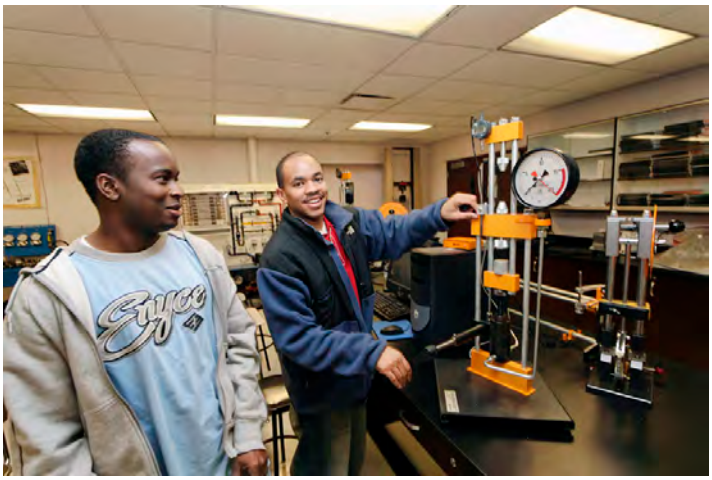
Physics

Curriculum Code: 0608

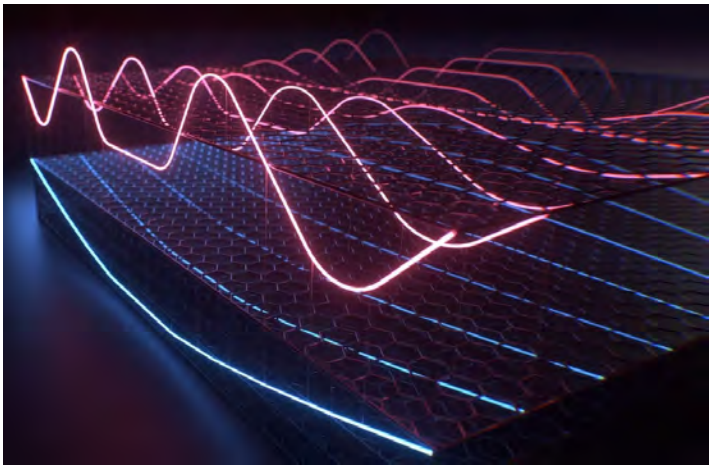
Will Earn Upon Program Completion: Associate in Science (A.S.) Degree



Why major in Physics?



Physics is the scientific study of matter and energy and is fundamental to understanding the natural world, including other natural sciences like Chemistry and Biology. A degree in physics provides opportunities for challenging and exciting careers in the many subfields of Physics, as well as in many technical and non-technical professions. Since physics students learn transferable skills, they also find careers in a variety of other fields, including, among many others, astronomy, neuroscience, mathematics, computer science, high school science teaching, law, medicine, environmental sciences, finance, operations research, marketing, industrial management, engineering, meteorology and oceanography.



If I major in Physics, can I transfer to an upper division college or university?

The A. S. degree in Physics prepares you for transfer to four-year colleges and universities to pursue a bachelor's degree. ECC's transfer/ articulation agreements with area four-year institutions provide smooth transfer for our graduates.

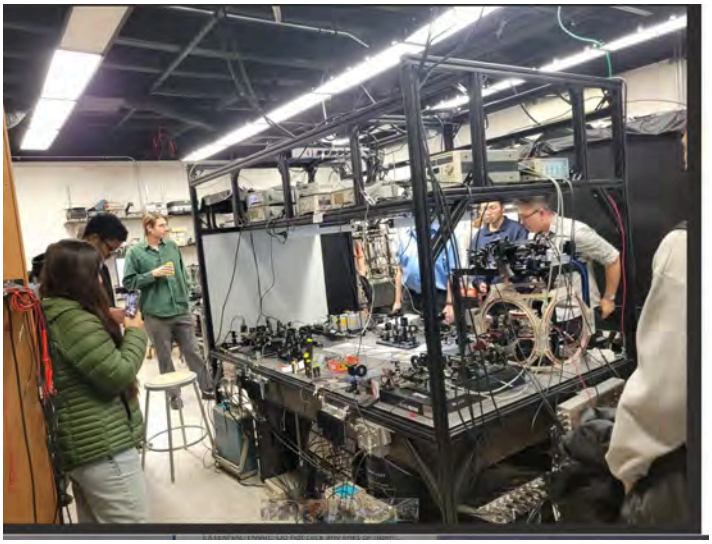
Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may have to take developmental courses in English and/or Mathematics before taking core courses in your major. Students are strongly recommended to take pre-calculus in high school or during the summer before beginning college calculus.



How long will it take for me to complete this degree?

If you do not need developmental course work and you register for an average of 16-17 credits each semester, you can complete the degree in two years. You may shorten the time by taking summer courses.



Upon completion of this program, graduates will be able to:

- Demonstrate an understanding of the principles of physics and the ability to apply these principles to problems of both fundamental and practical interest;
- Design and conduct experiments, and use the scientific method to analyze a problem and draw conclusions from data and observations;
- Apply critical thinking skills and ability to identify, formulate, and solve technical problems.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3430.

Division of Business







This division offers A.S. degree programs designed to prepare students for transfer to 4-year institutions, and A.A.S. and certificate programs designed to prepare students for business careers upon graduation, or to develop technical skills in specialized areas. Faculty have diverse academic and professional backgrounds including practical experience in the business field.



Cooperative education credits are offered to students in a number of program areas to develop real world experience, employability skills and to enhance graduates' on-the-job performance.

Location: Level III, Green Area

Divisional Contact Number: 973-877-3222

Chairperson: Germaine Albuquerque (albuquer@essex.edu), (973-877-3443)

Administrative Assistant: Khadidja Coulibaly (kcouliba@essex.edu, 973-877-3222)

Faculty	Discipline
Jean-Wilner Alexandre (jalexan5@essex.edu, x3199)	Economics
John Hammond (jhammond@essex.edu, x3204)	Finance
Timothy Kucerovy (tkucerov@essex.edu, x3172)	Supply Chain Management
John Olotewo (jolotewo@essex.edu, x3221)	Business
Raquel Pernia (pernia@essex.edu, x3095)	Accounting
Patrick Saint Fort (psaintfo1@essex.edu, x3498)	Accounting
Karen Scuorzo (scuorzo@essex.edu, x3464)	Business
Carlos Rivera (crivera10@essex.edu, x3393)	Business

The following programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

A.S. in Accounting (ACBSP accredited)

A.S. in Business Administration (ACBSP accredited)

A.S. in Finance (ACBSP accredited)

A.S. in Supply Chain (ACBSP accredited)



Degrees

Accounting

Curriculum Code: 2001

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

The A.S. in Accounting is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). For more information, please visit **http://www acbsp.org (https://acbsp.org/).**

Why major in Accounting?

This major is best suited for the student wishing to pursue upon completing his/her associate degree, a bachelor's degree in Accounting and also to work toward a CPA. With advanced degrees/certifications and relevant job experience, you can secure rewarding positions such as an Accounting Manager, Internal Auditor, Financial Analyst, Tax Accountant, or Comptroller in accounting firms, industry, governmental agencies, and nonprofit organizations. **The A.S. in Accounting is accredited by the**

Accreditation Council for Business Schools and Programs (ACBSP). For more information, please visit **http://www acbsp.org (https://acbsp.org/).**

If I major in Accounting, can I transfer to an upper-division college or university?

The A. S. degree in Accounting prepares you to transfer to upper division colleges and universities to complete your bachelor's degree. You may choose to participate in a dual admissions program, such as with Rutgers-Newark, Kean University, or Seton Hall University.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement test scores, you may be required to take developmental courses in English and/or Mathematics before taking core curriculum courses required for this major.

How long will it take for me to complete this degree?

Assuming no developmental coursework is required and the student registers for an average of 17 credits per semester, this degree can be completed within two years. Students can reduce this timeframe by enrolling in summer courses.

Where should I direct specific questions about this program?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

- Demonstrate of knowledge of the underlying framework of accounting concepts and principles;
- Apply various accounting skills to prepare financial and or management accounting summaries and reports, both manually and by using computers;
- Review and evaluate accounting reporting procedures for compliance with national and international guidelines/standards;
- Prepare and discuss capstone summaries of accounting practices that incorporate several accounting tasks, and /or areas.



Business Administration

Curriculum Code: 2005

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

The A.S. in Business Administration is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). For more information, please visit **http://www acbsp.org (https://acbsp.org/).**

A Dual admissions programs with Rutgers-Newark, NJIT, Montclair State University, Kean University, and Seton Hall University.



Why major in Business Administration?

This program provides knowledge of general business principles and management skills applicable in a wide variety of settings. This major is best suited for students who wish to pursue an associate's degree prior to a bachelor's degree in Business Administration. With advanced degrees/certifications and relevant job experience, you can secure a rewarding leader ship position as a manager within an industry, governmental agency, or a nonprofit organization. **The A.S. in Business Administration is accredited by the Accreditation Council for Business Schools and Programs (ACBSP)**. For more information, please visit **http://www acbsp.org (https://acbsp.org/).**

If I major in Business Administration, can I transfer to an upper-division college or university?

This program prepares you to transfer to an upper-division college or university to complete your bachelor's degree. You may choose to participate in a dual admissions program with Rutgers-Newark, NJIT, Montclair State University, Kean University, or Seton Hall University. These admissions agreements provide guaranteed admission with junior status to qualified students. Consult with ECC's Counselors in Student Development to review specific requirements.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on your placement test scores, you may be required to take developmental courses in English and/or Mathematics before taking the core curriculum courses required for this major.



How long will it take for me to complete this degree?

Assuming no developmental coursework is required and the student registers for an average of 16 credits per semester, this degree can be completed within two years. Students can reduce this time frame by enrolling in summer courses.

Where should I direct specific questions about this program?

Visit the Business Division in the Green Area of the main campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of fundamental business concepts and principles;
- Discuss and analyze issues related to global economics;
- Explain and apply management theories and principles; and
- Communicate effectively with accurate business terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Business Administration: Hospitality Management

Curriculum Code: 200H

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

Why major in Business Administration: Hospitality Management?

This program prepares you to pursue careers in travel, lodging, food and beverages, tourism and events management. Students acquire knowledge enabling them to work as Unit Managers, Assistant Managers, or Food and Beverage Managers. They will also be able to advance in other positions such as Front Office Manager or Sales and Marketing Manager.

If I major in Business Administration: Hospitality Management, can I transfer to an upper-division college or university?

This major is job-oriented and not intended for transfer to a baccalaureate program. However, many colleges and universities will apply most or all the courses you have taken toward a bachelor's degree.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement test scores, you may be required to take developmental courses in English and/or Mathematics before taking core curriculum courses required for this major.

How long will it take for me to complete this degree?

Assuming no developmental coursework is required and the student registers for an average of 16 credits per semester, this degree can be completed within two years. Students can reduce this timeframe by enrolling in summer courses.

Where should I direct specific questions about this program?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

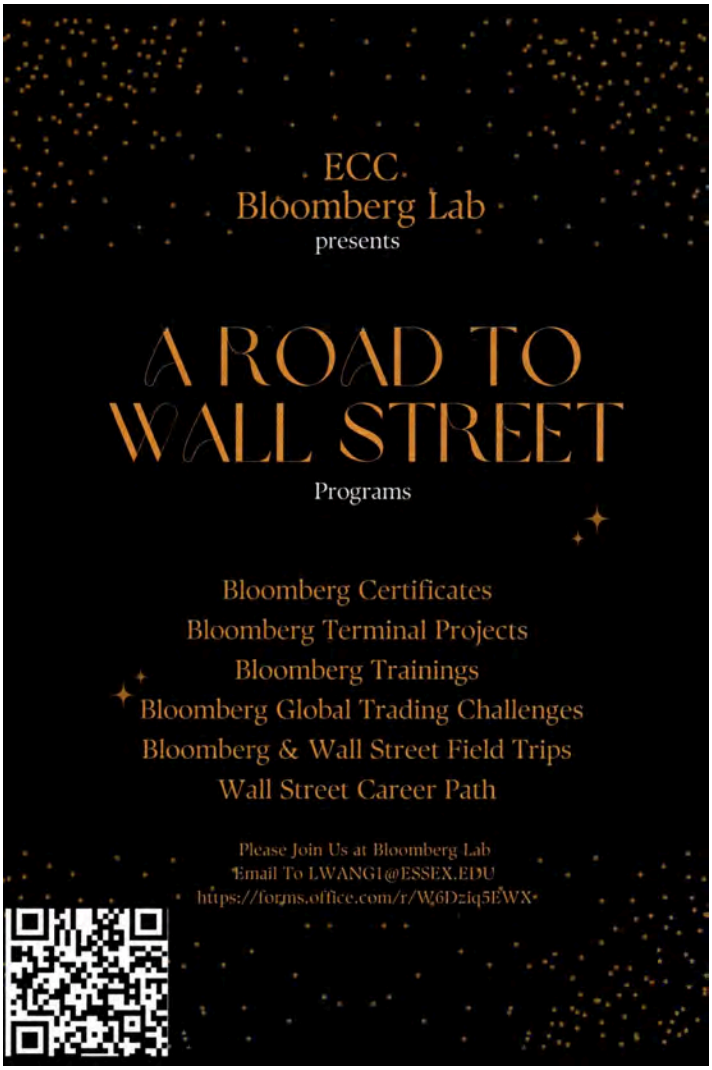
- Demonstrate knowledge of fundamental business concepts and principles;
- Demonstrate knowledge of the skills required for various positions in the hospitality management industry;
- Apply the basic principles of front office, housekeeping, merchandising, and food and beverage management; and
- Communicate effectively with accurate 'business' and 'hospitality industry' terminology in written and/or oral form, with demonstrated proficiency in the use of technology.

Finance

Curriculum Code: 2016

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

The A.S. in Finance is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). For more information, please visit **http://www acbsp.org (https://acbsp.org/).**



Why major in Finance?

This program is to intend to prepare individuals in pursuit of careers in the fields of Banking, Insurance, Brokerage, and other financial fields. It is also intended to assist students in identifying and valuing resources for both current and future use. Students will acquire knowledge enabling them to work as Junior Loan Officers, Assistant Credit Managers, Financial Planners, Investment Bankers, Security Brokers and Back Office Managers. They will gain sufficient knowledge of the business world enabling them to function effectively within corporations of any size, including nonprofit organizations and governmental agencies. Students will be prepared to pursue higher levels of study in four-year institutions in the area of finance or related disciplines. **The A.S. in Finance is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).** For more information, please visit **http://www acbsp.org (https://acbsp.org/).**



If I major in Finance, can I transfer to an upper-division college or university?

Certainly! This major is designed for transfer to baccalaureate programs. Many colleges and universities will apply most or all the courses you have taken toward a bachelor's degree.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on your evaluation and placement, you may be required to take developmental courses in English and/or Mathematics before taking core curriculum courses required for this major.

How long will it take for me to complete this degree?

Assuming no developmental coursework is required and the student registers for an average of 16 credits per semester, this degree can be completed within two years. Students can reduce this time frame by enrolling in summer courses.

Where should I direct specific questions about this program?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

- Determine the significance of fundamental components of finance and their relevance to financial environments;
- Demonstrate knowledge of financial markets and financial institutions;
- Explain the purpose and basic operation of the Federal Reserve System and Central Bank, as well as application of Monetary Policy as relates to the money supply;
- Evaluate the effect of monetary policy or output and prices using analysis of aggregate demand and supply;
- Explain how to apply various strategies in management of financial investment portfolios in order to optimize profits (and minimize taxes) within acceptable risks;
- Evaluate common debt and equity securities and analyze relative risks and returns associated with each;
- Identify and explain key elements of international financial markets; and

- Communicate effectively with accurate 'business' terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Supply Chain Management

Curriculum Code: 2017

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

The A.S. in Supply Chain Management is accredited by the Accreditation Council for Business Schools and Programs (ACBSP). For more information, please visit **http://www acbsp.org (https://acbsp.org/).**



Why major in Supply Chain Management?

This program is intended to prepare individuals wishing to pursue careers in Supply Chain Management. Students will acquire knowledge enabling them to work as Logistics Managers, Supply Chain Consultants, Transportation and Warehouse Operators, Sales Agents, Forecasters, Distributors, Lean Production Personnel, Customer Service Representatives, and Planning Managers. They acquire ample market experience to be able to work successfully in large and small businesses, nonprofit organizations, and government agencies. Students will be prepared to pursue higher levels of study in four-year institutions in the area of supply chain management or related fields. **The A.S. in Supply Chain Management is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).** For more information, please visit **http://www acbsp.org (https://acbsp.org/).**

If I major in Supply Chain Management, can I transfer into an upper division college or university?

Certainly! This major is designed for transfer to a baccalaureate program. Many colleges and universities will apply most or all the courses you have taken toward a bachelor's degree.

Are there any requirements I must satisfy before I start taking courses in this major?

Based on your evaluation and placement, you may be required to take developmental courses in English and/or Mathematics before taking core curriculum courses required for this major.

How long will it take for me to complete this degree?

Assuming no developmental coursework is required and the student registers for an average of 16 credits per semester, this degree can be completed within two years. Students can reduce this timeframe by enrolling in summer courses.

Where should I direct specific questions about this program?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

- Develop knowledge and understanding in relation to the fundamental concepts and components of Supply Chain Management and its role as it relates to the business environment;
- Develop knowledge, understanding and skills in the areas of Warehousing, Inventory Management, Distribution, and Transportation as well as the importance of integrating each factor as it relates to decision-making;
- Develop knowledge and understanding of Demand Planning, Order Fulfillment and Consumer Satisfaction;
- Show understanding of how to apply various strategies in the field of Supply Chain Management as it relates to Procurement and Risk Management;
- Demonstrate knowledge of manufacturing operations (planning, process, and control) as it relates to general logistics.



Academic Certificates

Business Career Development

Curriculum Code: 3001

Will Earn Upon Program Completion: Academic Certificate (AC)

Why earn a Business Career Development Academic Certificate?

This program develops and refines technical and professional skills in business. The program is appropriate for those wishing to upgrade job-

related skills for career advancement. It also prepares students seeking entry- level jobs in business and industry.

If I earn a Business Career Development Academic Certificate, can I transfer to an upper-division college or university?

The certificate is job-oriented and not designed for transfer to a baccalaureate program. However, many of the courses you take may be applied toward an associates degree and later a bachelor's degree. Check with your faculty advisor for more information.

Are there any requirements I must satisfy before I start taking courses for my certificate?

Based on evaluation and placement, you may have to take developmental courses in English and/or Mathematics before taking courses for your certificate.

How long will it take for me to complete this certificate?

If you do not need developmental coursework, you can complete the certificate in two semesters.

Where should I direct specific questions about this certificate?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this certificate, graduates will be able to:

- Demonstrate knowledge of basic business principles;
- Communicate effectively using business terms and concepts;
- Explain and apply motivational theories in business;
- Communicate effectively in written and oral forms with proficient use of technology.



Business Professional

Curriculum Code: 3013

Will Earn Upon Program Completion: Academic Certificate (AC)

Why earn a Business Professional Academic Certificate?

This program develops and refines technical and professional skills in business. The program is appropriate for those wishing to upgrade job-related skills for professional development. It also prepares students for entry- level jobs and for professional advancement in business and industry.

If I earn Business Professional Certificate, can I transfer to an upper-division college or university?

The certificate is job-oriented and not designed for transfer to a baccalaureate program. However, many of the courses you take may be applied toward an associates degree and later a bachelor's degree. Check with your faculty advisor for more information.

Are there any requirements I must satisfy before I start taking courses for my certificate?

Based on evaluation and placement, you may have to take developmental courses in English and/or Mathematics before taking courses for your certificate.

How long will it take for me to complete this Certificate?

If you do not need developmental coursework, you can complete the certificate in two semesters.

Where should I direct specific questions about this certificate?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this certificate, graduates will be able to:

- Demonstrate knowledge of basic business principles;
- Communicate effectively using business terms and concepts;
- Demonstrate dependability and initiative in carrying out responsibilities;
- Communicate effectively in written and oral forms with proficient use of technology.

Certificate of Achievement

Supply Chain Management

Curriculum Code: 3014

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why earn a Supply Chain Management Certificate?

This program introduces individuals to careers in Supply Chain Management. The program is appropriate for those seeking careers in logistics, transportation and warehouse operations, distribution, and planning manage. It is also prepares students seeking entry- level jobs in business and industry.

If I earn a Supply Chain Management Certificate, can I transfer to an upper-division college or university?

The certificate is job-oriented and not designed for transfer to a baccalaureate program. However, many of the courses you take may be applied toward an associates degree and later a bachelor's degree. Check with your faculty advisor for more information.

Are there any requirements I must satisfy before I start taking courses for my certificate?

Based on evaluation and placement, you may have to take developmental courses in English and/or Mathematics before taking courses for your certificate.

How long will it take for me to complete this Certificate?

If you do not need developmental coursework, you can complete the certificate in two semesters.

Where should I direct specific questions about this certificate?

Visit the Business Division in the Green Area of the Main Campus or call (973) 877-3222.

Upon completion of this program, graduates will be able to:

- Gain understanding of fundamental concepts of Supply Chain Management;
- Understand areas of warehousing, inventory management, distribution, and transportation;
- Gain understanding of demand planning, order fulfillment and consumer satisfaction;
- Understanding of Procurement, Risk Management and Logistics.

Division of Humanities and Bilingual Studies

Division of Humanities & Bilingual Studies



The Humanities & Bilingual Studies Division's degrees provide a broad and strong foundation in literature, history, communications, world languages, art, music, and other key disciplines. Any and all students wishing to expand their scope and understanding of the humanistic perspective should seriously consider one of our division's degree programs. There is something for everyone within these subject areas. A liberal arts education can be a gateway to many wide-ranging career opportunities.

For students unable to speak the English language fluently, the Division also offers four different levels of English as a Second Language (ESL). These courses range in purpose and are designed to help new speakers of English become fluent and proficient in the language, becoming eligible to pursue degrees and certificates here at Essex County College.

Location: Level I, Red Area

Divisional Contact Number: 973-877-3285

Chairperson: Dr. William J. Tooma (wtooma@essex.edu), (973-877-3382)

Administrative Assistant: Melissa Malagi (mel1malagi@essex.edu, 973-877-3285)

Faculty	Discipline	Coordinator
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Maria Bruan (bruan@essex.edu, x3368)	English as a Second Language	
Eileen De Freece (defreece@essex.edu, x3546)	English	
Jhestarri DePasquale (jdepasq1@essex.edu, x3030)	History	
David DiPasquale (ddipasqu@essex.edu, x1138)	Art	
Jamal Elborj (jelborj@essex.edu, x1936)	English	
Rachal Gasataya (rgasatay@essex.edu, x1882)	Music	
Nessie Hill (hill@essex.edu, x3027)	English	
Samuel Lumbsden (slumbsde@essex.edu, x3203)	English as a Second Language	ESL Coordinator
Mikal Nash (nash@essex.edu, x3489)	History	
Sean O'Connell (soconnel@essex.edu, x1926)	English	
Michael Pekarofski (pekarofski@essex.edu, x3548)	English as a Second Language	

Shawn Smith (ssmith59@essex.edu, x1153)	Art
Robert Spellman (spellman@essex.edu, x3059)	Art
Margaret Stevens (mstevens@essex.edu, x3239)	History
Alexandra Tangarife (atangari@essex.edu, x3041)	English
Jennifer Wager (jwager@essex.edu, x1937)	Communications
Rebecca Williams (wrebecca@essex.edu, x3470)	English



Degrees

Art

Curriculum Code: 0401

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Art?

ECC's Art degree program majors take courses which ensure a strong technical and artistic foundation. The curriculum parallels the first two years of a four-year degree program. Students will be able to take, in addition to their general education requirements, core foundational courses within their chosen discipline.



Upon completion of this program, graduates will be able to:

- Acquire a thorough understanding of the elements of art and the aesthetic principles related to each medium;
- Identify and apply various concepts of each medium;
- Expand their visual arts vocabulary;
- Explore both traditional and non-traditional techniques and materials;
- Understand and appreciate the criteria for aesthetic standards;
- Create art projects using industry standard tools, applications, and platforms; and
- Utilize professional project management practices.

Liberal Arts: General

Curriculum Code: 0199

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Liberal Arts: General?



ECC's Liberal Arts: General degree program majors are able to take a bulk of their general education requirements while also getting the opportunity

to take several Humanities or Social Science electives. This program is designed for those who wish to explore a broader base of study.

Upon completion of this program, graduates will be able to:

- Apply principles of effective rhetoric and critical thinking in oral presentations and writing assignments;
- Utilize the library, Internet, and other electronic sources to prepare research projects following Modern Language Association (MLA) guidelines for source documentation;
- Apply critical and analytical analysis techniques to literary works and visual art works and/or musical pieces of various periods, styles, and genres; and
- Demonstrate knowledge of historical events and fundamental concepts and theories of analysis used in historical interpretation; and Compare and analyze diverse cultures throughout history.



Liberal Arts: Africana Studies Option

Curriculum Code: 019A

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree



Why major in Liberal Arts: Africana Studies Option?

ECC's Liberal Arts: Africana Studies Option degree program is for those who desire a strong foundation of knowledge within African and African-American art, cinema, literature, history, and sociology. Majors of this program may go on to work in the fields of government service, teaching, law, publishing, and business.

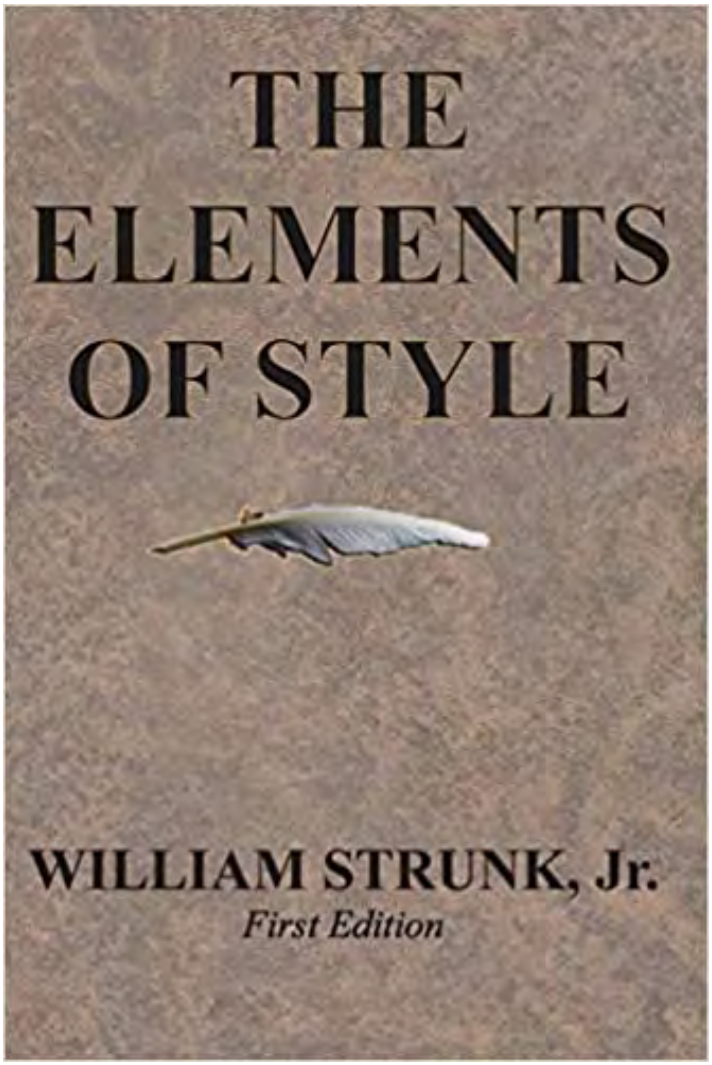
Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of the arts, history, and literature of Africa, the African-American community, and the Caribbean;



- Apply critical thinking, problem solving, and effective communication skills to analyze and discuss literary and/or art works, historical events, and topics related to cultural diversity; and
- Utilize the library, Internet, and other electronic sources to prepare research projects that follow MLA, APA, and/or Chicago Manual of style guidelines for source documentation.

Liberal Arts: English Option



Curriculum Code: 019E

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Liberal Arts: English Option?

ECC's Liberal Arts: English Option provides students the opportunity to sharpen their critical thinking, reading, and writing skills by

taking courses centered on different styles of writing and a variety of literature-based ones. Not just meant for those seeking future careers in education, this degree program option will prepare students for employment in a variety of fields.

Upon completion of this program, graduates will be able to:

- Read and discuss non-fiction-based works of various lengths;
- Recognize and use various modes of writing in order to develop persuasive essays;
- Make proper use of MLA Style in-text parenthetical citations;
- Read and discuss literary works of various lengths;
- Recognize and use various modes of writing in order to develop literary analytical essays;
- Demonstrate and refine communication skills needed for careers in business and industry;
- Recognize and use standard technical writing principles, conventions, and formats appropriate and needed in the workplace;
- Develop and write their own creative works of prose and poetry;
- Provide constructive criticism to their peers; and
- Take in the constructive criticism of others in order to apply it to their own writing.

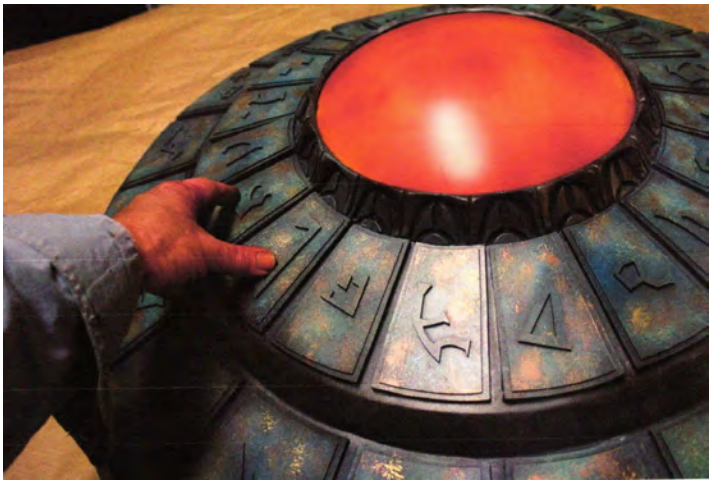
Liberal Arts: Entertainment Production Option

Curriculum Code: 019C

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Liberal Arts: Entertainment Production Option?

ECC's Liberal Arts: Entertainment Production Option is for students interested in completing their general education requirements as a set of core foundational courses within cinema studies, film and television production, and audio production (radio/podcasting).



Upon completion of this program, graduates will be able to:

- Learn to screen and critically analyze films, and other forms of media, as an artform;
- Learn to use a still camera to capture images while exploring various concepts of photography via traditional and non-traditional techniques;
- Plan, record, and edit a variety of television-based productions while learning to effectively operate within a studio environment;
- Develop and write their own screenplay while learning to provide and receive constructive criticism;
- Learn to complete a short film, starting from the storyboarding and scripting processes to the actual filming and, ultimately, ending with the post-production phase; and
- Learn to write, record, and edit a variety of audio productions while coming to understand the industry's structure and the medium's impact.

Liberal Arts: History Option

Curriculum Code: 019H

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree



Why major in Liberal Arts: History Option?

ECC's Liberal Arts: History Option provides students the opportunity to study the people, times, and events which have shaped the world in which we currently live. Not just meant for those seeking future careers in education, this degree program option will prepare students for employment in a variety of fields.



Upon completion of this program, graduates will be able to:

- Show an understanding of how individuals are shaped by their own past and by the past of their society and institutions;
- Show an understanding of how the operation of large-scale forces are responsible for causing change over time;
- Identify and describe the contours and stakes of conversations among historians within defined historiographical fields;
- Apply historical methods to evaluate critically the record of the past and how historians and others have interpreted it; and
- Show basic historical research skills, including (as appropriate) the effective use of libraries, archives, and databases.

Liberal Arts: Theater Option

Curriculum Code: 019D

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Liberal Arts: Theater Option?

ECC's Liberal Arts: Theater Option prepares students for a career in the field by providing them a core of courses designed to introduce them to and refine their skills in acting, directing, and playwriting. In addition, students will develop a strong appreciation for the history of the medium.

Upon completion of this program, graduates will be able to:

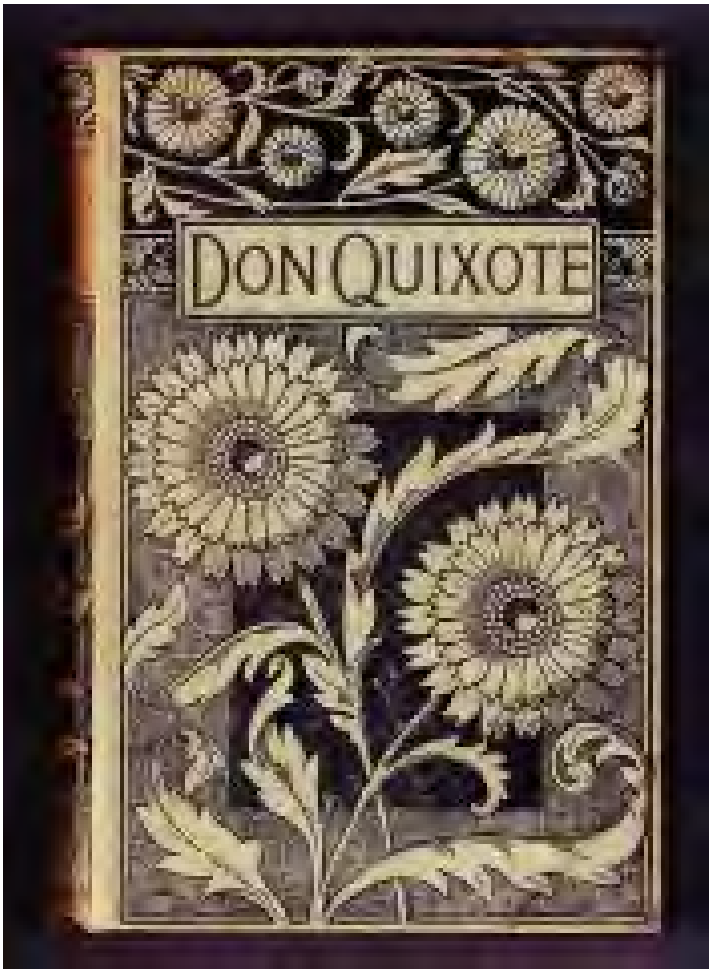
- Critically examine the philosophical and theoretical issues concerning the human experience via the exposure of reading, watching, and, to a lesser degree, performing portions of plays;
- Learn to understand the impact of the theater upon various societies over the course of time;
- Build an appreciation of the history of the theater and its ability to shape and reshape human thinking;
- Be able to successfully and professionally participate in a discourse on the analysis of the theater and the elements which makes it stand out from other forms of performing arts;
- Perform effectively;
- Evaluate dramatic performances and/or texts;
- Understand the principles which go into directing and staging for the theater;
- Be able to read a play's script and convey their interpretation of the material to others;
- Assimilate the various theatrical elements and articulate them as they relate to stage direction;
- Develop and write their own scenes and plays;
- Provide constructive criticism to their peers; and
- Take in the constructive criticism of others in order to apply it to their own writing.

Liberal Arts: World Language Option

Curriculum Code: 019L

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

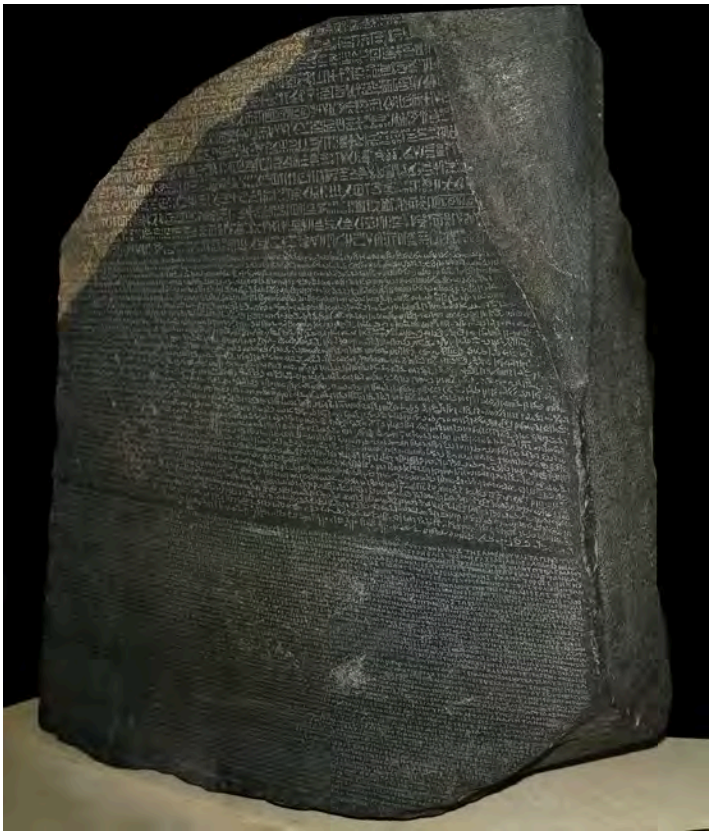
Why major in Liberal Arts: World Language Option?



ECC's Liberal Arts: World Language Option is designed for students who plan to go into fields of work such as teaching, interpreting, and translation. Majors will be able to study within either one or two different languages, depending upon their personal preference.

Upon completion of this program, graduates will be able to:

- Proficiently write, read, speak, and listen to intermediate-level Spanish that emphasizes real-life contexts; and
- Describe various cultures of the Spanish-speaking world.



Music

Curriculum Code: 0409

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Music?



ECC's Music degree program is designed for students to pick between two tracts of study: vocal or instrumental. Upon making that choice, majors will all take several level of music theory in addition to courses in ear training, sighting singing, and music technology.



Upon completion of this program, graduates will be able to:

- Read music, notate music, and analyze musical compositions;
- Read, sing, and notate intervals, rhythms, and melodies;
- Play major and scales and arpeggios (hands together) with reasonable speed and accuracy;
- Play chord progressions in all major and minor keys and harmonize melodies (written and improvised) using these progressions;
- Transpose melodies and harmonies to other keys;
- Perform repertoire pieces of increasing difficulty;
- Demonstrate correct singing and performance techniques;
- Perform a variety of styles;
- Interpret different styles from written arrangements and compositions;
- Describe various components;
- Understand the science behind audio and acoustics;
- Successfully make use of recording equipment; and
- Create musical compositions.

New Media Technology

Curriculum Code: 2071

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

Why major in New Media Technology?

ECC's New Media Technology is designed for students to enter the workforce upon graduating. It is not meant for a seamless transfer to a four-year institution although graduates of the program do sometimes make the choice to do so. Majors will take a plethora of courses within art, entertainment production, and interactive media.

Upon completion of this program, graduates will be able to:

- Apply fundamental principles of design to new media projects;
- Utilize industry-standard software applications and hardware equipment to produce new media projects; and
- Demonstrate knowledge of storyboarding, character development, interactivity and introductory scripting using various computer software platforms and applications.

Academic Certificates

Art

Curriculum Code: 3072

Will Earn Upon Program Completion: Academic Certificate (AC)

Why pursue the Art Academic Certificate?

This certificate is designed for those seeking to enhance their skillset within the visual arts. While created with those already holding an undergraduate degree in mind, anyone is eligible to enroll. It offers a seamless transfer to the Art AA degree program should someone wish to continue on from 30 to 60 credits.

Upon completion of this program, graduates will be able to:

- Acquire a thorough understanding of the elements of art and the aesthetic principles related to each medium;
- Identify and apply various concepts of each medium;
- Expand their visual arts vocabulary;
- Explore both traditional and non-traditional techniques and materials;
- Understand and appreciate the criteria for aesthetic standards;
- Create art projects using industry standard tools, applications, and platforms; and
- Utilize professional project management practices.

English

Curriculum Code: 3073

Will Earn Upon Program Completion: Academic Certificate (AC)

Why pursue the English Academic Certificate?

This certificate is designed for those seeking to gain knowledge within technical writing, creative writing, and literature. While created with those already holding an undergraduate degree in mind, anyone is eligible to enroll. It offers a seamless transfer to the Liberal Arts: English Option AA degree program should someone wish to continue on from 30 to 60 credits.

.***Upon completion of this program, graduates will be able to:***

- Read and discuss non-fiction-based works of various lengths;
- Recognize and use various modes of writing in order to develop persuasive essays;
- Make proper use of MLA Style in-text parenthetical citations;
- Read and discuss literary works of various lengths;
- Recognize and use various modes of writing in order to develop literary analytical essays;
- Demonstrate and refine communication skills needed for careers in business and industry;
- Recognize and use standard technical writing principles, conventions, and formats appropriate and needed in the workplace;
- Develop and write their own creative works of prose and poetry;
- Provide constructive criticism to their peers; and

- Take in the constructive criticism of others in order to apply it to their own writing.

Entertainment Production

Curriculum Code: 3075

Will Earn Upon Program Completion: Academic Certificate (AC)

Upon completion of this program, graduates will be able to:

- Learn to screen and critically analyze films, and other forms of media, as an artform;
- Learn to use a still camera to capture images while exploring various concepts of photography via traditional and non-traditional techniques;
- Plan, record, and edit a variety of television-based productions while learning to effectively operate within a studio environment;
- Develop and write their own screenplay while learning to provide and receive constructive criticism;
- Learn to complete a short film, starting from the storyboarding and scripting processes to the actual filming and, ultimately, ending with the post-production phase; and
- Learn to write, record, and edit a variety of audio productions while coming to understand the industry's structure and the medium's impact.

History

Curriculum Code: 3074

Will Earn Upon Program Completion: Academic Certificate (AC)

Why pursue the History Academic Certificate?

This certificate is designed for those seeking to gain knowledge within the study of various historical periods and topics. While created with those already holding an undergraduate degree in mind, anyone is eligible to enroll. It offers a seamless transfer to the Liberal Arts: History Option AA degree program should someone wish to continue on from 30 to 60 credits.

Upon completion of this program, graduates will be able to:

- Show an understanding of how individuals are shaped by their own past and by the past of their society and institutions;
- Show an understanding of how the operation of large-scale forces are responsible for causing change over time;
- Identify and describe the contours and stakes of conversations among historians within defined historiographical fields;
- Apply historical methods to evaluate critically the record of the past and how historians and others have interpreted it; and
- Show basic historical research skills, including (as appropriate) the effective use of libraries, archives, and databases.

Liberal Arts: General

Curriculum Code: 0191

Will Earn Upon Program Completion: Academic Certificate (AC)

Upon completion of this program, graduates will be able to:

- Apply principles of effective rhetoric and critical thinking in oral presentations and writing assignments;
- Utilize the library, Internet, and other electronic sources to prepare research projects following Modern Language Association (MLA) guidelines for source documentation;
- Apply critical and analytical analysis techniques to literary works and visual art works and/or musical pieces of various periods, styles, and genres; and
- Demonstrate knowledge of historical events and fundamental concepts and theories of analysis used in historical interpretation; and Compare and analyze diverse cultures throughout history.

Frequently Asked Questions

If I major in a degree or certificate program, can I transfer to a four-year college or university?

ECC's AA and AS degree programs are designed for to you transfer to a four-year institution so that students can complete their baccalaureates. Our AAS degree programs are designed for graduates to immediately enter the workforce, although some later choose to attend a four-year institution (how the transfer credits get determined can vary for this type of degree). The certificates are designed for you to put towards pursuing associate degrees, if you so choose.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on initial placement, you may have to take the ENG-099/101 co-requisite, which replaces traditional remedial English here at ECC. It is a 4.5-credit version of the standalone ENG-101 and will prepare you for further study here. In addition, your initial placement may result in your having to take remedial mathematics courses, but if you are a major within the Humanities & Bilingual Studies Division, the only standalone remedial math you will have to take is MTH-086/086T. Upon passing that, you can take either MTH-091S/101 or MTH-093S/103, which are similar to the ENG co-requisite.

How long will it take for me to complete my degree or certificate program?

For students pursuing AA, AS, or AAS degree programs, the length to completion can vary. If majors take a full-time load (a minimum of 12 college-level credits) each Fall and Spring and take advantage of the Winter Intercession and two Summer Sessions, there is no reason that it should take longer than two to two and a half years to finish your studies at ECC. The certificates should not take longer than a year to a year and a half.

Where should I direct specific questions about a degree or certificate program?

Call the Humanities & Bilingual Studies Division's main number at 973-877-3285.



Division of Mathematics, Engineering Technologies and Computer Science

This division offers A.S. degree programs designed to prepare students for transfer to 4-year institutions to pursue degrees in science and technology, and A.A.S. and certificate programs designed to prepare students to enter the workforce upon graduation.

Programs utilize cutting-edge equipment in laboratories for training next generation engineers, technicians, and scientists. Faculty have diverse backgrounds in applied sciences in both educational and industrial settings; most have earned doctorate or professional engineering licenses in field of specialization.

Location: Level II – Blue Area

Divisional Contact Number: 973-877-3302

Chairperson: Andrew Hrechak (ahrechak@essex.edu), (973-877-3303)

Administrative Assistant: Wisline Norde (wnorde@essex.edu, 973-877-3302)

Faculty	Discipline
Ron Bannon (bannon@essex.edu, x1886)	Mathematics
Carlos Castillo (ccastil6@essex.edu, x3308)	Mathematics
Paula Catalan (pcatalan@essex.edu, x2203)	Mathematics
Teryn Cha (yan@essex.edu, x1881)	Computer Science
Amit Das (adas3@essex.edu, x4403)	Mechanical Engineering
Carlos De La Torre (delatorre@essex.edu, x3340)	Mathematics
Alkis Dimopoulos (adimopou@essex.edu, x3379)	Engineering
George Effah (geffah@essex.edu, x1893)	Computer Science
Susan Elmesslamy (selmessa@essex.edu, x3535)	Computer Science
Ines Figueiras (ifigueir@essex.edu, x4348)	Mathematics
Mingyon McCall (mccall@essex.edu, x3014)	Mathematics
Bertheleau Ngakam (bngakam@essex.edu, x3063)	Mathematics
Brooke Orosz (borosz@essex.edu, x3016)	Mathematics
Jinsoo Park (jpark@essex.edu, x3588)	Engineering
Yusuf Parlar (yparlar@essex.edu, x3185)	Mathematics
Daxay Patel (patel@essex.edu, x1861)	Computer Information Systems
Ruben Petrela (rpetrela@essex.edu, x6593)	Architecture
Angela Pierce (apierce2@essex.edu)	Mathematics
Kodjovi Quenum (kquenum@essex.edu, x2197)	Mathematics
Debashis Sarkar (dsarkar@essex.edu, x3532)	Mathematics
Ardian Selimi (aselimi@essex.edu, x3051)	Computer Science
Deepal Shah (dshah10@essex.edu, x1852)	Information Systems
Timothy Stafford (stafford@essex.edu, x4408)	Mathematics
Mamta Vyas (mvyas@essex.edu, x4402)	Mathematics
Chengwen Wang (wang@essex.edu, x4349)	Mathematics

The programs in Civil Engineering Technology, Electrical Engineering Technology and Mechanical & Manufacturing Engineering Technology are accredited by the **Engineering Technology Accreditation Commission of ABET**, https://www.abet.org (https://www.abet.org/).

Degrees

Applied Computer Science

Curriculum Code: 2303

Will Earn Upon Completion: Associate in Science (A.S.) Degree



Why major in Applied Computer Science?

Program prepares for careers in management or other positions in information technology as well as for transfer. Typical entry-level positions include Technical Support Specialist, Network Technician, Database Application Specialist, PC Technician, and Helpdesk Technician.

If I major in Applied Computer Science can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division colleges and universities. Consult catalog where you plan to transfer to, to select courses toward your baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using various dynamic and static data structures;
- Design digital circuity;
- Utilize multitasking, preemptive scheduling, time sharing operating system concepts and associated communications, networking, and security issues;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Demonstrate object-oriented design techniques using encapsulation, abstraction, inheritance, and reusability;
- Use software applications like spreadsheets, word processing, and basic programming; and
- Apply ethical reasoning in the technology environment.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Architectural Technology

Curriculum Code: 2301

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree



Why major in Architectural Technology?

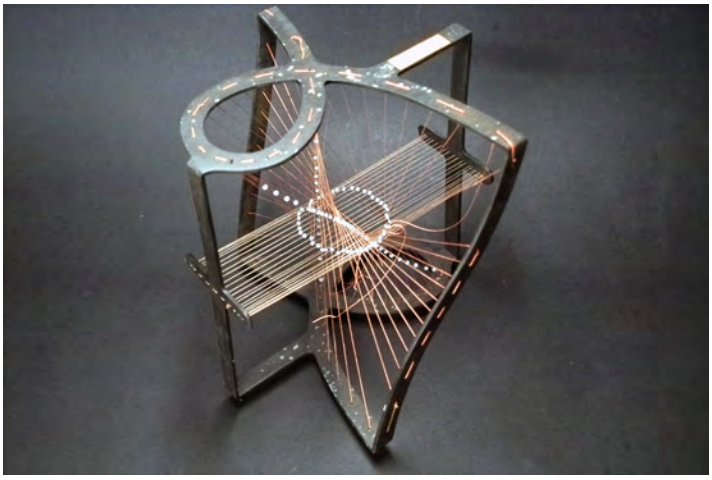
Program prepares for entry-level positions in the architectural profession ranging from Construction Site Inspector to CAD Operator. Instruction includes work in architectural design studio with opportunities to express ideas via conceptual architectural projects.

If I major in Architectural Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, such as at Kean University and New Jersey Institute of Technology. Placement in upper-division colleges or universities depends on individual academic performance and portfolio of work accumulated in the course of Architectural Technology study.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.



How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of basic construction principles and materials;
- Understand architectural and engineering drawings including scale and orthographic projection;
- Design various architectural projects including site layout and building features;
- Design structures utilizing functional as well as aesthetic considerations;
- Demonstrate ability to conduct architectural presentations for graphics and design pin-ups;
- Demonstrate knowledge of architectural history, including it influences design today; and
- Utilize computer software applications including computer aided design (CAD).

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Civil Engineering Technology

Curriculum Code: 5309

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Civil Engineering Technology?

Program prepares for entry-level positions in construction and civil engineering fields, including opportunities with engineering firms, building contractors, utility and materials testing companies, or engineering departments of governmental agencies.

If I major in Civil Engineering Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, particularly at NJIT.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Graduates of this program will demonstrate:

- Employment in the field of civil engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Utilize principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering;
- Perform standardized field and laboratory tests related to civil engineering;
- Utilize surveying methods appropriate for land measurement and/or construction layout; and
- Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Computer Information Systems

Curriculum Code: 2002

Will Earn Upon Completion: Associate in Science (A.S.) Degree

Why major in Computer Information Systems?

Program prepares for careers in management or other positions in information technology as well as for transfer. Typical entry-level positions include Technical Support Specialist, Network Technician, Database Application Specialist, PC Technician, and Helpdesk Technician.

If I major in Computer Information Systems can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division colleges and universities. Consult catalog where you plan to transfer to, to select courses toward your baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, this degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using dynamic and static data structures;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Apply business organization and management concepts to information technology environments; and
- Demonstrate understandings of principles of financial accounting for inventories receivables, assets, liabilities, internal control, and corporate entities; and
- Apply ethical reasoning in the technology environment.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Computer Science

Curriculum Code: 2302

Will Earn Upon Completion: Associate in Science (A.S.) Degree

Why major in Computer Science?

Program prepares for direct entry to computer technology jobs as well as for transfer emphasizing mathematically oriented computer applications. Entry-level positions include Application Programmer, Systems Analyst or Programmer, Software Engineer, Technical Support Specialist, Network Technician, and Helpdesk Technician.

If I major in Computer Science can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division institutions. Consult catalog where you may transfer to select courses toward baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking courses in Summer sessions.

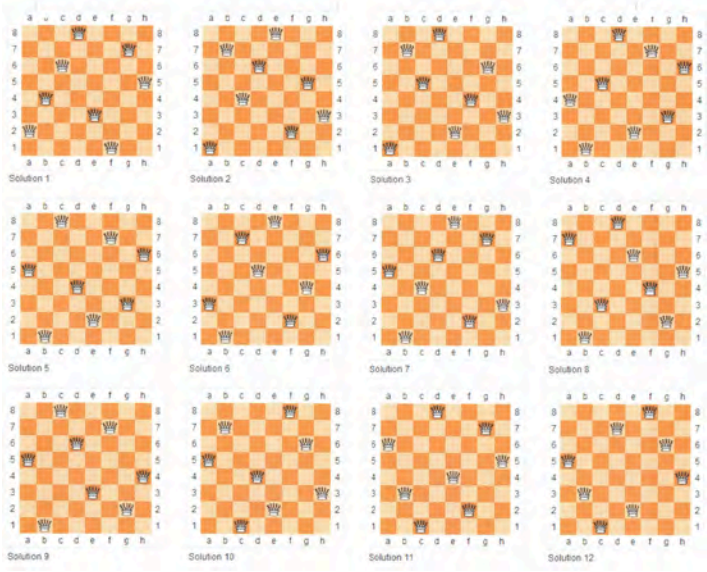
Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using various dynamic and static data structures;
- Design digital circuity;

- Utilize multitasking, preemptive scheduling, time sharing operating system concepts and associated communications, networking, and security issues;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Demonstrate object-oriented design techniques using encapsulation, abstraction, inheritance, and reusability;
- Use software applications like spreadsheets, word processing, and basic programming; and
- Apply ethical reasoning in the technology environment.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Computer Science: Data Science Option

Curriculum Code: 232D

Will Earn Upon Completion: Associate in Science (A.S.) Degree

Why major in Computer Science: Data Science Option?

Program prepares for a baccalaureate in data science or related field emphasizing programming languages, artificial intelligence and data visualization skills coupled with a mathematical background in calculus, statistics, probability and linear algebra.

If I major in Computer Science: Data Science Option can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division colleges and universities. Consult catalog where you plan to transfer to, to select courses toward your baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.



How long will it take me to complete this degree?

If you do not need developmental courses and register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Evaluate the role of data scientists and data analysts;
- Identify and apply commonly used data collection methods;
- Describe and apply common data cleansing methods;
- Learn and apply programming languages to manipulate data;
- Explain the role of the tools used for performing data analysis;
- Apply artificial intelligence techniques to real-world problems;
- Describe how data visualization helps in data representations; and
- Utilize data visualization tools to display data.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Cybersecurity & Network Technology

Curriculum Code: 2312

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Cybersecurity & Network Technology?

Program prepares for entry-level positions in information technology relating to securing devices like computers, smartphones, and computer networks including the Internet. It is designed to meet the changing needs of industry and provide students with technical expertise to administer computer networks and secure scalable connected networks.

If I major in Cybersecurity & Network Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, such as the Cybersecurity program at NJIT.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Describe and analyze hardware, software, network components, and their interrelations;
- Explain networking protocols and hierarchical relations of hardware and software;
- Compare protocol models and select appropriate protocols for a particular design;
- Manage multiple operating systems, systems software, network services, and security, as well as evaluate and compare systems software and emerging technologies;
- Develop solutions for networking and security problems, balancing business and technical issues and security;
- Explain concepts of confidentiality, availability, and integrity in Information Assurance; and
- Effectively communicate technical information verbally, in writing, and in presentation.

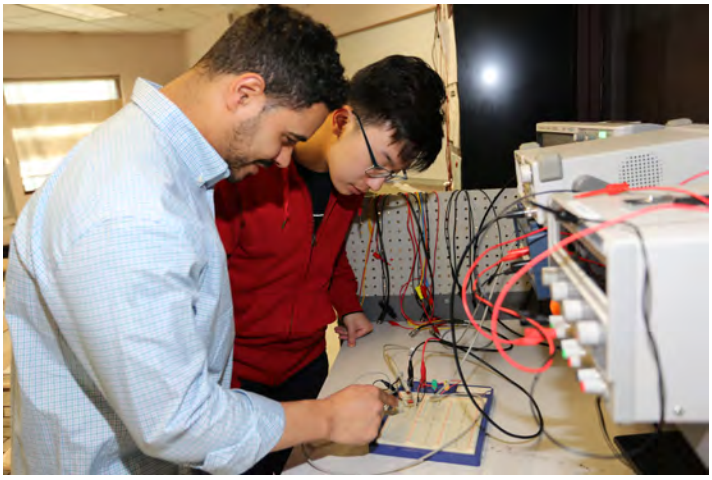
Where should I direct specific questions?

Contact the Division (973) 877-3302.

Electrical Engineering Technology

Curriculum Code: 2313

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree



Why major in Electrical Engineering Technology?

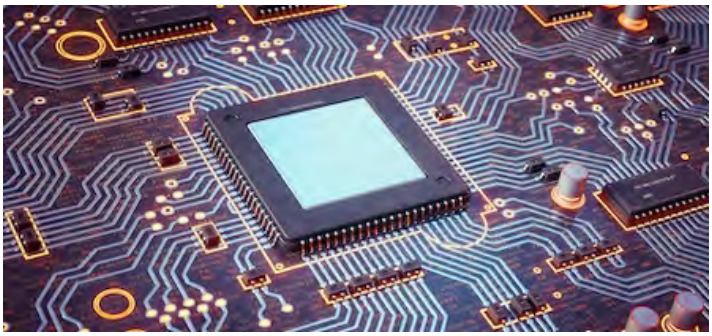
Program prepares for entry-level positions working with engineers in the design, fabrication, installation, operation, maintenance, and repair of electrical and computer devices.

If I major in Electrical Engineering Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, particularly New Jersey Institute of Technology.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.



How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 16 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Graduates of this program will demonstrate:

- Employment in the field of electrical and computer engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Apply circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering
standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems; and

- Apply natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Engineering

Curriculum Code: 0399

Will Earn Upon Completion: Associate in Science (A.S.) Degree



Why major in Engineering?

Program matches the first two years of an engineering baccalaureate preparing for students for seamless transfer. Students select engineering major elective courses from one of the branches of engineering that they plan to specialize in after transferring, such as electrical, biomedical, chemical, civil computer, or mechanical engineering.

If I major in Engineering can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division colleges and universities. Consult catalog where you plan to transfer to, to select courses toward your baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

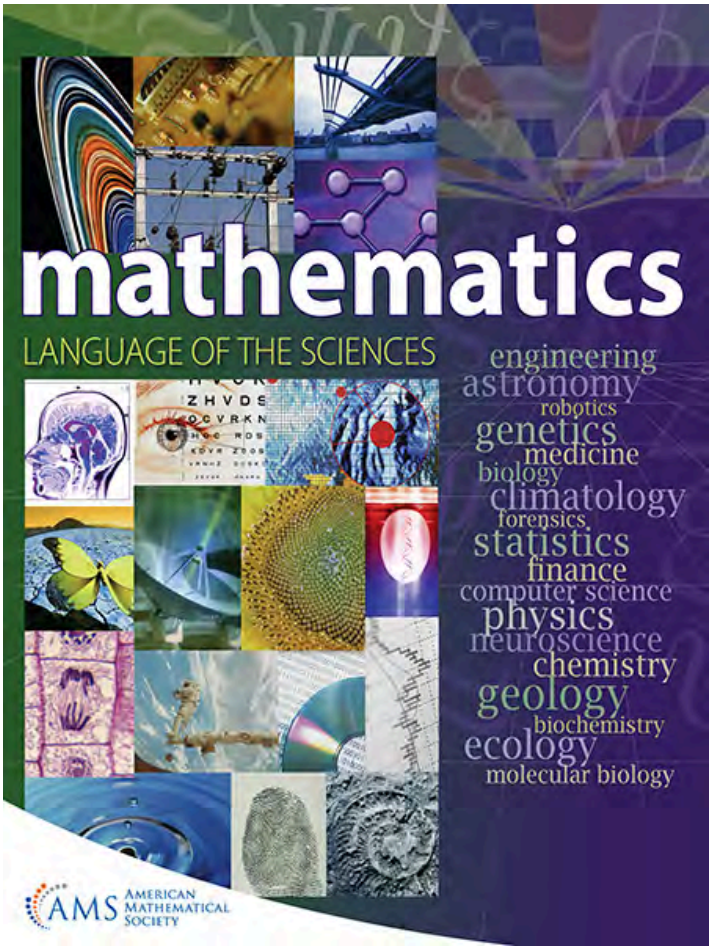
If you do not need developmental courses and you register for an average of 16 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Analyze engineering drawings including concept of scale and orthographic projection;
- Assist engineers and technicians in performing tasks relevant to selected branch of engineering;
- Complete written engineering reports using skills acquired in curriculum courses;
- Write computer programs to solve engineering-based problems using skills acquired in curriculum courses;
- Demonstrate knowledge of engineering principles such as mechanics, materials, and systems; and
- Utilize computer software applications used in engineering including computer aided design (CAD).

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Health Information Technology

Curriculum Code: 2124

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Health Information Technology?

Program prepares for entry-level training for management systems to collect, store, process, retrieve, analyze, disseminate, and communicate information related to the health care industry.

If I major in Health Information Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, particularly to the Medical Informatics program at New Jersey Institute of Technology and that for Health Information Technology at Rutgers-Newark.



Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 16 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Function as an entry-level Health Information Technician;
- Comply with principles, legal and professional standards, government regulations, and accrediting agencies which govern health;
- Communicate effectively with any and all providers and users of health information technology.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Mathematics

Curriculum Code: 0604

Will Earn Upon Completion: Associate in Science (A.S.) Degree

Why major in Mathematics?

Program prepares for baccalaureate in mathematics, mathematics education or related fields emphasizing methodological problem-solving like data analysis and actuarial science.

If I major in Mathematics can I transfer to an upper-division college or university?

Curriculum tracks shown below prepare students for transfer to upper-division colleges and universities. Consult the catalog of the College or University where you plan to transfer, to select the appropriate electives needed for accomplishing your eventual baccalaureate degree goal. Consult with a career advisor for assistance.

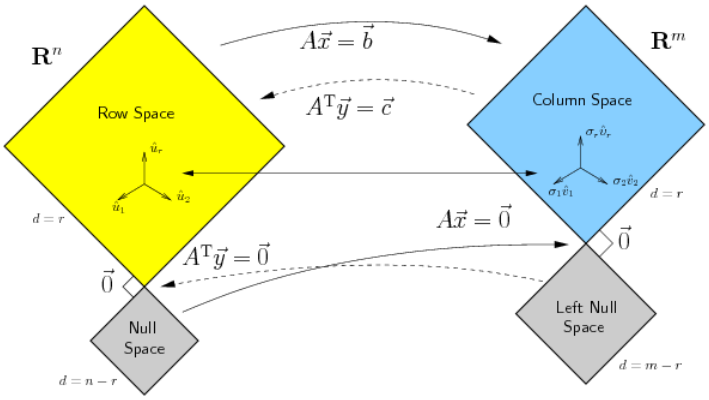


Mathematics Major Tracks:

- **Finance & Actuarial**
- **NJIT: Applied Mathematics & Applied Physics**
- **NJIT: Applied Mathematics & Physics**
- **NJIT: Applied Mathematics**
- **NJIT: Computational**
- **NJIT: Statistics & Data Analysis**
- **Rutgers Newark: Applied Mathematics**

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.



How long will it take me to complete this degree?

If you do not need developmental courses and register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of the fundamental concepts and theories from calculus, probability, statistics, linear algebra and technical writing;
- Utilize various problem-solving and critical-thinking techniques to set up and solve applied problems in science, business, engineering, and technology fields;
- Communicate accurate mathematical terminology and notation in written and/or oral form in order to explain strategies to solve problems as well as to interpret found solutions; and
- Use appropriate technology, such as graphing calculators and computer software, effectively as a tool to solve problems.

Where should I direct specific questions?

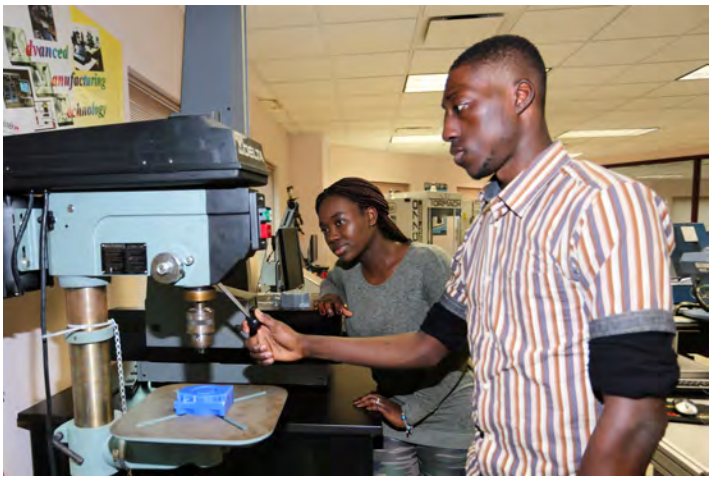
Contact the Division (973) 877-3302.



Mechanical & Manufacturing Engineering Technology

Curriculum Code: 2314

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree



Why major in Mechanical and Manufacturing Engineering Technology?

Program prepares for entry-level positions working in areas such as mechanical design, quality control, material testing, facilities design, automation, stress analysis, and sales.

If I major in Mechanical and Manufacturing Engineering Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions, particularly New Jersey Institute of Technology.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 16 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.



Graduates of this program will demonstrate:

- Employment in the field of mechanical and manufacturing engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Apply principles of geometric dimensioning and tolerancing;
- Use computer aided drafting and design software;
- Select, set-up, and calibrate measurement tools/instrumentation;
- Prepare laboratory reports and systems documentation associated with development, installation, or maintenance of mechanical components and systems;
- Demonstrate basic familiarity and use of industry codes, specifications, and standards;
- Demonstrate use of basic engineering mechanics; and
- Utilize skills acquired in a capstone experience acquired in the program.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Software Development Technology

Curriculum Code: 2316

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Software Development Technology?

Program introduces students to fundamental concepts of programming with emphasis on the whole software development process.

If I major in Software Development Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a major software-based project;
- Test software systems with specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as theory and principles of computer science and mathematics, to the development and maintenance of complex software development systems;
- Evaluate impact of potential solutions to software engineering problems in a global society, using knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques;
- Create interactive Web applications; and
- Design and develop mobile applications for the Android platform.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Technical Studies

Curriculum Code: 5304

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Technical Studies?

The Technical Studies degree program is designed to ensure validity of nontraditional learning and promote adult access to and success in postsecondary education and the workforce. By majoring in Technical Studies, you can transfer in approved credits from construction code training programs and earn a college degree.

If I major in Technical Studies can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Demonstrate necessary technical skills to be more productive in chosen profession and career;
- Demonstrate competence in broad array on intellectual and communication skills;
- Compete effectively in a technology-based global economy;
- Develop a broad base of knowledge;
- Think creatively, analytically, and critically;
- Apply basic principles of blueprint reading to prepare detailed working drawings using computer aided design (CAD) skills; and
- Communicate effectively.

Where should I direct specific questions?

Contact the Division (973) 877-3302.



Technical Studies: Uniform Construction Code Technology

Curriculum Code: 5305

Will Earn Upon Completion: Associate in Applied Science (A.A.S.) Degree

Why major in Technical Studies: Uniform Construction Code Technology?

The Technical Studies: Uniform Construction Code Technology Option degree program is designed to ensure validity of nontraditional learning and promote adult access to and success in postsecondary education and the workforce. By majoring in Technical Studies: Uniform Construction Code Technology Option, you can transfer in approved credits from construction code training programs and earn a college degree.

If I major in Technical Studies: Uniform Construction Code Technology can I transfer to an upper-division college or university?

Program is career oriented, not specifically designed for transfer. However, most colleges and universities in New Jersey accept training credits recommended by the American Council on Education (ACE), which evaluates training programs. Therefore, you can transfer some or all of credits earned in the Technical Studies: Uniform Construction Code Technology Option degree program to a professional studies bachelor's degree program at a four-year institution.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major. You may also have your training credits evaluated by a faculty member of the Division.

How long will it take me to complete this degree?

If you do not need developmental courses and register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Review construction plans in terms of compliance with applicable state and local codes;
- Determine whether construction is in conformance with approved plans;
- Apply technical and administrative code-related knowledge in code enforcement; and
- Demonstrate appropriate oral and written communication skills and professional behaviors, which include being able to write technical reports, communicate well with others during site visits/inspections, and effectively work as a member of a team.

Where should I direct specific questions?

Call the Division at (973) 877-3302.

Academic Certificate

Database System Administration

Curriculum Code: 3324

Will Earn Upon Completion: Academic Certificate (AC)

Why major in Database System Administration?

Certificate provides students with knowledge and skills needed to effectively administer computer-based database systems in any professional environment.

If I major in Database System Administration can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 12 credits each semester, certificate can be completed in one year.

Upon completion of this program, graduates will be able to:

- Apply design theory to a database using appropriate database management systems;
- Design, maintain, and monitor database server architecture including addressing performance optimization to meet system requirements;
- Test software systems against specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as computer science and mathematics theories and principles, to develop and maintain complex software systems; and
- Evaluate impact of potential software engineering problem solutions as they fit into global societies by integrating knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Certificates of Achievement

Building Code Technology

Curriculum Code: 3052

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Building Code Technology?

Certificate offers opportunity to fulfill credentials for state-approved licensing requirements adopted by the New Jersey Uniform Construction Code, administered by the Department of Community Affairs. Provides currently licensed code enforcement personnel means to upgrade educational credentials and prepares for inspector-related employment.

If I major in Building Code Technology can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 6 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local building codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Building Code Inspector.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Computer and Network Support

Curriculum Code: 3321

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Computer and Network Support?

Certificate introduces students to installation, configuration, troubleshooting, and maintenance of computer hardware, software, operating systems, peripherals, cabling, and networks.

If I major in Computer and Network Support can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 8 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Describe and analyze hardware and software, components of a network and their interrelations;
- Explain network protocols and hierarchical relationships of hardware and software;
- Compare protocol models and select appropriate protocols for a particular design;
- Explain concepts and theories of networking and apply to various situations, which may involve classifying networks, analyzing performance, and implementing new technologies;
- Use resources to stay abreast of latest industry tools and techniques analyzing impacts on existing and applying to future situations;
- Manage multiple operating systems, systems software, network services, and security; and
- Evaluate and compare systems software and emerging technologies.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Computer-Aided Design (CAD) Technology

Curriculum Code: 3205

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Computer-Aided Design Technology?

Certificate provides students with knowledge and skills needed to effectively use computer aided design (CAD) in any professional environment, such as civil, mechanical, and manufacturing engineering, as well as architecture, surveying, and construction.

If I major in Computer-Aided Design Technology can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 12 credits each semester, certificate can be completed in one year, including taking summer courses.

Upon completion of this program, graduates will be able to:

- Apply principles of engineering graphics to prepare detailed drawings using CAD software;
- Demonstrate computer literacy in use of various CAD systems; and
- Use American National Standards Institute (ANSI) protocol for sizing and tolerancing of mating parts; Apply Geometric Dimension and Tolerancing (GD&T) techniques to engineering design; and Utilize 3D solid modeling CAD systems to create mechanical components and generate assembly designs.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Cybersecurity

Curriculum Code: 3322

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Cybersecurity?

Certificate provides students with knowledge and skills needed to effectively administer computer-based database systems in any professional environment.

If I major in Cybersecurity can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 15 credits each semester, certificate can be completed in one year.

Upon completion of this program, graduates will be able to:

- Manage multiple operating systems, systems software, network services and security;
- Evaluate and compare systems software and emerging technologies;
- Develop solutions for networking and security problems, balancing business concerns, technical issues, and security;
- Identify infrastructure components and role they serve, and design infrastructure including devices, topologies, protocols, systems software, management, and security;
- Use resources to stay abreast of industry tools and techniques analyzing impacts;
- Explain concepts of confidentiality, availability, and integrity in Information Assurance, including physical, software, devices, policies,

and people, and analyze these in an existing system and design implementations; and
- Cite and comply with relevant industry and organizational codes of conduct and ethics.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Electrical Code Technology

Curriculum Code: 3051

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Electrical Code Technology?

Certificate offers opportunity to fulfill credentials for state-approved licensing requirements adopted by the New Jersey Uniform Construction Code, administered by the Department of Community Affairs. Provides currently licensed code enforcement personnel means to upgrade educational credentials and prepares for inspector-related employment.

If I major in Electrical Code Technology can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 6 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local electrical codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Electrical Code Inspector.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Fire Code Technology

Curriculum Code: 3050

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Fire Code Technology?

Certificate offers opportunity to fulfill credentials for state-approved licensing requirements adopted by the New Jersey Uniform Construction Code, administered by the Department of Community Affairs. Provides currently licensed code enforcement personnel means to upgrade educational credentials and prepares for inspector-related employment.

If I major in Fire Code Technology can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 6 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local fire protection codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Fire Protection Code Inspector.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Mechatronics

Curriculum Code: 3316

Will Earn Upon Completion: Certificate of Achievement (COA)



Why major in Mechatronics?

Certificate introduces students to fundamental concepts of mechatronics which is essential in almost every segment of industry using automation, including things like electronics, robotics, computers, telecommunications, and machine control. Program provides additional

training for students in engineering technology programs to enhance technical skills and thus improve employability.

If I major in Mechatronics can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 15 credits each semester, certificate can be completed in one year, including summer courses.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a mechatronics system, including components like sensors and output devices;
- Identify main components of programmable logic controllers, their functions, and classification;
- Apply principles of engineering graphics to prepare detailed drawings using CAD software; and
- Recognize and explain functions of control elements of a closed-loop system.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Plumbing Code Technology

Curriculum Code: 3053

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Plumbing Code Technology?

Certificate offers opportunity to fulfill credentials for state-approved licensing requirements adopted by the New Jersey Uniform Construction Code, administered by the Department of Community Affairs. Provides currently licensed code enforcement personnel means to upgrade educational credentials and prepares for inspector-related employment.

If I major in Plumbing Code Technology can I transfer to an upper-division college or university?

Certificate is job-oriented, not designed for baccalaureate transfer, but credits may be applied to an associate degree at ECC. Further, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 6 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local plumbing codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Plumbing Code Inspector.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Software Development and Programming

Curriculum Code: 3323

Will Earn Upon Completion: Certificate of Achievement (COA)

Why major in Software Development and Programming?

Certificate introduces students to fundamental concepts of programming with emphasis on the whole software development process.

If I major in Software Development and Programming can I transfer to an upper-division college or university?

Certificate is career oriented, not specifically designed for baccalaureate transfer. However, some credits earned may transfer to four-year institutions.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take me to complete this certificate?

If you do not need developmental courses and you register for an average of 6 credits each semester, certificate can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a major software-based project;
- Test software systems with specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as theory and principles of computer science and mathematics, to the development and maintenance of complex software development systems;
- Evaluate impact of potential solutions to software engineering problems in a global society, using knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques;

- Create interactive Web applications; and
- Design and develop mobile applications for the Android platform.

Where should I direct specific questions?

Contact the Division (973) 877-3302.

Division of Nursing and Health Sciences

This division offers A.A.S. degree programs leading to licensure for entry into the workforce, an A.S. degree designed to prepare students for transfer to 4-year institutions, and a certificate program in practical nursing. Programs utilize state-of-the-art-on-campus laboratories to facilitate student learning. Faculty are licensed to practice in respective fields and hold diverse academic and professional backgrounds; most hold advanced practice credentials in their professional field.



Location: Health Sciences Building (Level I and Level II)

Divisional Contact Number: 973-877-1865

Chairperson: Lori York (lyork@essex.edu), (973-877-3445)

Administrative Assistant: Robbyn Graham (rgraham1@essex.edu, 973-877-1865)

Instructional Area	Faculty	Coordinator
Licensed Practical Nurse (LPN)	Gennevieve Danville (gdanvill@essex.edu, x1870)	Coordinator
	Gervida Constant (gconsta1@essex.edu, x3428)	
Registered Nurse (RN) & LPN-RN Articulation	Lori York (lyork@essex.edu, x3445)	Coordinator
	Edwin Alcantara (ealcanta@essex.edu, x3210)	
	Shazam Bacchus (sbacchu1@essex.edu, x1885)	
	Shanta Carter(scarte16@essex.edu, x3476)	
	Bergenie Celony (bcelony@.essex.edu, x3476)	
	Jennifer Chapman (jchapman@essex.edu, x3476)	
	Breanna Dickson (bdickso1@essex.edu, x3070)	
	Donna Francis (dfranci2@essex.edu, x3533)	
	Ann-Maria Griffiths (agriff11@essex.edu, x1157)	
	Rebecca Kaiser (rkaiser@essex.edu)	
	Coleen Lambert (clamber9@essex.edu, x1162)	
	Candice McEwan (cmcewan1@essex.edu, x3476)	
	Guerdie Nonez (gnonez@essex.edu, x1864)	
	Ifeanuli Ona (iona@essex.edu, 1156)	
	Victoria Pangilinan (vpangili@essex.edu, x1872)	
Physical Therapist Assistant	Christine Stutz-Doyle (stutz@essex.edu, x3456)	Coordinator
	Thomas Donofrio (tdonofri@essex.edu, x3475)	
	Kevin Lawless(klawless@esse x3007)	
Radiography	Victor Eromosele (veromose@essex.edu, x3343)	
Vision Care Technology	Renita Mangru (rmangru1@essex.edu, x3367)	Coordinator
	Charles Harrison (harrison@essex.edu, x3367)	
Simulation and Skills Laboratory	Myrna Scott (mscott12@essex.edu, x3353)	Coordinator

The Physical Therapist Assistant (PTA) program is accredited by the **Commission on Accreditation in Physical Therapy Education (CAPTE),** https://www.capteonline.org (https://www.capteonline.org/).

The Radiography program is accredited by the **Joint Review Committee on Education in Radiologic Technology (JCERT),** https://www.jrcert.org (https://www.jrcert.org/).

The Vision Care Technology program is accredited by the **Commission on Opticianry Accreditation (COA),** https://coaccreditation.com (https://coaccreditation.com/).

The Nursing programs are accredited by the **New Jersey Board of Nursing,** https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the **Accreditation Commission in Nursing (ACEN),** https://www.acenursing.org (https://www.acenursing.org/).

Degrees

Health Science

Curriculum Code: 2114

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Health Science?

The Health Science program provides opportunities for health care personnel and allied health majors to complete a general health science associate degree. Students receive up to 24 credits for previous post-secondary professional training in health science professions. Certificates or licenses must be current at time of evaluation. Bachelor's degree completion can lead to employment in health education or entry-level health care administration positions.

If I major in Health Science, can I transfer to an upper-division college or university?

The A.S. degree in Health Science may be transferred to the Health Science bachelor's degree programs at Rutgers University, New Jersey City University, and Berkeley College. Also, Thomas Edison State University will apply most or all of courses taken toward a bachelor's degree in Health Science or in Applied Science and Technology.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement testing, you may have to take developmental courses in English and/or Mathematics before taking major courses. Submit copies of diploma and official transcript from where you received professional training and current certificate or licensure to the Division of Nursing and Health Sciences for evaluation prior to admission to the Health Science major.

How long will it take for me to complete this degree?

If you do not need developmental courses and depending on credits granted for prior professional training, you can complete the degree in two years or less by taking an average of 15 credits each semester. You may shorten the time required by taking courses in summer sessions.

Who should apply to the Health Science Program?

Any health care professional who holds licensure or certification in their specialty and who received training in any accredited or state-licensed post-secondary health science training program may apply. This program is useful for health care professionals working in fields for which no specific degree is offered. In addition, any ECC student who completed some college-level course work in nursing or other health science disciplines but did not complete a specific degree may apply their credits toward completion of this degree.

Upon completion of this program, graduates will be able to:

- Advance to a bachelor's degree program specializing in health education, health care informatics, or health care administration;
- Secure job promotions within health-related fields for which no specific degree exists; and
- Prepare for employment in fields such as health services administration, health computing, or health education.

Where should I direct specific questions about this program?

Call (973) 877-1865.

Nursing

Curriculum Code: 2104

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Why major in Nursing?

There is a growing demand for nurses nationwide. Nursing is a service-oriented profession involving caring for and working with people. A state-of-the-art, nursing simulation laboratory is available to facilitate learning, as is a multi-media computer laboratory. The Nursing program prepares students for entry-level positions in hospitals and other health care facilities. Upon completion, students are eligible to sit for the NCLEX-RN exam to qualify for licensure as a registered nurse.

If I major in Nursing, can I transfer to an upper-division college or university?

Yes. Many colleges have "upper division" nursing programs that allow associate degree graduates to earn a Bachelor of Science in Nursing (B.S.N.); we have articulation agreements with New Jersey City University, Kean University, and Montclair State University.

Are there any requirements I must satisfy before I start taking courses in my major?

It is recommended that you apply to the College as a General Science major (curriculum code: 0603) and indicate interest in Nursing. The following are minimum standards for program admission:

- Be at college level in English and Mathematics, which may require the completion of developmental courses (e.g., ENG 099 and/or MTH 092) based on placement testing.
- Have a high school diploma or GED.
- Have an overall college GPA of 2.5 or higher.
- Successfully complete all of the program prerequisites with a grade of "C" or better: ENG 101: College Composition I; BIO 121: Anatomy & Physiology I (within 5 years of admission); CHM 101 or CHM 103: College Chemistry I or General Chemistry I; and, PSY 101: Introduction to Psychology
- Completion of ONE time ATI Test of Essential Academic Skills (ATI TEAS-RN) upon approval to test granted by Nursing Department. A

score of 60 and above qualifies you to be ranked for admission; tests taken outside of ECC will NOT be evaluated.

For other admissions requirements, contact the Nursing Department or see the RN Program Fact Sheet. Qualified applicants are admitted on a space-available basis. In addition to the Nursing program requirements, transfer students must complete a minimum of 9 credits at ECC to be eligible for admission to the Nursing program.

How long will it take for me to complete this degree?

The Nursing degree program is a full-time program that can be completed in a two-year period (after prerequisites are completed) if you register for an average of 13 credits each semester.

The Essex County College Nursing program is approved and accredited by the:

New Jersey Board of Nursing

124 Halsey Street, 6th Floor

Newark, NJ, 07102, (973) 504-6430

https://www.njconsumeraffairs.gov/nur/Pages/default.aspx

Accreditation Commission for Education in Nursing (ACEN), Inc.

3343 Peachtree Road NE, Suite 850, Atlanta, GA, 30326

(404) 975-5000

www.acenursing.org (http://www.acenursing.org/)

Upon completion of this program, graduates will be able to:

- Provide safe culturally sensitive care to patients across the lifespan;
- Practice using legal, ethical, and regulatory standards of the nursing profession;
- Collaborate with the patient and the multidisciplinary health care team to meet the needs of patients in a variety of settings;
- Manage care to promote quality positive outcomes for patients and their families;
- Demonstrate clinical judgment in assisting patient and families to promote optimal health by utilizing current evidence and available resources; and
- Utilize information technology to collect data, prevent errors, communicate effectively and maintain safe quality care.

Where should I direct specific questions about this program?

Call the Division at (973) 877-1868/1865.



Nursing: LPN Articulation Option

Curriculum Code: 2104

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Why major in the LPN Articulation Option?

The LPN Articulation Option of the Nursing program provides opportunities for Licensed Practical Nurses to gain credit for previous LPN education and licensure toward completion of the Nursing A.A.S. degree. The program prepares students for entry-level positions in hospitals and other health care facilities. Upon completion, students are eligible to sit for the NCLEX-RN exam to qualify for licensure.

If I major in the LPN Articulation Option, can I transfer to an upper-division college or university?

Yes. Many colleges have “upper division” nursing programs that allow associate’s degree graduates to earn a Bachelor of Science in Nursing (B.S.N.). We have articulation agreements with New Jersey City University, Kean University, and Montclair State University.

Are there any requirements I must satisfy before I start taking courses in my major?

Students must possess a current LPN/LVN license prior to applying to program, a high school diploma or GED, and have official transcript of state-approved or NLN-accredited Practical Nursing Program sent to ECC. Applicants should enter ECC as General Science (curriculum code: 0603) students and indicate interest in Nursing. Minimum standards for admission are:

- Be at college level in English and Mathematics, which may require completion of developmental courses (e.g., ENG 099 and/or MTH 092) based on placement testing.
- Have an overall GPA of 2.5 or higher.
- Complete program prerequisite courses with grades of “C” or better: CHM 101 College Chemistry I (or CHM 103 General Chemistry I), BIO 121 Anatomy & Physiology I, BIO 122 Anatomy & Physiology II, ENG 101 College Composition I, ENG 102 College Composition II, and PSY 101 General Psychology I.
- Possess a current LPN/LVN license.
- Completion of ONE time ATI Test of Essential Academic Skills (ATI TEAS-RN) upon approval to test granted by Nursing Department. A score of 60+ qualifies ranking for admission to the program. Tests taken outside ECC will NOT be evaluated.

For other admissions requirements, contact the Nursing Department or see the LPN-RN Fact Sheet. Qualified applicants are admitted on a space-available basis. Admission to the nursing program is based on a statistically-weighted candidate ranking system.

How long will it take for me to complete this degree?

The Nursing: LPN Articulation Option can be completed in three semesters (after program prerequisites are completed) if you register for an average of 12 or more credits each semester.

How does this option benefit the LPN?

Upon successful completion of two courses, NRS 106 LPN Mobility I and NRS 111 LPN Mobility II, students can complete the Nursing Program by successfully completing NRS 206 Nursing III, NRS 216 Nursing IV, and NRS 217 Nursing Leadership (Nursing V) in the generic track. Graduates are awarded the Associate in Applied Science degree with a major in Nursing and are eligible to sit for the NCLEX-RN exam. Upon successful completion of NRS 106 and NRS 111, the LPN is awarded 6 credits toward the Nursing degree as credit for their LPN education (NRS 999).

The Essex County College Nursing program is approved and accredited by the:

New Jersey Board of Nursing

124 Halsey Street, 6th Floor

Newark, NJ, 07102, (973) 504-6430

https://www.njconsumeraffairs.gov/nur/Pages/default.aspx

Accreditation Commission for Education in Nursing (ACEN), Inc.

3343 Peachtree Road NE, Suite 850, Atlanta, GA, 30326

(404) 975-5000

www.acenursing.org (http://www.acenursing.org/)

Where should I direct specific questions about this program?

Call the Division at (973) 877-1868/1865.

Physical Therapist Assistant

Curriculum Code: 2106

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

The Physical Therapist Assistant (PTA) program is accredited by the **Commission on Accreditation in Physical Therapy Education (CAPTE),** https://www.capteonline.org (https://www.capteonline.org/).

Why major in Physical Therapist Assistant?

Physical therapist assistants (PTAs)have a rewarding opportunity to make a positive difference in the quality of people's lives. Their work involves extensive contact with both patients and other health care professionals. PTAs work under the supervision of physical therapists in implementing treatment programs specific to the plan of care. PTAs work in hospitals, private physical therapy offices, community health centers, corporate or industrial health centers, sport facilities, research institutions, rehabilitation centers, nursing homes, home health agencies, schools, pediatric centers, colleges, and universities. The PTA program is accredited by the Commission on Accreditation for Physical Therapy Education (CAPTE); rules and regulations regarding accreditation can be found on their website: http://www.capteonline.org/AccreditationHandbook.

If I major in Physical Therapist Assistant, can I transfer to an upper-division college or university?

The PTA curriculum differs from that of physical therapists. Under most circumstances, courses completed and credits acquired toward this associate's degree are not transferable. Our program, however, has an articulation agreement with Mercy College (Dobbs Ferry, NY). This agreement allows graduates, who apply and are accepted into Mercy's Physical Therapy program, to transfer many credits completed at ECC. Other accredited programs designed to allow experienced PTAs to continue working while attending a doctoral degree program on weekends exist, but our articulation agreement only applies to Mercy College.



Are there any requirements I must satisfy before I start taking courses in my major?

All students – even transfer students – should apply to the College as a General Science (curriculum code: 0603) student first before applying for admission to the PTA Program. Completion of prerequisites and submission of an application does not automatically guarantee admission. Transcripts from other institutions must be evaluated and accepted by ECC Enrollment Services prior to review by the PTA program. Strict application deadline is March 15 for enrollment the following Fall. Admission to the PTA program is competitive and merit-based and includes minimal basic standards that must be met for applicants to be considered for admission. These standards are as follows:

- Completion of all remedial and/or ESL courses as indicated by placement testing.
- Completion of all prerequisite courses with a grade of "C" or higher. Only two of the three prerequisites may be repeated to achieve these grades; each may only be repeated once. Prerequisites courses are: BIO 121 Anatomy and Physiology I (4 credits), ENG 101 College Composition I (3 credits), and PSY 101 General Psychology I (3 credits).
- A college GPA of 2.5 or higher in courses required by the PTA program. Grades in general education courses completed prior to admission are also applied to establish applicants' GPA.
- Submission of a program application to the Division of Nursing and Allied Health (applications are accepted from January 1st to March 15th each calendar year).
- Completion and documentation of 50 required volunteer or work hours in a physical therapy department or facility by the March 15th application deadline.
- Completion of the Test of Essential Academic Skills (TEAS) with a minimum score of 50. The TEAS may only be taken once per

application and a passing score does not guarantee admission to the program. Students should not register to take the TEAS until all other application requirements listed above have been met.

How long will it take for me to complete this degree?

If you do not need developmental courses and have completed prerequisites and you register for an average of 15 credits each semester, you can complete the program in two years.

Upon completion of this program, graduates will be able to:

- Work under the supervision of a physical therapist in an ethical, lawful, safe, and effective manner;
- Implement a comprehensive treatment plan developed by a physical therapist;
- Communicate regularly with the supervising physical therapist about the patient's progress and the need for adjustments to be made by the physical therapist in treatment procedures in accordance with changes in patient status;
- Perform appropriate measurement and assessment techniques within the knowledge and limits of practice to assist the supervising physical therapists in monitoring and modifying the plan of care;
- Interact with patients and families in a manner that provides the desired psychosocial support including the recognition of cultural and socioeconomic differences;
- Participate in the teaching of other health care providers, patients and families;
- Document relevant aspects of patient treatment;
- Participate in discharge planning and follow up care;
- Demonstrate effective written, oral, and nonverbal communication with patients and their families, colleagues, health care providers, and the public;
- Identify levels of authority and responsibility; planning, time management, supervisory process, performance evaluations, policies and procedures; fiscal considerations for physical therapy providers and consumers; and, continuous quality improvement;
- Read and interpret professional literature;
- Accept responsibility for professional development; and
- Modify an intervention only in accordance with changes in patient/client status and within the scope of the plan of care that has been established by the physical therapist.

Where should I direct specific questions about this program?

To contact the program directly, please call (973) 877-3375 or email ptapro@essex.edu.



Radiography

Curriculum Code: 2105

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

The Radiography program is accredited by the **Joint Review Committee on Education in Radiologic Technology (JCERT),** https://www.jrcert.org (https://www.jrcert.org/).



Why major in Radiography?

Radiography involves assisting in the diagnosis and management of human illness by producing diagnostic images (also called radiographs or x-rays) of structures in the body. Students receive hands-on training in radiographic procedures and imaging modalities and in operating room and fluoroscopic procedures. Graduates are eligible to take the American Registry of Radiologic Technologists Board examination for National Registration in addition to New Jersey State licensure. Upon licensure, graduates will qualify to work with physicians in offices, clinics, and hospitals. Radiographers can specialize in mammography, computed tomography (CT), digital vascular imaging (angiography), and magnetic resonance imaging (MRI). Related jobs can be found in manufacturing firms and medical supply companies. The Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N Wacker Drive, Chicago, IL, 60606 and by the

State of New Jersey Department of Environmental Protection Radiologic Technology Board of Examiners.

If I major in Radiography, can I transfer to an upper-division college or university?

The Radiography degree program is job-oriented and not designed for transfer to a bachelor's program. However, colleges and universities, including Thomas Edison State University and Rutgers University School of Health Related Professions, may apply most or all credits earned in this program towards a bachelor's degree.

Are there any requirements I must satisfy before I start taking courses in my major?

All students – even transfer students – must first apply to the College (a General Science major-curriculum code: 0603 is recommended) before applying for admission to the Radiography Program. Admission is competitive. Completion of prerequisites and application submission does not automatically guarantee admission. Transcripts from other institutions must be evaluated by ECC Enrollment Services prior to review by the Radiography Department. Strict application deadline is April 30 for enrollment in the following Fall. The following are minimum standards for admission into the Radiography program:

- Be at college level in English and Mathematics, which may require completion of developmental courses (e.g., ENG 099 and/or MTH 092) based on placement testing.
- Successfully complete program prerequisite courses with a grade of "C" or better: BIO 121 Anatomy & Physiology I, ENG 101 College Composition I, MTH 100 Introduction to College Mathematics or any other college-level math, and HSC 109 Medical Terminology.
- Have a college GPA of 2.5 or higher.
- Perform satisfactorily – score at least 50 – on the 'TEAS for AH' (Test of Essential Academic Skills for Allied Health), which is scheduled annually in the Spring.

How long will it take for me to complete this degree?

If you do not need developmental courses and have completed prerequisites for admission, you can complete the program in 22 months by following the recommended sequence of courses and by earning a grade of "C" or better in all RTC courses.

Upon completion of this program, graduates will be able to:

- Students will be able to demonstrate appropriate equipment manipulation;
- Students will be able to demonstrate clinical competency on progressively more difficult patients;
- Students will be able to identify the dangers of ionizing radiation to the patient and appreciate ALARA principles;
- Students will be able to interpret and respond to patient's non-verbal and verbal needs;
- Students will be able to demonstrate team interaction skills;
- Students will be able to perform successful image evaluation;
- Students will be able to perform appropriately in role play scenarios designed to demonstrate effective patient care skills and patient interactions;
- Students will be able to learn and apply appropriate patient care;
- Students will be able to demonstrate professional behavior; and
- Student will be able to demonstrate ethical behavior becoming of an entry level radiography technologist.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3293.

Vision Care Technology

Curriculum Code: 2122

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

The Vision Care Technology program is accredited by the **Commission on Opticianry Accreditation (COA),** https://coaccreditation.com (https://coaccreditation.com/).



Why major in Vision Care Technology?

The Vision Care Technology degree program introduces students to opticianry. Students receive training in laboratory techniques of measuring and grinding eyeglasses to prescription and in fitting and final adaptation of eyewear. Curriculum prepares students for business administration functions of the profession and to pass the state licensing examination for Ophthalmic Technician and Ophthalmic Dispenser. To be successful in the field, you must combine scientific and clinical skills with ability to work well with patients. Job opportunities include owning or working in a retail optical dispensary or sales and marketing of ophthalmic materials. Employment prospects are increasing caused by rising number of elderly and trends toward high fashion eyewear. The VCT program is accredited by the Commission on Opticianry Accreditation (COA), PO Box 592, Canton, NY, 13617 (Phone: 703-468-0566).

If I major in Vision Care Technology, can I transfer to an upper-division college or university?

The program is career-oriented, although students may choose to transfer credits to four-year institutions to pursue a bachelor's degree in optometry, opticianry, or related fields.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major. In addition, prior completion of trigonometry, biology, and physics at the high school level is strongly recommended.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 18 credits each semester, program can be completed in two years; less by taking summer courses.

Upon completion of this program, graduates will be able to:

- Develop lensometry skills necessary for laying out lenses for edging, inspecting jobs according to standards, and neutralizing a pair of glasses;
- Discuss prescription eyewear both verbally and written with patient / customer and eyecare professionals;
- Analyzing and interpreting prescriptions;
- Identify human eye structure including its function and pathology;
- Assist patient / customer in selection of proper frames and lenses;
- Determine patient / customer physiognomic measurements (facial and eye);
- Reading / neutralizing prescriptions of existing eyeglasses both single vision and multifocal;
- Verifying eyeglasses to the prescription as to being either dispensable or not dispensable according to New Jersey standards;
- Adapt and fit prescription eyeglasses to patient / customer;
- Demonstrate proficiency in eyeglass lens edging equipment and applying rules and regulations for safety;
- Ability to interpret contact lens prescriptions and the differences from spectacles prescriptions and how they relate to the anatomy of the eye;
- Understanding of how eyeglass prescriptions relate to the anatomy and physiology of the patient / customer's eye(s);
- Understanding frame and lens materials / designs and how they relate to patient / customer's needs considering the pros and cons of their decisions;
- Understanding theory of light and optics as it relates to lens designs and materials and focusing power;
- Understanding the standards and regulations both nationally and New Jersey and how they need to be applied;
- Learning the role / responsibility / professional ethics of an Optician; and
- Discuss the use of the phoropter to determine prescriptions subjectively.

After fulfilling requirements of the VCT program, students can take the New Jersey State boards to obtain their New Jersey license. They may also choose to obtain American Board of Opticianry (ABO) Certification. Since the inception of this program, 100% of our students have passed the American Board of Opticianry and the National Contact Lens exams, and 75% have passed the NJ State Licensing Board exam. Job opportunities are excellent for licensed New Jersey Opticians with nearly 100% placement immediately after licensure.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3367.

Academic Certificate

Licensed Practical Nurse

Curriculum Code: 3312

Will Earn Upon Program Completion: Academic Certificate (AC)

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Why major in Licensed Practical Nurse (LPN)?

There is growing demand for LPNs to care for individuals in various settings. LPNs work closely with RNs and other health care team members in long-term care facilities, assisted living sites, and some hospitals. A state-of-the-art, well-equipped nursing simulation laboratory is available, as is a multi-media computer laboratory. Upon program completion, a student is eligible to sit for the NCLEX-PN exam to qualify for LPN licensure.

Is there educational mobility after completing the LPN program?

The Division of Nursing and Health Sciences subscribes to the state articulation model for education mobility of nurses. LPN students can enter the RN program upon meeting admission requirements of the Nursing: LPN Articulation Option A.A.S. Degree Program.

Are there any requirements I must satisfy before I start taking courses in the LPN program?

Apply to the College as an LPN student (curriculum code: 3312). The following are minimum requirements for admission into the program:

- Be at college level in English and Mathematics, which may require completion of developmental courses (e.g., ENG 099 and/or MTH 092) based on placement testing.
- Have a high school diploma or GED.
- Achieve a satisfactory score on the LPN program admission exam.

Note: Strict program application deadline is June 30 for enrollment the following Spring. Admission is competitive. Qualified applicants are admitted on space-available basis based on minimum score of 50% in Reading and overall composite score of at least 50% in English, Science, Math, and Reading on the pre-admissions (TEAS) test.

How long will it take for me to complete the LPN program?

This 48-week program can be completed in one 12-month cycle (January-December).

Upon completion of this program, graduates will be able to:

- Demonstrate cognitive knowledge (including basic nursing care theory and practice, patient assessment techniques, and comprehensive treatment plan/intervention elements) required of entry-level LPNs;

- Demonstrate psychomotor skills (including medication administration, physical assessments, and assisting with teaching/ instruction in care of older adults) required of entry-level LPNs; and
- Demonstrate communication skills and ethical/professional behaviors (including progress reports and written documentation of client care) expected of entry-level LPNs.



Where should I direct specific questions about this program?

Call (973) 877-1868/1865.

Certificate of Achievement

Vision Care Technology

Curriculum Code: 3310

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why major in Vision Care Technology?

The Vision Care Technology certificate program introduces students to the field of opticianry. Students receive training in laboratory techniques of measuring and grinding eyeglasses to prescription and in fitting and final adaptation of eyewear. Curriculum also prepares students for business administration functions of the profession and to pass the state licensing examination for Ophthalmic Technician and Ophthalmic Dispenser. To be successful in the field, you must combine scientific and clinical skills with ability to work well with patients. Job opportunities include owning or working in a retail optical dispensary or sales and marketing of ophthalmic materials. Employment prospects are increasing caused by growth in the elderly population and trends toward high fashion eyewear. All course work required by the Certificate of Achievement can be applied towards earning an A.A.S. degree in Vision Care Technology. The program is accredited by the Commission on Opticianry Accreditation (COA), P.O. Box 592, Canton, NY, 13617 (Phone: 703-468-0566).

If I major in Vision Care Technology, can I transfer to an upper-division college or University?

The certificate program is career oriented, although students may choose to transfer their credits to four-year institutions in pursuit of a bachelor's degree in optometry, opticianry, or related fields.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on your placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major. In addition, prior completion of trigonometry, biology, and physics at high school level is strongly recommended.



How long will it take for me to complete this degree?

If you do not need developmental coursework and you register for an average of 6 credits each semester, you can complete the program in three years in conjunction with New Jersey's Apprentice Dispensing Permit.

Upon completion of this program, graduates will be able to:

- Develop lensometry skills necessary for laying out lenses for edging, inspecting jobs according to standards, and neutralizing a pair of glasses;
- Discuss prescription eyewear both verbally and written with patient / customer and eyecare professionals;
- Analyzing and interpreting prescriptions;
- Identify human eye structure including its function and pathology;
- Assist patient / customer in selection of proper frames and lenses;
- Determine patient / customer physiognomic measurements (facial and eye);
- Reading / neutralizing prescriptions of existing eyeglasses both single vision and multifocal;
- Verifying eyeglasses to the prescription as to being either dispensable or not dispensable according to New Jersey standards;
- Adapt and fit prescription eyeglasses to patient / customer;
- Demonstrate proficiency in eyeglass lens edging equipment and applying rules and regulations for safety;
- Ability to interpret contact lens prescriptions and the differences from spectacles prescriptions and how they relate to the anatomy of the eye;
- Understanding of how eyeglass prescriptions relate to the anatomy and physiology of the patient / customer's eye(s);
- Understanding frame and lens materials / designs and how they relate to patient / customer's needs considering the pros and cons of their decisions;
- Understanding theory of light and optics as it relates to lens designs and materials and focusing power;
- Understanding the standards and regulations both nationally and New Jersey and how they need to be applied;

- Learning the role / responsibility / professional ethics of an Optician; and
- Discuss the use of the phoropter to determine prescriptions subjectively.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3367.

PLEASE NOTE:

All applicants to Nursing and Health Sciences programs must meet special admission requirements. While waiting for admission, students are urged to begin taking core curriculum requirements, contact the divisional chair or faculty advisors for details. Admission to programs in the division is competitive; also contact counselors, faculty advisors, and/or Enrollment Service for additional details.

An individual who has charges pending or has ever been convicted of a felony or misdemeanor and/or found guilty of professional misconduct or negligence may or may not be eligible to be licensed as an allied health professional. These matters should be cleared with the respective licensing boards before applying for admission to allied health programs.

Division of Social Sciences

This division offers A.S. and A.A. degree programs designed to prepare students for transfer to 4-year institutions, and A.A.S. degree and certificate programs designed to prepare students for careers in social sciences upon graduation. Programs are distributed across disciplines of anthropology, criminal justice, education, health, physical education, political science, psychology, and sociology.



Students majoring in Human and Social Services have a mandatory internship experience required as part of the curriculum. Students who wish to take specific career courses for employment advancement are encouraged to meet with the chairperson of the Division or coordinators of respective programs for assistance in selecting courses that will fulfill their special needs. Faculty hold advanced degrees, are professionally active, and involved in research and publication. They serve on numerous boards and committees, and many are leaders in human service fields.

Location: Level III, Yellow

Divisional Contact Number: 973-877-3250

Chairperson: Mamie Bridgeforth (bridgefo@essex.edu), (973-877-3251)

Administrative Assistant: Patricia Seward (seward@essex.edu, 973-877-3250)

Faculty	Discipline
Patrice Davis (davis@essex.edu, x3253)	Criminal Justice
Nicole DePasquale (ndepasq1@essex.edu, x3067)	Psychology
Gerald Freedman (freedman@essex.edu, x3248)	Physical Education
Rhonda Hobson (rhobson@essex.edu, x3247)	Criminal Justice
Mary Jenkins (mjenkins6@essex.edu, x3541)	Social Work
Clare Kajura (ckajura@essex.edu, x3372)	Psychology
Akil Khalfani (khalfani@essex.edu, x3219)	Sociology
Felix Linfante (fe22linfante@essex.edu, x6623)	Education
Christina Pennington (chpenning2@essex.edu, x3554)	Paralegal Studies
Bridget Turner (bturner@essex.edu, x1897)	Education

The A.S. degree in Paralegal Studies is approved by the **American Bar Association**, https://www.americanbar.org (https://www.americanbar.org/).

The A.A.S. degree in Human and Social Services is accredited by the **Board of the Council for Standards in Human Service Education (CSHSE)**, https://www.cshse.org/.

Degrees

Criminal Justice

Curriculum Code: 0898

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

Why major in Criminal Justice?

Program prepares students to transfer to four-year institutions for a bachelor's in criminal justice or related fields, or to enter the job market directly. Prepares students to enter and/or progress in professional law enforcement, pre-law, corrections, probation, parole, criminology, homeland security, forensic science, cybersecurity, corporate security, crime prevention, crime mapping, race and crime analysis, juvenile youth services, forensic psychology, international criminal justice systems, data analysis, gender crime, white collar crime, gangs, media and criminology, mass incarceration, criminal justice crime control and prevention, criminal justice management, human services and community justice, law and society, police studies, security management, child advocacy and policy, justice studies, environmental justice, national security studies, fire science, corporate security, juvenile youth services, and sky marshal.

If I major in Criminal Justice, can I transfer to a four-year college or university?

Yes, ECC has transfer/articulation agreements with the following: Rutgers University, New Jersey City University, Kean University, William Paterson, and John Jay College of Criminal Justice. Curriculum is matched for seamless transfer so freshman and sophomore years are done at affordable ECC with a high-quality education; and then transfer as a Junior to bachelor's at less expense. There is also articulation with Thomas Edison State University, which offers an alternate route to a bachelor's with blended courses, online classes, and continued study at ECC to satisfy baccalaureate requirements. Consult with advisor or transfer coordinator to review requirements for transferring with junior status.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may have to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 15 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

Upon completion of this program, graduates will be able to:

- Describe functions of various components of the criminal and juvenile justice system (i.e., law enforcement, courts, and corrections) and explain interrelationship of these components;
- Demonstrate basic knowledge of criminal law and rights of individual citizens;
- Describe role and ethical responsibilities of criminal justice professionals in the community and organization and administration of various entities in the criminal justice system;
- Analyze nature of crime and criminal behavior (e.g., theories, policies, and research);
- Explain social, political, economic, and cultural factors within society influencing development of criminological theory, corrections, laws, and criminal justice practices and application to criminal behaviors and sanctions;
- Demonstrate critical thinking skills in evaluating complexity of criminal justice issues; and
- Communicate effectively with accurate criminal justice terminology in written and/or oral form, with demonstrated proficiency in the use of technology.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250.



Education

Curriculum Code: 0206

Will Earn Upon Program Completion: Associate in Arts (A.A.) Degree

Why major in Education?



Program is for students interested in teaching careers in public, private, parochial, or charter schools. It provides tools and information to become professional teachers; and, is designed to meet challenges of teaching in today's society.

If I major in Education, can I transfer to an upper-division college or university?

Transfer/articulation agreements with allow students to transfer to appropriate baccalaureate programs.

Are there any requirements I must satisfy before I start taking courses in my major?

Based upon your placement, you may have to enroll in developmental courses in Mathematics and/or English before taking courses in your major.

How long will it take me to complete the A.A. degree.

If you do not need developmental courses and you register for an average of 15 credits per semester, you can complete the degree in two years or less.



After completing this A.A. degree program at E.C.C., how do I secure teacher certification?

Earn baccalaureate degree from regionally accredited college or university with grade point average of at least 3.0, and pass PRAXIS Examination; and

Complete student teaching in public-school setting through accredited four-year college/university.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of basic principles of educational theory and practice;
- Exhibit broad-based knowledge necessary to prepare for teacher education programs;
- Demonstrate understanding and appreciation of basic principles of Humanities, Social Sciences, Science, and Mathematics;
- Demonstrate knowledge of and appreciation of various learning styles within diverse environments; and
- Express themselves in appropriate written and oral forms.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250 or (973) 877-1897

Human and Social Services

Curriculum Code: 2202

Will Earn Upon Program Completion:
Associate in Applied Science (A.A.S.) Degree

The A.A.S. degree in Human and Social Services is accredited by the **Board of the Council for Standards in Human Service Education (CSHSE),** https://www.cshse.org/.

Why major in Human and Social Services?

The Human and Social Services program provides an opportunity for students interested in Human and Social Services careers to receive an Associate in Applied Science Degree. Upon graduation, the students will have gained a broad-based professional education in preparation for a wide variety of employment opportunities such as: Community and Social Service Specialists; Social Services Assistants; Human Services Case Managers; Community Health Workers; Gerontology Worker; and Social Worker Aid, etc. The Human and Social Services program also provides the foundation for students who wish to become Social Workers, Certified Drug and Alcohol Counselors, Clergy Counselors, Psychologists, and other mental health professionals.

If I major in Human and Social Services, can I transfer to an upper-division college or University?

This program is designed for immediate employment. However, four year institutions will apply most or all of your courses toward a bachelor's degree, depending upon their program requirements. Consult your departmental advisor to obtain information about transferability. Most of our students transfer to Rutgers University, Kean University and Montclair University. Students pursing the Clergy Counselor option are, upon graduation, accepted into the Pillar College Clergy Counseling Program.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on your placement, you may have to take developmental courses in mathematics, English and/or reading before taking courses at the 100 level and above.

How long will it take for me to complete this degree?

If you do not need developmental coursework, you can complete the degree in two years or less by taking an average of 15 credits each semester. You may shorten the time required by taking summer courses.

Upon completion of this program, graduates will be able to:

- Students will be able to utilize their strong and diverse knowledge base and clinical/practical experience in the delivery of human services to clients
- Students will be able to explain the historical and philosophical foundation of human services
- Students will be able to utilize theoretical framework and empirical evidence to understand development and the interactions among human systems- individuals, groups, families, organizations, communities and societies

- Students will be able to analyze and assess the needs of clients or client groups
- Students will be able conduct various types of mental health assessments for screening clients/patients
- Students will be able to utilize the knowledge of organizational and social policies, human systems, the conditions that influence human functioning, evidence-based practices, and client-specific data to advocate on behalf of clients

Program Outcomes

https://www.essex.edu/wp-content/uploads/2024/10/Human-and-Social-Services-AAS-Student-Outcomes.pdf

Where should I direct specific questions about this program?

Call the Division of Social Sciences at (973) 877-3250.

Paralegal Studies

Curriculum Code: 2015

Will Earn Upon Program Completion: Associate in Science (A.S.) Degree

The AS degree in Paralegal Studies is approved by the **American Bar Association,** https://www.americanbar.org (https://www.americanbar.org/).



The Paralegal Program prepares students to work under the supervision of an attorney. A paralegal shall not engage in the unauthorized practice of law. Only attorneys can provide legal services directly to the public.

Why major in Paralegal Studies?

Paralegal Studies prepares students to work in entry-level positions in various legal settings such as law firms, corporations, government and other entities. Paralegals typically perform variety of tasks including, but not limited to, interviewing clients, investigating cases, preparing legal documents, performing legal research, writing legal memoranda, and assisting in trials and appeals. In addition to introducing students to fundamental legal principles, program develops students' practical skills to prepare them to work effectively in any legal environment.

If I major in Paralegal Studies, can I transfer to a four-year college or university?

Yes, Paralegal Studies prepares students to transfer for baccalaureates in many fields. Typically, credits are applied to the first two years of a bachelors. While at ECC, we encourage you familiarize yourself with requirements of program wishing to transfer to upon graduation.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may have to take developmental courses in English and/or Mathematics before taking courses in your major.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 17 credits each semester, degree can be completed in two years, which may be shortened by taking summer courses.

May I transfer Paralegal courses from another college?

Students may transfer up to 15 legal specialty credits from ABA-approved institutions into the program. Transcripts are evaluated by Paralegal Program Coordinator to determine legal courses considered for transfer. Program Coordinator evaluates legal specialty courses from ABA-approved institutions on a case-by-case basis. In addition, students who wish to apply credits to the Paralegal Studies Program must also have courses evaluated by Program Coordinator within six (6) months of entry into program; time limitation is necessary for advisement and to avoid possible course duplication.

Upon completion of this program, graduates will be able to:

- Explain role of a paralegal in today's legal system;
- Demonstrate knowledge of American legal system, fundamental legal principles, and the litigation process;
- Demonstrate knowledge of principles of legal ethics and of the Model Code of Ethics and Professional Responsibility and Guidelines for Enforcement of the National Federation of Paralegal Associations, Inc.;
- Proficiently access, locate, and research the law by both traditional and electronic methods;
- Demonstrate problem-solving and critical, analytical thinking skills within context of evaluating legal issues; and
- Communicate effectively with accurate legal terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250.

Physical Education

Curriculum Code: 0899

Will earn upon Program Completion: Associate in Science (A.S.) Degree

***Why major in Physical Education*?**

Curriculum parallels first two years of baccalaureate in a four-year college or university and also prepares one for careers such as teacher of health and physical education, recreation director, private fitness center administrator/instructor, and personal trainer/coach.

If I major in Physical education, can I transfer to an upper-division college or university?

The Physical Education degree may be transferred to a bachelor's degree program at upper-level institutions to obtain a Bachelor's in Physical Education and Recreation.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may have to take developmental courses in Mathematics and/or English before taking courses in your major.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 16 credits each semester and attend summer courses, you can complete the degree in two years or less.

Upon Completion of this program, graduates will be able to:

- Demonstrate competency in varied physical skills, and techniques and mechanics of activity;
- Receive First Aid Certification;
- Practice preventative measures and first aid in event of accidents or illness;
- Demonstrate mastery of concepts related to health and physical fitness;
- Demonstrate knowledge of fundamentals and techniques of specific sports; and
- Qualify for employment opportunities.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250

Social Sciences

Curriculum Code: 0710

Will Earn Upon Completion: Associate in Science (A.S.) Degree

Why Major in Social Sciences?



Program provides foundation for majors such as Sociology, Psychology, Pre-Law, Social Work, Gerontology, Anthropology, Political Science, Counseling, and Urban Studies at four-year colleges or universities. Curriculum parallels first two years at such institutions and is best suited for those interested in human behavior and in helping individuals and communities.

If I major in Social Sciences can I transfer to an upper-division college or university?

Curriculum prepares for transfer to upper-division colleges and universities. Consult catalog where you plan to transfer to, to select courses toward your baccalaureate.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may be required to take developmental courses in English and/or Mathematics before taking courses in your major.



How long will it take me to complete this degree?

If you do not need developmental courses and you register for an average of 17 credits each semester, you can complete the degree in two years or less. You may shorten time by taking summer courses.

Upon Completion of this program, graduates will be able to:

- Demonstrate knowledge of diverse cultures and social structures;
- Demonstrate knowledge of psycho-social factors influencing human behavior;
- Recognize social and political trends within societies;
- Demonstrate in-depth knowledge of formal research on varied Social Science topics;
- Demonstrate knowledge of ways of thinking and of analysis associated with Social Sciences;
- Demonstrate knowledge of skills and attitudes of professional practice in Social Sciences occupations;
- Demonstrate competency in use of technology to gather and interpret Social Science data; and
- Advance to a Bachelor's in disciples like Psychology, Sociology, Anthropology, Political Science, Social Work, Pre-Law, Urban Studies, and Gerontology.

Where should I direct specific questions?

Contact the Division (973)877-3250

Academic Certificate

Massage Therapy

Curriculum Code: 6013

Will Earn Upon Program Completion: Academic Certificate (AC)

Why major in Massage Therapy?

Massage therapists use manual techniques and adjunctive therapies to relieve effects of stress, ease tension, and promote health and well-being. Employment includes in settings such as massage offices, medical offices, health clubs, fitness centers, and spas.

Field is rapidly growing and many massage therapists specialize in areas such as sports massage, Shiatsu, pregnancy massage, relaxation therapy, or onsite massage. Professional growth continues through broadening and deepening manual skills. Massage therapists, in conjunction with other healthcare professionals, make referrals as appropriate to a client's needs.

If I major in Massage Therapy, can I transfer to an upper-division college or university?

Major is career oriented and not designed for transfer to a baccalaureate. Credits earned can be applied to Health Sciences program at ECC. Other colleges and universities may apply most or all of courses taken toward a baccalaureate, depending upon program requirements.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may have to take developmental courses in English and/or Mathematics. Massage sessions with a professional massage therapist is strongly recommended prior to taking major courses.

How long will it take for me to complete this certificate?

This is a one-year program starting in the Fall semester.

Upon Completion of this program, graduates will be able to:

- Take National Certification Examination to become certified as a professional massage therapist;
- Be licensed by State of New Jersey as a Massage Therapist;
- Demonstrate Shiatsu and Swedish massage;
- Work with general population as well as special populations like athletes, pregnant clients, and geriatric clients to build and maintain health;
- Demonstrate massage techniques used in medical settings to assist in the healing process;
- Develop a vision of the ideal business plan and identify steps to achieve it; and
- Prepare client records as well as financial records for success in business practice.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250

Certificates of Achievement

Autism Spectrum Disorders

Curriculum Code: 3058

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why major in the Autism Spectrum Disorders Certificate?

The Autism Spectrum Disorders Certificate Program consists of five courses (15 credits) designed to prepare students to work with children diagnosed with Autism Spectrum Disorders. These courses provide both a theoretical and practical foundation for supporting children, equipping students with the essential skills needed to work as paraprofessionals and professionals in the field of education.

If I major in Autism Spectrum Disorders, can I transfer to a four-year college or university"

This program is career-oriented; however, the transfer of credits is at the discretion of the receiving college or university.

Are there any requirements I must satisfy before I start taking the courses in my major?

Students must have a high school diploma or possess a GED.

How long will it take for me to complete this program?

The program may be completed within one year. Students must complete Early Care and Education Field Experience.

Where should I direct specific questions about this program?

Call Dr. Bridget Turner in the Division of Social Sciences (973) 877-1897



Child Development Associate

Curriculum Code: 0204

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why enroll in Childhood Development Associate Certificate of Achievement program?

Child Development Associate program offers three courses preparing students for the National Childhood Development Certification (CDA) examination. Courses provide theoretical and practical foundation for obtaining CDA Certification, which is necessary for working as paraprofessionals in Early Childhood classrooms or Family Child Care settings.

If I complete the Childhood Development Associate program, can I transfer to an upper-division college or university?

This program is career-oriented and not designed for transfer.

Are there any requirements I must satisfy before I start taking courses in the program?

Students must be a high school graduate or possess a GED.

How Long will take for me to complete this program?

Depending upon prior education and work experience, program may be completed within one year. Students must complete 480 hours working with children from infancy through five years of age in group settings. If any of these hours have been accumulated within five years of enrolling in the program students may utilize those hours toward the required 480 hours.

Upon Completion of this program, graduates will be able to:

- Demonstrate understanding of principles of instruction in Early Childhood settings;
- Prepare and complete professional resources files;
- Demonstrate understanding of professional standards and practice skills in professional settings;
- File application and successfully sit for National Childhood Development Certification (CDA) exam; and
- Secure employment in Child Care industry.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250 or (973) 877-1897



Human and Social Services

Curriculum Code: 3057

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why major in Human and Social Services Certificate?

The Human and Social Services certificate program allows student to begin a career that permits satisfaction of helping individuals and communities.

If I major in Human and Social Services, can I transfer to a four-year college or university?

Human and Social Services certificate is career oriented and not designed for transfer. However, four-year institutions may apply most or all the courses toward a bachelor's depending upon program requirements.

Are there any requirements I must satisfy before I start taking courses in my major?

Based on placement, you may have to take developmental courses in English and/or Mathematics before taking courses in your major. In addition, students must be currently employed by a human service organization, which must be approved by the Division prior to admission to the program.

How long will it take for me to complete this degree?

If you do not need developmental courses and you register for an average of 14 credits each semester, certificate can be completed in one year.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of structure, policies, procedures, purposes, and offerings of agencies and institutions providing human and social services to individuals, families, groups, and communities;
- Demonstrate knowledge of theoretical approaches of various levels of practice in social work, gerontology, addictions counseling, and mental health;
- Conduct client intake and process client referrals to appropriate support services; and
- Conduct home visitations and participate in client mentoring.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250.

Paralegal

Curriculum Code: 3208

Will Earn Upon Program Completion: Certificate of Achievement (COA)

Why major in Paralegal Certificate?

Law firms, corporations, government agencies, title and insurance companies, state and federal courts, and other entities increasingly seek paralegals to assist with legal tasks. Duties of paralegals include conducting interviews, investigations, and legal research; preparing legal documents and memoranda; assisting with clients; and being involved in daily operations of law offices.

Are there any requirements I must satisfy before I start taking courses in my major?

Certificate program is only open to individuals who already earned an A.A., A.S., B.A., B.S., or graduate degree in any discipline from regionally-accredited institutions *and* have completed 18 or more general education credits in: 1) Written & Oral Communications; 2) Society & Human Behavior; 3) Quantitative Knowledge & Skills; 4) Science; 5) Humanities; and 6) History as required by Essex County College.

May I transfer Paralegal courses from another college?

Students may transfer up to 9 legal specialty courses from ABA-approved institutions into the program. Upon matriculation, students must submit all academic transcripts to Enrollment Services to determine whether they have successfully completed (with a minimum grade of "C" or better) the 18 or more general education credits required. Subsequently, transcripts are evaluated by Paralegal Program Coordinator to determine legal courses considered for transfer.

If I major in Paralegal Certificate, can I transfer to a four-year college or university?

Paralegal certificate is career oriented and not designed for transfer to a bachelor's, but courses completed may be applied to an associate's at ECC. Most or all credits earned in certificates applied to associate's, transfer to four-year institutions. See a Social Sciences Division academic advisor (faculty member) for more information.

How long will it take for me to complete this degree?

Depending upon when you matriculate, Paralegal Certificate can be completed in one year taking three to four courses each semester.

Upon completion of this program, graduates will be able to:

- Explain the role of a paralegal in today's legal system;
- Demonstrate knowledge of American legal system, fundamental legal principles, and the litigation process;
- Demonstrate knowledge of principles of legal ethics and of the Model Code of Ethics and Professional Responsibility and Guidelines for Enforcement of the National Federation of Paralegal Associations, Inc.;
- Proficiently access, locate, and research the law by both traditional and electronic methods;
- Demonstrate problem-solving and critical, analytical thinking skills within context of evaluating legal issues; and
- Communicate effectively with accurate legal terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Where should I direct specific questions about this program?

Call the Division at (973) 877-3250.

NOTE: To enter this certificate of achievement program, you must possess at least an associate's degree (in any discipline) and be able to demonstrate that you have met the general education requirements of Essex County College by completing 18 or more general education credits.

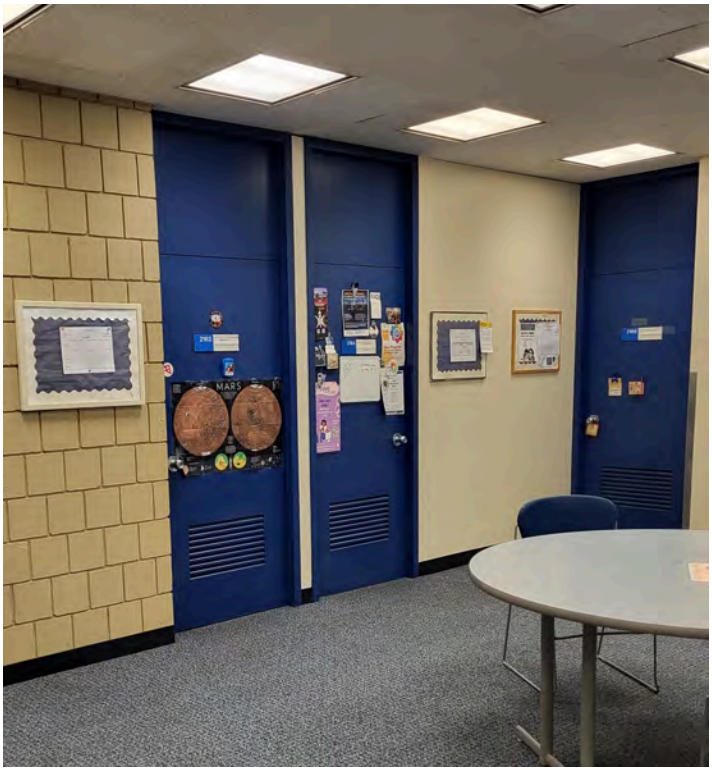
ABOUT ACADEMIC DIVISIONS





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- Division of Business (p. 88)
- Division of Humanities and Bilingual Studies (p. 92)
- Division of Math, Engineering Technology and Computer Science (p. 102)
- Division of Nursing and Health Sciences (p. 118)
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Division of Biology, Chemistry and Physics

Division: Biology, Chemistry and Physics Division

Degrees

- Biology/Pre-Medicine - AS (0601) (p. 85)
- Biology/Pre-Medicine MD Option - AS (061G) (p. 85)
- Chemistry - AS (0602) (p. 86)
- Environmental Science - AS (2207) (p. 86)
- General Science - AS (0603) (p. 87)
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Biology/Pre-Medicine - AS (0601)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
CHM 103	General Chemistry I	4
CHM 104	General Chemistry II	4
MTH 119	Pre-Calculus I	4
or MTH 118	Precalculus	
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (30 Credits)		
BIO 103	General Biology I	4
BIO 104	General Biology II	4
BIO 210	Scientific Research Methods	2
Select two of the following:		8
BIO 211, BIO 228, BIO 230		
MTH 120	Pre-Calculus II	4
or MTH 121	Calc with Analytic Geom I	
Select one of the following Sequences:		8
PHY 101 & PHY 102	College Physics I and College Physics II	
or		
CHM 203 & CHM 204	Organic Chemistry I and Organic Chemistry II	
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No grade of "D" is acceptable in any BIO, CHM, PHY or MTH course.
- MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II sequence (8 credits) may substitute for MTH 118 Precalculus (4 Credits).
- This plan assumes successful completion of all required developmental courses in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem-solving skills, including the scientific method, qualitative and quantitative data analysis;
- Demonstrate mastery of fundamental concepts of biology at the molecular and cellular levels;
- Demonstrate mastery of fundamental concepts of biology at the organismal, community and ecosystem levels; and
- Perform scientific investigations using proper laboratory instrumentations and laboratory procedures.

Biology/Pre-Medicine MD Option - AS (061G)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
MTH 121	Calc with Analytic Geom I	4
BIO 103	General Biology I	4
BIO 104	General Biology II	4
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology	3
Humanistic Perspective (3)		
Select any English Literature Course		3
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (32 Credits)		
BIO 211	Microbiology	4
CHM 103	General Chemistry I	4
CHM 104	General Chemistry II	4
CHM 203	Organic Chemistry I	4
CHM 204	Organic Chemistry II	4
MTH 118	Precalculus	4
PHY 101	College Physics I	4
PHY 102	College Physics II	4
Total Credits		**62**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No grade of "D" is acceptable in BIO, CHM, PHY, or MTH courses.
- MTH 119 Pre-Calculus I - MTH 120 Pre-Calculus II (8 cr.) sequence may be substituted for MTH 118 Precalculus (4 cr.)

- BIO 121 Anatomy & Physiology I - BIO 122 Anatomy and Physiology II (8 cr.) sequence may be substituted for BIO 211 Microbiology (4 cr.)
- Minimum required GPA for articulation is 3.5

Upon completion graduates will be able to:

- Utilize critical thinking and problem-solving skills to become avid learners; and
- Apply for entry into a 5-year M.D. program by demonstrating mastery in biology, inorganic chemistry, organic chemistry, and physics.

Through its administration by the Division of Biology, Chemistry and Physics, the Biology/Pre-Medicine MD Option program demands academic rigor. The minimum required GPA is 3.5.

Chemistry - AS (0602)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
MTH 121	Calc with Analytic Geom I	4
MTH 122	Calc with Analytic Geom II	4
PHY 101	College Physics I	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (27 Credits)		
CHM 103	General Chemistry I	4
CHM 104	General Chemistry II	4
CHM 203	Organic Chemistry I	4
CHM 204	Organic Chemistry II	4
CHM 299	Research Study in Chemistry	3
MTH 221	Calc with Analytic Geom III	4
PHY 102	College Physics II	4
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No grade of "D" is acceptable in CHM, MTH or PHY courses.

Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem solving skills, including the scientific method and method of scientific conversion;
- Understand fundamental concepts of inorganic chemistry, including the chemical laws of nature, solutions, acids & bases, kinetics, equilibrium, and thermochemistry, thermodynamics, electrochemistry, and nuclear chemistry;
- Demonstrate mastery of fundamental concepts of organic chemistry, including functional groups, reactions, syntheses, and mechanisms;
- Perform chemical experiments in a safe and scientific manner, using proper scientific and laboratory safety procedures.

Environmental Science - AS (2207)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
MTH 101	Statistics and Probability I	4
BIO 103	General Biology I	4
BIO 104	General Biology II	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (30 Credits)		
BIO 210	Scientific Research Methods	2
BIO 220	Intro to Environmental Science	4
BIO 225	Plant Science	4
or BIO 230	Ecology and Evolution	
CHM 103	General Chemistry I	4
CHM 104	General Chemistry II	4
GEO 101	Rocks, Minerals and Fossils	4
GEO 102	Surface Proc.&Natural Disaster	4
MTH 118	Precalculus	4
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I,

HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No grade of "D" is acceptable in BIO, CHM, GEO or MTH courses
- MTH 119 Pre-Calculus I - MTH 120 Pre-Calculus II (8cr.) sequence may be substituted for MTH 118 Precalculus (4 cr.)

Upon completion of this program, graduates will be able to:

- Students will be able to describe the fundamental concepts of Geology and Environmental Science, including the origin, composition; and evolution of the Earth, and how the Earth system responds to internal and external forces, including the forces of humans;
- Students will be able to effectively communicate and critically evaluate scientific observations, analyses and ideas;
- Students will be able to scientifically collect, analyze, and interpret geologic, geoscience, and earth systems data.

General Science - AS (0603)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101- BIO 102, BIO 103- BIO 104, BIO 116, BIO 121- BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101- CHM 102, CHM 103- CHM 104 , GEO 101- GEO 102,		
PHY 101- PHY 102, PHY 103- PHY 104, PHY 105, PHY 113- PHY 114,		
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
Select any two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (24 Credits)		
Select six science electives from the following courses [1]		24
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 210, BIO 211, BIO 220, BIO 228, BIO 230, BIO 237, BIO 241, BIO 251; CHM 101, CHM 102, CHM 103, CHM 104, CHM 203, CHM 204; GEO 101, GEO 102; PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114		
Additional Course Requirements (3 Credits)		
Free Elective(s)		3
Total Credits		**60**

[1] If a chosen science course is three credits then seven science courses are required.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No Grade of "D" is acceptable in MTH or Science courses

Upon completion of this program, graduates will be able to:

- Utilize critical thinking and problem-solving skills, including the scientific method and methods of scientific conversion;
- Demonstrate mastery of fundamental concepts of biology, chemistry, and/or physics; and
- Perform scientific investigations using proper scientific and laboratory safety protocols.

Physics - AS (0608)

Division: Biology, Chemistry and Physics Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
MTH 121	Calc with Analytic Geom I	4
MTH 122	Calc with Analytic Geom II	4
CHM 103	General Chemistry I	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (30 Credits)		
PHY 103	General Physics I	4
PHY 104	General Physics II	4
PHY 110	Intro. Data Reduction Applica.	3
PHY 203	General Physics III	5
PHY 299	Physics Research Capstone	2
MTH 221	Calc with Analytic Geom III	4
MTH 222	Differential Equations	4

CHM 104	General Chemistry II	4
or PHY 113	Astronomy	
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

- No grade of "D" is acceptable in CHM, MTH or PHY courses

Upon completion of this program, graduates will be able to:

- Demonstrate an understanding of the principles of physics and the ability to apply these principles to problems of both fundamental and practical interest;
- Design and conduct experiments, and use the scientific method to analyze a problem and draw conclusions from data and observations;
- Apply critical thinking skills and ability to identify, formulate, and solve technical problems.

Division of Business

Division: Business Division

The following programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

A.S. in Accounting (ACBSP accredited)

A.S. in Business Administration (ACBSP accredited)

A.S. in Finance (ACBSP accredited)

A.S. in Supply Chain (ACBSP accredited)

Degrees

- Accounting - AS (2001) (p. 88)
- Business Administration - AS (2005) (p. 89)
- Business Administration: Hospitality Management - AAS (200H) (p. 89)
- Finance - AS (2016) (p. 91)
- Supply Chain Management - AS (2017) (p. 92)

Academic Certificates

- Business Career Development - Academic Certificate (3001) (p. 90)
- Business Professional - Academic Certificate (3013) (p. 90)

Certificate of Achievement

- Supply Chain Management - Certificate of Achievement (3014) (p. 92)

Accounting - AS (2001)

Division: Business Division

The A.S. in Accounting is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (6)		
ECO 101	Principles of Economics I (Macro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (16 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
Select two ACC 200-level courses		8
Additional Course Requirements (12 Credits)		
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
BUS 211	Principles of Marketing	3
or BUS 251	Business Law I	
ECO 102	Principles of Economics II	3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I,

HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate of knowledge of the underlying framework of accounting concepts and principles;
- Apply various accounting skills to prepare financial and or management accounting summaries and reports, both manually and by using computers;
- Review and evaluate accounting reporting procedures for compliance with national and international guidelines/standards;
- Prepare and discuss capstone summaries of accounting practices that incorporate several accounting tasks, and /or areas.

Business Administration - AS (2005)

Division: Business Division

The A.S. in Business Administration is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (6)		
ECO 101	Principles of Economics I	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
BUS 231	Global Business I	3
Select any two BUS 200-level courses		6
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
ECO 102	Principles of Economics II	3
Free Elective (one 2-credit course or two 1-credit courses)		2
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of fundamental business concepts and principles;
- Discuss and analyze issues related to global economics;
- Explain and apply management theories and principles; and
- Communicate effectively with accurate business terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Business Administration: Hospitality Management - AAS (200H)

Division: Business Division

Code	Title	Credits
General Education Requirements (25 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
Select one of the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (9)		
ECO 101	Principles of Economics I	3
Select any two of the following:		6
ANT 101, ANT 105, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3

or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (18 Credits)		
BUS 101	Business Organization & Mgmt	3
HMM 103	Intro. to Hospitality Mgmt.	3
HMM 226	Supervisory Development	3
HMM 261	Hotel/Motel Housing Management	3
HMM 263	Front Office Procedures	3
HMM 264	Food & Beverage Management	3
Additional Course Requirements (17 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
SCM 101	Intro. to Operations and SCM	3
Select one of the following:		3
HMM 256 (recommended), BUS 201, BUS 203, BUS 204, BUS 207, BUS 211, BUS 213, BUS 221, BUS 231, BUS 251, BUS 252, BUS 253		
Free Elective [1]		3
Total Credits		**60**

[1] CEE 298 Cooperative Edu. Experience I is recommended.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of fundamental business concepts and principles;
- Demonstrate knowledge of the skills required for various positions in the hospitality management industry;
- Apply the basic principles of front office, housekeeping, merchandising, and food and beverage management; and
- Communicate effectively with accurate 'business' and 'hospitality industry' terminology in written and/or oral form, with demonstrated proficiency in the use of technology.

Business Career Development - Academic Certificate (3001)

Division: Business Division

Code	Title	Credits
General Education Requirements (9-10 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
or ENG 102	College Composition II	
Technological Competency/Quantitative Knowledge, & Skills (3-4)		
Select one of the following:		3-4
CIS 131, CIS 135, MTH 100, MTH 101, MTH 103, MTH 113, MTH 114, MTH 119, MTH 120, MTH 127		
Society & Human Behavior (3)		
Select one of the following:		
ART 100, ART 101, ART 102, MUS 100, MUS 109, MUS 117, FRN 101, FRN 102, SPN 101, SPN 102, CIN 101, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219, POL 104, ANT 101, ANT 105		3
Major Requirements (16-18 Credits)		
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
ACC 101	Prin of Accounting I Financial	4
Select any two of the following based on your curriculum (degree program):		6-8
ACC 102, ACC 201, ACC 202, ACC 211, ACC 231, ACC 232		
BUS 100, BUS 203, BUS 204, BUS 207, BUS 211, BUS 213, BUS 221, BUS 231, BUS 251, BUS 252, BUS 253		
FIN 101, FIN 201, FIN 207, FIN 209, FIN 211		
HMM 103, HMM 226, HMM 261, HMM 263, HMM 264		
SCM 101, SCM 201, SCM 219, SCM 229, SCM 239, SCM 249		
Additional Course Requirements (6 Credits)		
ECO 101	Principles of Economics I (Macro)	3
ECO 102	Principles of Economics II	3
Total Credits		**31-34**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this certificate, graduates will be able to:

- Demonstrate knowledge of basic business principles;
- Communicate effectively using business terms and concepts;
- Explain and apply motivational theories in business;
- Communicate effectively in written and oral forms with proficient use of technology.

Business Professional - Academic Certificate (3013)

Division: Business Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Major Requirements (18-19 Credits)		

BUS 101	Business Organization & Mgmt	3
Select any two BUS 200-level courses		6
Select any three Logistics (LOG) courses		9-10
or Select the following three courses:		
ACC 101, BUS 203, HMM 103		
Additional Course Requirements (6 Credits)		
Select two of the following:		6
ART 100, ART 101, ART 102, CEE 298, ECO 101, ECO 102, ENG 105, ENG 109, FRN 101, MUS 100, MUS 109, MUS 117, SPN 101		
Total Credits		**30-31**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this certificate, graduates will be able to:

- Demonstrate knowledge of basic business principles;
- Communicate effectively using business terms and concepts;
- Demonstrate dependability and initiative in carrying out responsibilities;
- Communicate effectively in written and oral forms with proficient use of technology.

Finance - AS (2016)

Division: Business Division

The A.S. in Finance is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society and Human Behavior (9)		
ECO 101	Principles of Economics I (Macro)	3
ECO 102	Principles of Economics II (Micro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102 , PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
FIN 101	Introduction to Finance	3
FIN 201	Money and Banking	3
FIN 207	Principles of Investments	3
FIN 209	International Finance	3
FIN 211	Fin.Sem./Exp.& Directed Study	3
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
Select one of the following:		3
BUS 211, BUS 231, BUS 251		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Determine the significance of fundamental components of finance and their relevance to financial environments;
- Demonstrate knowledge of financial markets and financial institutions;
- Explain the purpose and basic operation of the Federal Reserve System and Central Bank, as well as application of Monetary Policy as relates to the money supply;
- Evaluate the effect of monetary policy or output and prices using analysis of aggregate demand and supply;
- Explain how to apply various strategies in management of financial investment portfolios in order to optimize profits (and minimize taxes) within acceptable risks;
- Evaluate common debt and equity securities and analyze relative risks and returns associated with each;
- Identify and explain key elements of international financial markets; and
- Communicate effectively with accurate 'business' terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Supply Chain Management - AS (2017)

Division: Business Division

The A.S. in Supply Chain Management is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (9)		
ECO 101	Principles of Economics I (Macro)	3
ECO 102	Principles of Economics II (Micro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
SCM 101	Intro. to Operations and SCM	3
SCM 201	Principles Supply Chain Mgmt.	3
SCM 219	Transportation & Warehousing	3
Select two of the following:		6
SCM 229, SCM 239, SCM 249		
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
Select one of the following:		3
BUS 211, BUS 231, BUS 251		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Develop knowledge and understanding in relation to the fundamental concepts and components of Supply Chain Management and its role as it relates to the business environment;
- Develop knowledge, understanding and skills in the areas of Warehousing, Inventory Management, Distribution, and Transportation as well as the importance of integrating each factor as it relates to decision-making;
- Develop knowledge and understanding of Demand Planning, Order Fulfillment and Consumer Satisfaction;
- Show understanding of how to apply various strategies in the field of Supply Chain Management as it relates to Procurement and Risk Management;
- Demonstrate knowledge of manufacturing operations (planning, process, and control) as it relates to general logistics.

Supply Chain Management - Certificate of Achievement (3014)

Division: Business Division

Code	Title	Credits
Major Requirements (15 Credits)		
SCM 101	Intro. to Operations and SCM	3
SCM 201	Principles Supply Chain Mgmt.	3
SCM 219	Transportation & Warehousing	3
Select any two of the following:		6
SCM 229, SCM 239, SCM 249		
Total Credits		**15**

Upon completion of this program, graduates will be able to:

- Gain understanding of fundamental concepts of Supply Chain Management;
- Understand areas of warehousing, inventory management, distribution, and transportation;
- Gain understanding of demand planning, order fulfillment and consumer satisfaction;
- Understanding of Procurement, Risk Management and Logistics.

Division of Humanities and Bilingual Studies

Division: Humanities and Bilingual Studies Division

Degrees

- Art - AA (0401) (p. 93)
- Liberal Arts: General - AA (0199) (p. 93)
- Liberal Arts: Africana Studies Option - AA (019A) (p. 94)
- Liberal Arts: English Option - AA (019E) (p. 95)
- Liberal Arts: Entertainment Production Option - AA (019C) (p. 95)
- Liberal Arts: History Option - AA (019H) (p. 96)
- Liberal Arts: Theater Option - AA (019D) (p. 97)
- Liberal Arts: World Language Option - AA (019L) (p. 98)
- Music - AS (0409) (p. 98)
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Academic Certificates

- Art - Academic Certificate (3072) (p. 100)
- English - Academic Certificate (3073) (p. 100)
- Entertainment Production - Academic Certificate (3075) (p. 100)
- History - Academic Certificate (3074) (p. 101)
- Liberal Arts: General - Academic Certificate (0191) (p. 101)

Art - AA (0401)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		*12*
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select any two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208, MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
ART 107	Drawing I	3
ART 111	Painting I	3
ART 140	Photography I	3
ART 205	Two Dimensional Design	3
ART 206	Three Dimensional Design	3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Acquire a thorough understanding of the elements of art and the aesthetic principles related to each medium;
- Identify and apply various concepts of each medium;
- Expand their visual arts vocabulary;
- Explore both traditional and non-traditional techniques and materials;
- Understand and appreciate the criteria for aesthetic standards;
- Create art projects using industry standard tools, applications, and platforms; and
- Utilize professional project management practices.

Liberal Arts: General - AA (0199)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select any two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		

Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
Humanities Electives [1]		6
Humanities or Social Science Electives [1,2]		6
Select one of the following World Language Courses:		
FRN 101	Elementary French I	3
or SPN 101	Elementary Spanish I	
Total Credits		**60**

[1] Humanities Electives: ART, CIN, CMS, DRA, ENG, FRN, HST, MUS, NMT, PHI, REL, SPN

[2] Social Sciences Electives: ANT, CJI, ECO, EDU, PLS, POL, PSY, SOC

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply principles of effective rhetoric and critical thinking in oral presentations and writing assignments;
- Utilize the library, Internet, and other electronic sources to prepare research projects following Modern Language Association (MLA) guidelines for source documentation;
- Apply critical and analytical analysis techniques to literary works and visual art works and/or musical pieces of various periods, styles, and genres;
- Demonstrate knowledge of historical events and fundamental concepts and theories of analysis used in historical interpretation; and Compare and analyze diverse cultures throughout history.

Liberal Arts: Africana Studies Option - AA (019A)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
SOC 101	Introduction to Sociology	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
Select one of the following:		3
ENG 232, ENG 237, ENG 238		
Select one of the following:		3
HST 121, HST 122, HST 134, HST 135, HST 205		
Select one of the following:		3
SOC 203, SOC 205		
Select one of the following:		3
ART 200, CIN 103, MUS 109, MUS 117		
Select one (non-repeated) of the following:		3
ART 200, CIN 103, ENG 232, ENG 237, ENG 238, HST 121, HST 122, HST 134, HST 135, HST 205, MUS 109, MUS 117, SOC 203, SOC 205		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of the arts, history, and literature of Africa, the African-American community, and the Caribbean;
- Apply critical thinking, problem solving, and effective communication skills to analyze and discuss literary and/or art works, historical events, and topics related to cultural diversity; and
- Utilize the library, Internet, and other electronic sources to prepare research projects that follow MLA, APA, and/or Chicago Manual of style guidelines for source documentation.

Liberal Arts: English Option - AA (019E)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select any two of the following courses:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following courses:		3
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270		
Major Requirements (9 Credits)		
ENG 105	Technical Writing	3
or ENG 169	Creative Writing	
ENG 208	Survey of Shakespearean Lit.	3
Select an additional English Literature course		3
Additional Requirements (6 Credits)		
Select one of the following World Language Courses:		
FRN 101	Elementary French I	3
or SPN 101	Elementary Spanish I	
Humanities or Social Science Elective [1]		3
Total Credits		**60**

[1] Humanities Electives: ART, CIN, CMS, DRA, ENG, FRN, HST, MUS, NMT, PHI, REL, SPN
Social Science Electives: ANT, CJI, ECO, EDU, PLS, POL, PSY, SOC

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Read and discuss non-fiction-based works of various lengths;
- Recognize and use various modes of writing in order to develop persuasive essays;
- Make proper use of MLA Style in-text parenthetical citations;
- Read and discuss literary works of various lengths;
- Recognize and use various modes of writing in order to develop literary analytical essays;
- Demonstrate and refine communication skills needed for careers in business and industry;
- Recognize and use standard technical writing principles, conventions, and formats appropriate and needed in the workplace;
- Develop and write their own creative works of prose and poetry;
- Provide constructive criticism to their peers; and
- Take in the constructive criticism of others in order to apply it to their own writing.

Liberal Arts: Entertainment Production Option - AA (019C)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		

Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select any two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
Select one of the following courses:		3
ART 140, any CIN course, or ENG 151		
CMS 110	Fundamentals of TV Production	3
CMS 113	Screenwriting	3
CMS 121	Fundamentals of Filmmaking	3
CMS 136	Audio Production	3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Learn to screen and critically analyze films, and other forms of media, as an artform (If ENG 151, CIN 101 or 103 is taken);
- Learn to use a still camera to capture images while exploring various concepts of photography via traditional and non-traditional techniques (If ART 140 is taken);
- Plan, record, and edit a variety of television-based productions while learning to effectively operate within a studio environment;
- Develop and write their own screenplay while learning to provide and receive constructive criticism;
- Learn to complete a short film, starting from the storyboarding and scripting processes to the actual filming and, ultimately, ending with the post-production phase; and
- Learn to write, record, and edit a variety of audio productions while coming to understand the industry's structure and the medium's impact.

Liberal Arts: History Option - AA (019H)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select two of the following: [2]		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following courses:		3
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208, REL 105		
Major Requirements (9 Credits)		
Select any three additional History (HST) courses		9
Additional Requirements (6 Credits)		
Select one of the following World Language Courses:		
FRN 101	Elementary French I	3
or SPN 101	Elementary Spanish I	
Humanities or Social Science Elective [1]		3
Total Credits		**60**

[1] Humanities Electives: ART, CIN, CMS, DRA, ENG, FRN, HST, MUS, NMT, PHI, REL, SPN

[2] Social Science Electives: ANT, CJI, ECO, EDU, PLS, POL, PSY, SOC ANT 101 & POL 104 are recommended.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Show an understanding of how individuals are shaped by their own past and by the past of their society and institutions;
- Show an understanding of how the operation of large-scale forces are responsible for causing change over time;
- Identify and describe the contours and stakes of conversations among historians within defined historiographical fields;
- Apply historical methods to evaluate critically the record of the past and how historians and others have interpreted it; and
- Show basic historical research skills, including (as appropriate) the effective use of libraries, archives, and databases.

Liberal Arts: Theater Option - AA (019D)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select two of the following courses:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses (ENG 208 & ENG 250 recommended)		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following courses:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (12 Credits)		
DRA 101	Fundamentals of Acting I	3
DRA 102	Fundamentals of Acting II	3
DRA 105	Directing and Staging	3
DRA 106	Playwriting	3
Additional Requirements (3 Credits)		
Select one of the following World Languages courses:		3
FRN 101 or SPN 101		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Critically examine the philosophical and theoretical issues concerning the human experience via the exposure of reading, watching, and, to a lesser degree, performing portions of plays;
- Learn to understand the impact of the theater upon various societies over the course of time;
- Build an appreciation of the history of the theater and its ability to shape and reshape human thinking;
- Be able to successfully and professionally participate in a discourse on the analysis of the theater and the elements which makes it stand out from other forms of performing arts;
- Perform effectively;
- Evaluate dramatic performances and/or texts;
- Understand the principles which go into directing and staging for the theater;
- Be able to read a play's script and convey their interpretation of the material to others;
- Assimilate the various theatrical elements and articulate them as they relate to stage direction;
- Develop and write their own scenes and plays;
- Provide constructive criticism to their peers; and
- Take in the constructive criticism of others in order to apply it to their own writing.

Liberal Arts: World Language Option - AA (019L)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
Select any two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select any two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global & Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (12 Credits)		
Select two course sequences of the same language OR select two course sequences from two different languages [1]		12
Additional Requirements (3 Credits)		
Humanities or Social Sciences Elective [2]		3
Total Credits		**60**

[1] World Language Course Sequences: SPN 101 - SPN 102, SPN 201 - SPN 202, FRN 101 - FRN 102, FRN 201 - FRN 202.

[2] Humanities: ART, MUS, CIN, ENG, HST, CMS, PHI, REL, DRA, NMT
Social Sciences: ANT, CJI, ECO, EDU, PLS, POL, PSY, SOC

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Proficiently write, read, speak, and listen to intermediate-level Spanish that emphasizes real-life contexts; and
- Describe various cultures of the Spanish-speaking world.

Music - AS (0409)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one MTH course OR one Science course and two MTH courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102,GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (27 Credits)		
MUS 105 & MUS 115	Musicianship I and Ear Training/Sight Singing I	4
MUS 106 & MUS 116	Musicianship II and Ear Training/Sight Singing II	4
MUS 205	Musicianship III	2
MUS 206	Musicianship IV	2
MUS 170	Intro. to Music Technology	3
Keyboard Class Series (Take all of the following Keyboard classes):		
MUS 131	Keyboard Class I	2
MUS 132	Keyboard Class II	2
MUS 231	Keyboard Class III	2
MUS 232	Keyboard Class IV	2
Select one of the following series sequences:		4
Instrumental Workshop Series:		
MUS 153	Instrumental Workshop I	

MUS 154	Instrumental Workshop II	
MUS 253	Instrumental Workshop III	
MUS 254	Instrumental Workshop IV	
Vocal Class/ Series:		
MUS 121	Voice Class I	
MUS 122	Voice Class II	
MUS 221	Voice Class III	
MUS 222	Voice Class IV	
Additional Requirements (3 Credits)		
Humanities or Social Sciences Elective [1]		3
Total Credits		**60**

Note: Music coordinator may make music course substitutions as deemed appropriate.

[1] Humanities: ART, MUS, CIN, ENG, HST, CMS, PHI, REL, DRA, NMT
Social Sciences: ANT, CJI, ECO, EDU, PLS, POL, PSY, SOC

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Read music, notate music, and analyze musical compositions;
- Read, sing, and notate intervals, rhythms, and melodies;
- Play major and scales and arpeggios (hands together) with reasonable speed and accuracy;
- Play chord progressions in all major and minor keys and harmonize melodies (written and improvised) using these progressions;
- Transpose melodies and harmonies to other keys;
- Perform repertoire pieces of increasing difficulty;
- Demonstrate correct singing and performance techniques;
- Perform a variety of styles;
- Interpret different styles from written arrangements and compositions;
- Describe various components;
- Understand the science behind audio and acoustics;
- Successfully make use of recording equipment; and
- Create musical compositions.

New Media Technology - AAS (2071)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
Select one Science course or MTH course:		4
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (38 Credits)		
ART 107	Drawing I	3
ART 111	Painting I	3
or ART 205	Two Dimensional Design	
ART 140	Photography I	3
ART 171	Animation Design	3
ART 206	Three Dimensional Design	3
CMS 110	Fundamentals of TV Production	3
CMS 113	Screenwriting	3
CMS 121	Fundamentals of Filmmaking	3
CMS 136	Audio Production	3
NMT 101	Interactive Multimedia Design	4
NMT 201	Advanced Interactive Design	4
NMT 202	Game Design and Applications	3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply fundamental principles of design to new media projects;
- Utilize industry-standard software applications and hardware equipment to produce new media projects;
- Demonstrate knowledge of storyboarding, character development, interactivity and introductory scripting using various computer software platforms and applications.

Art - Academic Certificate (3072)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (15 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Humanistic Perspective (9)		
ART 101	Art History I	3
ART 102	Art History II	3
ART 200	African American Art	3
Major Requirements (15 Credits)		
ART 107	Drawing I	3
ART 111	Painting I	3
ART 140	Photography I	3
ART 205	Two Dimensional Design	3
ART 206	Three Dimensional Design	3
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Acquire a thorough understanding of the elements of art and the aesthetic principles related to each medium;
- Identify and apply various concepts of each medium;
- Expand their visual arts vocabulary;
- Explore both traditional and non-traditional techniques and materials;
- Understand and appreciate the criteria for aesthetic standards;
- Create art projects using industry standard tools, applications, and platforms; and
- Utilize professional project management practices.

English - Academic Certificate (3073)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (12 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Major Requirements (18 Credits)		
ENG 105	Technical Writing	3
or ENG 169	Creative Writing	
ENG 208	Survey of Shakespearean Lit.	3
Select one ENG Literature course from the following:		3
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270		
Select any three additional ENG Literature courses		9
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Read and discuss non-fiction-based works of various lengths;
- Recognize and use various modes of writing in order to develop persuasive essays;
- Make proper use of MLA Style in-text parenthetical citations;
- Read and discuss literary works of various lengths;
- Recognize and use various modes of writing in order to develop literary analytical essays;
- Demonstrate and refine communication skills needed for careers in business and industry;
- Recognize and use standard technical writing principles, conventions, and formats appropriate and needed in the workplace;
- Develop and write their own creative works of prose and poetry;
- Provide constructive criticism to their peers; and
- Take in the constructive criticism of others in order to apply it to their own writing.

Entertainment Production - Academic Certificate (3075)

Code	Title	Credits
General Education Requirements (15 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Humanistic Perspective (6)		
Select one of the following:		3
Any 200-level ENG Literature course,		

ART 100, ART 101, ART 102, ART 200, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Any History (HST) course		
CIN 101	Introduction to Film	3
Major Requirements (15 Credits)		
Select one of the following:		3
ART 140, CIN 103, ENG 151		
CMS 110	Fundamentals of TV Production	3
CMS 113	Screenwriting	3
CMS 121	Fundamentals of Filmmaking	3
CMS 136	Audio Production	3
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Learn to screen and critically analyze films, and other forms of media, as an artform;
- Learn to use a still camera to capture images while exploring various concepts of photography via traditional and non-traditional techniques;
- Plan, record, and edit a variety of television-based productions while learning to effectively operate within a studio environment;
- Develop and write their own screenplay while learning to provide and receive constructive criticism;
- Learn to complete a short film, starting from the storyboarding and scripting processes to the actual filming and, ultimately, ending with the post-production phase; and
- Learn to write, record, and edit a variety of audio productions while coming to understand the industry's structure and the medium's impact.

History - Academic Certificate (3074)

Division: Humanities and Bilingual Studies Division

Code	Title	Credits
General Education Requirements (12 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Major Requirements (18 Credits)		
Select one HST course from the following:		3
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 204, HST 205, HST 206, HST 208		
Select any five additional HST courses		15
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Show an understanding of how individuals are shaped by their own past and by the past of their society and institutions;
- Show an understanding of how the operation of large-scale forces are responsible for causing change over time;
- Identify and describe the contours and stakes of conversations among historians within defined historiographical fields;
- Apply historical methods to evaluate critically the record of the past and how historians and others have interpreted it; and
- Show basic historical research skills, including (as appropriate) the effective use of libraries, archives, and databases.

Liberal Arts: General - Academic Certificate (0191)

Code	Title	Credits
General Education Requirements (29 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one of the following Science courses:		4
BIO 101, BIO 102, GEO 101, GEO 102, PHY 113, PHY 114		
Select one of the following Math courses:		4
MTH 101, MTH 103		
Note: While the following Science and MTH courses can count towards satisfying the Quantitative/Scientific Knowledge, Skills & Reasoning general education requirements, students are advised not to take them -		
BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105,		
MTH 100, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
Select two of the following courses:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		

Select any 200-level English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (6 Credits)		
Humanities Electives [1]		3
FRN 101	Elementary French I	3
or SPN 101	Elementary Spanish I	
Total Credits		**35**

[1] Humanities Electives: ART, CIN, CMS, DRA, ENG, FRN, HST, JRN, MUS, NMT, PHI, REL, SPN

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply principles of effective rhetoric and critical thinking in oral presentations and writing assignments;
- Utilize the library, Internet, and other electronic sources to prepare research projects following Modern Language Association (MLA) guidelines for source documentation;
- Apply critical and analytical analysis techniques to literary works and visual art works and/or musical pieces of various periods, styles, and genres;
- Demonstrate knowledge of historical events and fundamental concepts and theories of analysis used in historical interpretation; and Compare and analyze diverse cultures throughout history.

Division of Math, Engineering Technology and Computer Science

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Degrees

- Applied Computer Science - AS (2303) (p. 102)
- Architectural Technology - AAS (2301) (p. 103)
- Civil Engineering Technology - AAS (5309) (p. 104)
- Computer Information Systems - AS (2002) (p. 105)
- Computer Science - AS (2302) (p. 106)
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Applied Computer Science - AS (2303)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (34 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (16)		
MTH 113	College Algebra with Trig	4
MTH 127	Basic Calculus	4
PHY 101	College Physics I	4
PHY 102	College Physics II	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		

ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (23 Credits)		
CSC 121	Computer Science I	3
CSC 122	Computer Science II	3
CSC 221	Computer Sys and Architecture	3
CSC 223	Ethics and Computer Technology	3
CSC 225	Data Structures	3
CSC 228	Operating Systems	4
CSC 231	Database Design	4
Additional Course Requirements (3 Credits)		
MTH 136	Discrete Mathematics	3
Total Credits		**60**

- If you do not place into MTH 127 Basic Calculus or MTH 113 College Algebra with Trig the prerequisite is MTH 100 Intro. to College Mathematics. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using various dynamic and static data structures;
- Design digital circuity;
- Utilize multitasking, preemptive scheduling, time sharing operating system concepts and associated communications, networking, and security issues;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Demonstrate object-oriented design techniques using encapsulation, abstraction, inheritance, and reusability;
- Use software applications like spreadsheets, word processing, and basic programming; and
- Apply ethical reasoning in the technology environment.

Architectural Technology - AAS (2301)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
MTH 113	College Algebra with Trig	4
PHY 101	College Physics I	4
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
OR Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
OR Select any History (HST) Course		
Major Requirements (31 Credits)		
ARC 101	Architectural Design I	4
ARC 102	Architectural Design II	4
ARC 111	History of Architecture I	3
ARC 112	History of Architecture II	3
ARC 131	Construction Methods I	3
ARC 132	Construction Methods II	3
ARC 201	Architectural Design III	4
ARC 202	Architectural Design IV	4
MTH 114	Unified Calculus I	3
Additional Course Requirements (9 Credits)		
ENR 105	Applied Computer Aided Design	2
ENR 205	Advanced Autocad	3
PHY 102	College Physics II	4
Total Credits		**60**

- If you do not place into MTH 113 College Algebra with Trig the prerequisite is MTH 100 Intro. to College Mathematics. Math Placement is determined by the Mathematics Department. This course should be taken in high school or the summer before your first semester at ECC.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of basic construction principles and materials;

- Understand architectural and engineering drawings including scale and orthographic projection;
- Design various architectural projects including site layout and building features;
- Design structures utilizing functional as well as aesthetic considerations;
- Demonstrate ability to conduct architectural presentations for graphics and design pin-ups;
- Demonstrate knowledge of architectural history, including it influences design today; and
- Utilize computer software applications including computer aided design (CAD).

Building Code Technology - Certificate of Achievement (3052)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 105	Technical Writing	3
Major Requirements (22 Credits)		
UCC 109	Subcode Official	3
UCC 110	Construction Official	3
UCC 119	Building Inspector RCS	6
UCC 121	Building Inspector ICS	6
UCC 220	Building Inspector HHS	4
Additional Course Requirements (6 Credits)		
ARC 131	Construction Methods I	3
ARC 132	Construction Methods II	3
Total Credits		**34**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local building codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Building Code Inspector.

Civil Engineering Technology - AAS (5309)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

This program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org.) under the commission's General Criteria and Program Criteria for Civil Engineering Technology and Similarly Named Programs.

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (10)		
MTH 114	Unified Calculus I	3
MTH 213	Unified Calculus II	3
PHY 101	College Physics I	4
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (33 Credits)		
CET 111	Construction Methd & Materials	3
CET 211	Surveying	4
CET 221	Hydraulics and Drainage	3
CET 225	Soil Mechanics	3
CET 231	Structures	3
ELC 115	Electric Circuits I	3
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
ENR 105	Applied Computer Aided Design	2
ENR 110	Statics for Technology	3
ENR 220	Mechanics of Materials	3
CET 251	CET Seminar	2
Additional Course Requirements (7 Credits)		
CSC 106	Roadmap to Computing Engineers	3
PHY 102	College Physics II	4
Total Credits		**62**

- If you do not place into MTH 114 Unified Calculus I the prerequisites are MTH 100 Intro. to College Mathematics and MTH 113 College

Algebra with Trig. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Graduates of this program will demonstrate:

- Employment in the field of civil engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Utilize principles, hardware, and software that are appropriate to produce drawings, reports, quantity estimates, and other documents related to civil engineering;
- Perform standardized field and laboratory tests related to civil engineering;
- Utilize surveying methods appropriate for land measurement and/or construction layout; and
- Apply fundamental computational methods and elementary analytical techniques in sub-disciplines related to civil engineering.

Computer and Network Support - Certificate of Achievement (3321)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Technological Competency (3)		
CSC 100	Fundamental of Computer Scienc	3
Major Requirements (23 Credits)		
CSC 113	Intro Linux/UNIX Operating Sys	4
CSC 114	Computer Networks I	4
CSC 116	Intro to Comp/Network Security	4
CSC 137	Intro. to Programming in Java	3
CSC 214	Computer Networks II	4
CSC 253	Intro. System & Cloud Admin.	4
Total Credits		**29**

Note: The minimum passing grade for all courses designated CSC is C. If you earn a grade below C, you need to repeat that course.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Describe and analyze hardware and software, components of a network and their interrelations;
- Explain network protocols and hierarchical relationships of hardware and software;
- Compare protocol models and select appropriate protocols for a particular design;
- Explain concepts and theories of networking and apply to various situations, which may involve classifying networks, analyzing performance, and implementing new technologies;
- Use resources to stay abreast of latest industry tools and techniques analyzing impacts on existing and applying to future situations;
- Manage multiple operating systems, systems software, network services, and security; and
- Evaluate and compare systems software and emerging technologies.

Computer Information Systems - AS (2002)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (14)		
MTH 113	College Algebra with Trig	4
MTH 114	Unified Calculus I	3
MTH 136	Discrete Mathematics	3
Select one of the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 113, PHY 114		
Society & Human Behavior (6)		

Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (25 Credits)		
CIS 212	Systems Analysis and Design	3
CIS 215	Data Communications	3
CSC 121	Computer Science I	3
CSC 122	Computer Science II	3
CSC 225	Data Structures	3
CSC 223	Ethics and Computer Technology	3
CSC 221	Computer Sys and Architecture	3
CSC 228	Operating Systems	4
or CSC 231	Database Design	
Additional Course Requirements (3 Credits)		
CIS 131	Micro Computers in Business	3
Total Credits		**60**

- If you do not place into MTH 113 College Algebra with Trig the prerequisite is MTH 100 Intro. to College Mathematics. Math Placement is determined by the Mathematics Department. This course should be taken in high school or the summer before your first semester at ECC.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using dynamic and static data structures;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Apply business organization and management concepts to information technology environments; and
- Demonstrate understandings of principles of financial accounting for inventories receivables, assets, liabilities, internal control, and corporate entities; and
- Apply ethical reasoning in the technology environment.

Computer Science - AS (2302)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (15)		
MTH 121	Calc with Analytic Geom I	4
MTH 136	Discrete Mathematics	3
or MTH 239	Introduction to Linear Algebra	
Select one of the following sequences:		8
BIO 103-BIO 104, BIO 121-BIO 122,		
CHM 103-CHM 104, PHY 103-PHY 104		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (30 Credits)		
CSC 121	Computer Science I	3
CSC 122	Computer Science II	3
CSC 221	Computer Sys and Architecture	3
CSC 223	Ethics and Computer Technology	3
CSC 225	Data Structures	3
CSC 228	Operating Systems	4
MTH 122	Calc with Analytic Geom II	4
Select one of the following:		4
CSC 116, CSC 230, CSC 231, CSC 251, CSC 255		
Select one of the following:		3
CSC 100, CSC 104, CSC 151, MTH 141		
Total Credits		**60**

- If you do not place into MTH 121 Calc with Analytic Geom I the prerequisites are: MTH 100 Intro. to College Mathematics, MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.

2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design applications in object-oriented language using various dynamic and static data structures;
- Design digital circuity;
- Utilize multitasking, preemptive scheduling, time sharing operating system concepts and associated communications, networking, and security issues;
- Design and implement relational database with supporting applications;
- Demonstrate multi-user database processing in LANs in client-server systems;
- Demonstrate object-oriented design techniques using encapsulation, abstraction, inheritance, and reusability;
- Use software applications like spreadsheets, word processing, and basic programming; and
- Apply ethical reasoning in the technology environment.

Computer Science: Data Science Option - AS (232D)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (15)		
MTH 101	Statistics and Probability I	4
MTH 121	Calc with Analytic Geom I	4
MTH 239	Introduction to Linear Algebra	3
PHY 103	General Physics I	4
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (30 Credits)		
CSC 121	Computer Science I	3
CSC 122	Computer Science II	3
CSC 225	Data Structures	3
CSC 231	Database Design	4
MTH 122	Calc with Analytic Geom II	4
MTH 141	Mathematical Statistics	3
DSC 141	Data Science I - Fundamentals	2
DSC 241	Data Sci II - Machine Learning	2
DSC 242	Intro to Artificial Intel	3
DSC 243	Data Visualization	3
Total Credits		**60**

- If you do not place into MTH 121 Calc with Analytic Geom I the prerequisites are: MTH 100 Intro. to College Mathematics, MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

  Notes:

  a. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
  b. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

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Upon completion of this program, graduates will be able to:

- Evaluate the role of data scientists and data analysts;
- Identify and apply commonly used data collection methods;
- Describe and apply common data cleansing methods;
- Learn and apply programming languages to manipulate data;
- Explain the role of the tools used for performing data analysis;
- Apply artificial intelligence techniques to real-world problems;
- Describe how data visualization helps in data representations; and
- Utilize data visualization tools to display data.

Computer-Aided Design (CAD) Technology - Certificate of Achievement (3205)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (10 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
Select one of the following:		
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
MTH 100	Intro. to College Mathematics	4
Major Requirements (13 Credits)		

ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
ENR 105	Applied Computer Aided Design	2
ENR 106	Intermediate Comp-Aided Design	2
ENR 205	Advanced Autocad	3
ENR 250	Computer-Aided Design Project	2
Total Credits		**23**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply principles of engineering graphics to prepare detailed drawings using CAD software;
- Demonstrate computer literacy in use of various CAD systems; and
- Use American National Standards Institute (ANSI) protocol for sizing and tolerancing of mating parts; Apply Geometric Dimension and Tolerancing (GD&T) techniques to engineering design; and Utilize 3D solid modeling CAD systems to create mechanical components and generate assembly designs.

Cybersecurity & Network Technology - AAS (2312)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
MTH 100	Intro. to College Mathematics	4
or MTH 101	Statistics and Probability I	
Select one of the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104,		
MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 113, PHY 114		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) course		
Major Requirements (30 Credits)		
CSC 104	Network Fundamentals	3
CSC 113	Intro Linux/UNIX Operating Sys	4
CSC 114	Computer Networks I	4
CSC 116	Intro to Comp/Network Security	4
CSC 137	Intro. to Programming in Java	3
CSC 214	Computer Networks II	4
CSC 226	NetworkDefense&CounterMeasures	4
CSC 230	Computer & Internet Forensics	4
Additional Course Requirements (10 Credits)		
CSC 253	Intro. System & Cloud Admin.	4
Approved Ethics Course (CSC 223 or HIT 102)		3
Select one of the following:		3
CSC 250	Infor. Tech. Capstone Project	
CSC 260	Information Tech. Internship	
Any Approved Technical Course		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Describe and analyze hardware, software, network components, and their interrelations;
- Explain networking protocols and hierarchical relations of hardware and software;
- Compare protocol models and select appropriate protocols for a particular design;
- Manage multiple operating systems, systems software, network services, and security, as well as evaluate and compare systems software and emerging technologies;
- Develop solutions for networking and security problems, balancing business and technical issues and security;
- Explain concepts of confidentiality, availability, and integrity in Information Assurance; and
- Effectively communicate technical information verbally, in writing, and in presentation.

Cybersecurity - Certificate of Achievement (3322)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Technological Competency (3)		
CSC 100	Fundamental of Computer Scienc	3
Major Requirements (23 Credits)		
CSC 113	Intro Linux/UNIX Operating Sys (or an approved technology course)	4
CSC 114	Computer Networks I	4
CSC 116	Intro to Comp/Network Security	4
CSC 226	NetworkDefense&CounterMeasures	4
CSC 230	Computer & Internet Forensics	4
CSC 250	Infor. Tech. Capstone Project (or an approved technology course)	3
Total Credits		**29**

Note: The minimum passing grade for all courses designated CSC is "C". If you earn a grade below "C", you need to repeat that course.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Manage multiple operating systems, systems software, network services and security;
- Evaluate and compare systems software and emerging technologies;
- Develop solutions for networking and security problems, balancing business concerns, technical issues, and security;
- Identify infrastructure components and role they serve, and design infrastructure including devices, topologies, protocols, systems software, management, and security;
- Use resources to stay abreast of industry tools and techniques analyzing impacts;
- Explain concepts of confidentiality, availability, and integrity in Information Assurance, including physical, software, devices, policies, and people, and analyze these in an existing system and design implementations; and
- Cite and comply with relevant industry and organizational codes of conduct and ethics.

Database System Administration - Academic Certificate (3324)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (7 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
MTH 100	Intro. to College Mathematics	4
Major Requirements (23 Credits)		
CSC 113	Intro Linux/UNIX Operating Sys	4
CSC 151	Intro Develop Web Applications	3
CSC 231	Database Design	4
CSC 232	Advanced Database Management	4
CSC 251	Web Application Development	4
CSC 253	Intro. System & Cloud Admin.	4
Total Credits		**30**

Note: The minimum passing grade for all courses designated CSC and MTH is "C". If you earn a grade below "C", you need to repeat that course.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Apply design theory to a database using appropriate database management systems;
- Design, maintain, and monitor database server architecture including addressing performance optimization to meet system requirements;
- Test software systems against specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as computer science and mathematics theories and principles, to develop and maintain complex software systems; and
- Evaluate impact of potential software engineering problem solutions as they fit into global societies by integrating knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques.

Electrical Code Technology - Certificate of Achievement (3051)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 105	Technical Writing	3
Major Requirements (13 Credits)		
UCC 109	Subcode Official	3
UCC 110	Construction Official	3
UCC 130	Electrical Inspector ICS	4
UCC 230	Electrical Inspector HHS	3
Additional Course Requirements (6 Credits)		
ARC 131	Construction Methods I	3
ARC 132	Construction Methods II	3
Total Credits		**25**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local electrical codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Electrical Code Inspector.

Electrical Engineering Technology - AAS (2313)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

This program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org./) under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (7)		
MTH 114	Unified Calculus I	3
PHY 101	College Physics I	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Course Requirements (24 Credits)		
ELC 115	Electric Circuits I	3
ELC 116	Electric Circuits II	3
ELC 120	Fundamentals of Analog ELC	3
ELC 218	Pulse and Digital Circuits	3
ELC 222	Intro to Communication Systems	3
ELC 228	Intro to Microprocessors	3
ELC 250	Electric Design	3
Approved Technical Electives		3
Select one of the following:		
Any 200-level ELC, ENR, CSC, or MTH courses		
Additional Course Requirements (14 Credits)		
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
MTH 213	Unified Calculus II	3
PHY 102	College Physics II	4
CSC 106	Roadmap to Computing Engineers	3
Total Credits		**60**

- Approved technical electives should be selected after consultation with an academic advisor.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Graduates of this program will demonstrate:

- Employment in the field of electrical and computer engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;

- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Apply circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering
standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems; and
- Apply natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

Engineering - AS (0399)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (31 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (16)		
MTH 121	Calc with Analytic Geom I	4
MTH 122	Calc with Analytic Geom II	4
CHM 103	General Chemistry I	4
PHY 103	General Physics I	4
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		*3*
Select any History (HST) course		
Major Requirements (26 Credits)		
CSC 112	Computer Prog. for Engr. Tech.	3
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
ENR 105	Applied Computer Aided Design	2
MTH 222	Differential Equations	4
PHY 104	General Physics II	4
Major Elective		3
Major Elective		3
Major Elective		3
Additional Course Requirements (4 Credits)		
MTH 221	Calc with Analytic Geom III	4
Total Credits		**61**

- If you do not place into MTH 121 Calc with Analytic Geom I the prerequisites are MTH 100 Intro. to College Mathematics, MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

MAJOR ELECTIVES

- Mechanical

ENR 211 Engineer Mechanics I - Statics

ENR 212 Engineer Mechanics II-Dynamics

ENR 221 Strength of Materials

MET 203 Engineering Materials and Proc

- Biomedical (for all tracks)

MTH 141 Mathematical Statistics

MTH 239 Introduction to Linear Algebra

CHM 104 General Chemistry II

- Civil

CET 111 Construction Methd & Materials

CET 211 Surveying

CET 231 Structures

ENR 211 Engineer Mechanics I - Statics

ENR 221 Strength of Materials

ENR 212 Engineer Mechanics II-Dynamics

- Chemical

ELC 218 Pulse and Digital Circuits

MTH 141 Mathematical Statistics

MTH 239 Introduction to Linear Algebra

CHM 104 General Chemistry II

- Electrical

ELC 218 Pulse and Digital Circuits

ELC 228 Intro to Microprocessors

ELC 230 Circuits & Systems for Engr.

- Computer

ELC 218 Pulse and Digital Circuits

ELC 228 Intro to Microprocessors

ELC 230 Circuits & Systems for Engr.

- General

Consult with your Division

[1] Major Electives are to be selected in consultation with a faculty advisor in the Division of METCS.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Analyze engineering drawings including concept of scale and orthographic projection;
- Assist engineers and technicians in performing tasks relevant to selected branch of engineering;
- Complete written engineering reports using skills acquired in curriculum courses;
- Write computer programs to solve engineering-based problems using skills acquired in curriculum courses;
- Demonstrate knowledge of engineering principles such as mechanics, materials, and systems; and
- Utilize computer software applications used in engineering including computer aided design (CAD).

Fire Code Technology - Certificate of Achievement (3050)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 105	Technical Writing	3
Major Requirements (18 Credits)		
UCC 109	Subcode Official	3
UCC 110	Construction Official	3
UCC 140	Fire Prot Inspector Part I	4
UCC 141	Fire Protection Inspector II	4
UCC 240	Fire Protection Inspector HHS	4
Additional Course Requirements (6 Credits)		
ARC 131	Construction Methods I	3
ARC 132	Construction Methods II	3
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local fire protection codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Fire Protection Code Inspector.

Health Information Technology - AAS (2124)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (23 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
MTH 100	Intro. to College Mathematics	4
BIO 121	Anatomy & Physiology I	4
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (21 Credits)		
HIT 101	Intro Hlt Care&Pub Hlt in U.S.	3
HIT 102	Cust Srv Ethics&Compliance HIT	3
HIT 103	Intr Electronic Health Records	3
HIT 105	Fund WkFlow Proc,Anal&Redesign	3
HIT 106	Intro to Project Management	3
HIT 201	Intro Hlt Info. Mngmt. Systems	3
HIT 226	Health Info. Tech. Internship	3
Additional Course Requirements (16 Credits)		

HSC 109	Medical Terminology	3
CSC 104	Network Fundamentals	3
CSC 137	Intro. to Programming in Java	3
CIS 137	Micro Computer Data Bases	3
CSC 237	Enterprise Java Programming	4
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Function as an entry-level Health Information Technician;
- Comply with principles, legal and professional standards, government regulations, and accrediting agencies which govern health;
- Communicate effectively with any and all providers and users of health information technology.

Mathematics - AS (0604)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
MTH 121	Calc with Analytic Geom I	4
PHY 103	General Physics I	4
PHY 104	General Physics II	4
Society & Human Behavior (6)		
ECO 101 or ECO 102		3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (16 Credits)		
MTH 122	Calc with Analytic Geom II	4
Major Electives		12
Additional Course Requirements (14 Credits)		
ENG 105	Technical Writing	3
MTH 221	Calc with Analytic Geom III	4
MTH 222	Differential Equations	4
CSC 100	Fundamental of Computer Scienc	3
or CSC 137	Intro. to Programming in Java	
Total Credits		**60**

- If you do not place into MTH 121 Calc with Analytic Geom I the prerequisites are MTH 100 Intro. to College Mathematics, MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

- Major Electives are four 3-credit courses which are to be selected in consultation with a faculty advisor in the Division of METCS.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of the fundamental concepts and theories from calculus, probability, statistics, linear algebra and technical writing;
- Utilize various problem-solving and critical-thinking techniques to set up and solve applied problems in science, business, engineering, and technology fields;
- Communicate accurate mathematical terminology and notation in written and/or oral form in order to explain strategies to solve problems as well as to interpret found solutions; and
- Use appropriate technology, such as graphing calculators and computer software, effectively as a tool to solve problems.

Mechanical & Manufacturing Engineering Technology - AAS (2314)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

This program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org./), under the General Criteria and the Program Criteria for Manufacturing Engineering Technology and Similarly Named Programs and Mechanical Engineering Technology and Similarly Named Programs.

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	

Quantitative/Scientific Knowledge, Skills & Reasoning (10)		
MTH 114	Unified Calculus I	3
MTH 213	Unified Calculus II	3
PHY 101	College Physics I	4
Society & Human Behavior (3)		
ECO 101	Principles of Economics I	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Course Requirements (31 Credits)		
ELC 115	Electric Circuits I	3
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
ENR 110	Statics for Technology	3
ENR 112	Dynamics for Technology	3
ENR 205	Advanced Autocad	3
ENR 220	Mechanics of Materials	3
MET 203	Engineering Materials and Proc	3
MET 210 (recommended), MET 211 or MET 215		3
MET 250	Mechanical Engr. Tech. Project	2
PHY 102	College Physics II	4
Additional Course Requirements (8 Credits)		
CSC 106	Roadmap to Computing Engineers	3
ENR 105	Applied Computer Aided Design	2
CHM 106	Chemistry for Engineering Tech	3
Total Credits		**61**

- Approved technical electives should be selected after consultation with an academic advisor.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Graduates of this program will demonstrate:

- Employment in the field of mechanical and manufacturing engineering or related field; and
- Engagement in continuing education, including advanced degrees.

Upon completion of this program, graduates will be able to:

- Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline;
- Design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
- Apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- Conduct standard tests, measurements, and experiments and to analyze and interpret the results;
- Function effectively as a member of a technical team;
- Apply principles of geometric dimensioning and tolerancing;
- Use computer aided drafting and design software;
- Select, set-up, and calibrate measurement tools/instrumentation;
- Prepare laboratory reports and systems documentation associated with development, installation, or maintenance of mechanical components and systems;
- Demonstrate basic familiarity and use of industry codes, specifications, and standards;
- Demonstrate use of basic engineering mechanics; and
- Utilize skills acquired in a capstone experience acquired in the program.

Mechatronics - Certificate of Achievement (3316)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (10 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Quantitative/Scientific Knowledge, Skills & Reasoning (7)		
MTH 114	Unified Calculus I	3
PHY 101	College Physics I	4
Major Requirements (17 Credits)		
ELC 115	Electric Circuits I	3
ENR 103	Engr. Graphics & Intro. to CAD	2
MET 202	Modern Manuf. Systems/Robotics	3
MET 211	Machines and Controls	3
MET 215	Fluid Mechanics	3
MET 221	Programmable Logic Controllers	3
Total Credits		**27**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a mechatronics system, including components like sensors and output devices;
- Identify main components of programmable logic controllers, their functions, and classification;
- Apply principles of engineering graphics to prepare detailed drawings using CAD software; and
- Recognize and explain functions of control elements of a closed-loop system.

Plumbing Code Technology - Certificate of Achievement (3053)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 105	Technical Writing	3
Major Requirements (18 Credits)		
UCC 109	Subcode Official	3
UCC 110	Construction Official	3
UCC 151	Plumbing Inspector ICS	8
UCC 250	Plumbing Inspector HHS	4
Additional Course Requirements (6 Credits)		
ARC 131	Construction Methods I	3
ARC 132	Construction Methods II	3
Total Credits		**30**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Evaluate construction plans in terms of compliance with state and local plumbing codes;
- Determine if construction conforms to approved plans;
- Apply technical and administrative code-related knowledge in code enforcement;
- Effectively use English language skills gained in program to comprehend and evaluate ideas in context of code enforcement, and communicate them both orally and in writing; and
- Take National Certification Examination to become a licensed Plumbing Code Inspector.

Software Development and Programming - Certificate of Achievement (3323)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (7 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
MTH 100	Intro. to College Mathematics	4
Major Requirements (22 Credits)		
CSC 113	Intro Linux/UNIX Operating Sys	4
CSC 137	Intro. to Programming in Java	3
CSC 151	Intro Develop Web Applications	3
CSC 237	Enterprise Java Programming	4
CSC 251	Web Application Development	4
CSC 255	Mobile Application Development	4
Total Credits		**29**

Note: The minimum passing grade for all courses designated CSC and MTH is C. If you earn a grade below C, you need to repeat that course.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a major software-based project;
- Test software systems with specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as theory and principles of computer science and mathematics, to the development and maintenance of complex software development systems;
- Evaluate impact of potential solutions to software engineering problems in a global society, using knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques;
- Create interactive Web applications; and
- Design and develop mobile applications for the Android platform.

Software Development Technology - AAS (2316)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
MTH 100	Intro. to College Mathematics	4
Select one of the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104,		
MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 113, PHY 114		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) course		
Major Requirements (33 Credits)		
CSC 104	Network Fundamentals	3
CSC 137	Intro. to Programming in Java	3
CSC 151	Intro Develop Web Applications	3
CSC 231	Database Design	4
CSC 232	Advanced Database Management	4
CSC 237	Enterprise Java Programming	4
CSC 251	Web Application Development	4
CSC 253	Intro. System & Cloud Admin.	4
CSC 255	Mobile Application Development	4
Additional Course Requirements (7 Credits)		
Select one of the following:		4
CSC 113, CSC 114, CSC 116		
Select one of the following:		3
CSC 250, CSC 260, Approved Technical Course		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Design, develop, and implement a major software-based project;
- Test software systems with specification, performance, maintenance, and quality requirements;
- Apply software engineering theory, principles, tools, and processes, as well as theory and principles of computer science and mathematics, to the development and maintenance of complex software development systems;
- Evaluate impact of potential solutions to software engineering problems in a global society, using knowledge of contemporary issues and emerging software engineering trends, models, tools, and techniques;
- Create interactive Web applications; and
- Design and develop mobile applications for the Android platform.

Technical Studies - AAS (5304)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 122		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 113, PHY 114		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219 SOC 101, SOC 108, SOC 219		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (24 Credits)		
Technical Studies Electives [1]		24
Additional Course Requirements (16 Credits)		
ENR 100	Fund. of Engineering Design	2
ENR 105	Applied Computer Aided Design	2
Technical Courses [2]		12
Total Credits		**60**

[1] 24 Technical Studies elective credits may be earned as block credits for qualified apprenticeship training programs.

[2] 12 additional technical credits taken at Essex County College. Technical credits may be earned from college-level courses in science, technology, and engineering having the following prefixes: ARC, CET, CIS, CSC, ELC, ENR, and MET.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate necessary technical skills to be more productive in chosen profession and career;
- Demonstrate competence in broad array on intellectual and communication skills;
- Compete effectively in a technology-based global economy;
- Develop a broad base of knowledge;
- Think creatively, analytically, and critically;
- Apply basic principles of blueprint reading to prepare detailed working drawings using computer aided design (CAD) skills; and
- Communicate effectively.

Technical Studies: Uniform Construction Code Technology - AAS (5305)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 113, PHY 114		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (33 Credits)		
UCC 109	Subcode Official	3
UCC 110	Construction Official	3
CEE 298	Cooperative Edu. Experience I	2
CEE 299	Cooperative Edu. Experience II	2
Technical Studies Electives [1]		7-16
Code Concentration (7-16)		
Select a concentration from the list below: [2]		7-16
Building Code		
Electrical Code		
Fire Code		
Plumbing Code		
Additional Course Requirements (7 Credits)		
ENR 100	Fund. of Engineering Design	2
ENR 105	Applied Computer Aided Design	2
Technical Elective [3]		3
Total Credits		**60**

[1] The Technical Studies Electives are chosen based on a concentration in one of the technical areas listed below. Courses may be completed for credit at Essex County College or may be transferred in from construction trade programs where a license has been obtained. The Technical Courses may be any additional (non-repeated) course designated ARC, CET, ELC, ENR, MET, or UCC or courses recommended and approved by an METCS Division academic advisor or faculty member.

[2]
- If your concentration is in Building Code (16 credits) you will take 7 credits of Technical Courses.
- If your concentration is in Electrical Code (7 credits) you will take 16 credits of Technical courses.
- If your concentration is in Fire Code (12 credits) you will take 11 credits of Technical Courses.
- If your concentration is in Plumbing Code (12 credits) you will take 11 credits of Technical Courses.

[3] Choose the Technical Elective from the major course requirements indicated on the curriculum guides of the programs listed below or other appropriate programs. Programs and courses must be approved by an METCS Division academic advisor or faculty member.
- Architectural Technology 2301
- Civil Engineering Technology 5309
- Computer-Aided Design Technology 3205
- Computer Information Systems 2002
- Computer Science 2302
- Electrical Engineering Technology 2313
- Engineering 0399
- Mechanical and Manufacturing Engineering Technology 2314

Concentrations

- Building Code

UCC 119 Building Inspector RCS

UCC 121 Building Inspector ICS

UCC 220 Building Inspector HHS

- Electrical Code

UCC 130 Electrical Inspector ICS

UCC 230 Electrical Inspector HHS

- Fire Code

UCC 140 Fire Prot Inspector Part I

UCC 141 Fire Protection Inspector II

UCC 240 Fire Protection Inspector HHS

- Plumbing Code

UCC 151 Plumbing Inspector ICS

UCC 250 Plumbing Inspector HHS

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Review construction plans in terms of compliance with applicable state and local codes;
- Determine whether construction is in conformance with approved plans;
- Apply technical and administrative code-related knowledge in code enforcement; and
- Demonstrate appropriate oral and written communication skills and professional behaviors, which include being able to write technical reports, communicate well with others during site visits/inspections, and effectively work as a member of a team.

Division of Nursing and Health Sciences

Degrees

- Health Science - AS (2114) (p. 118)
- Nursing - AAS (2104) (p. 119)
- Nursing: LPN Articulation Option - AAS (2104) (p. 120)
- Physical Therapist Assistant - AAS (2106) (p. 121)
- Radiography - AAS (2105) (p. 122)
- Vision Care Technology - AAS (2122) (p. 123)

Academic Certificate

- Licensed Practical Nurse - Academic Certificate (3312) (p. 119)

Certificate of Achievement

- Vision Care Technology - Certificate of Achievement (3310) (p. 124)

Health Science - AS (2114)

Division: Nursing and Health Sciences Division

Code	Title	Credits
General Education Requirements (36 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy and Physiology II	4
Select one of the following:		4
MTH 100, MTH 101, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (24 Credits)		
Select a maximum of 24 credits from any accredited or state-licensed post-secondary health science training program [1]		24
Additional Course Requirements		
Select additional credits from the following to total 24 credits: [2]		
ENG 109, HSC 101, HSC 102, HSC 109, BIO 103, BIO 104, BIO 211, BIO 241, BIO 251, CHM 101, CHM 103, CHM 104, SOC 201, SOC 207		
Total Credits		**60**

[1] College-level credit will be transferred as a block; technical school or other certificate credits will be weighted and then awarded as a block. Credits may be awarded from professional programs in fields such as: Dental Assisting, Dental Hygiene, Dietary Management, LPN, Massage Therapy, Military Medic, Nursing, Physical Therapist Assistant, Radiography, Respiratory Care, Ultrasound,Vision Care Technology and/or any accredited or state-licensed post-high school health science training program, which is licensed or certified by examination.

[2] If the Major Course Requirement credits awarded from a professional education program total less than 24 credits, the balance may be chosen from the list, which are all 3- or 4-credit courses. Keep in mind that the number of credits of Additional Course Requirements plus the number of credits awarded toward Major Course Requirement credits must total 24 credits.

- *ECC students who completed college-level course work in Dental Assisting, Dental Hygiene, Dietary Manager, Massage Therapy, LPN, Nursing, Physical Therapist Assistant, Radiography, Respiratory Care, and Vision Care Technology programs but who did not complete a specific degree many apply their professional credits toward the Health Science degree.*

- *Students may not earn two degrees in the same discipline.*
- *The minimum passing grade for all program-related courses is "C". If you earn a grade below "C", you need to repeat that course.*
- *Please meet with a Division of Health Sciences academic advisor (faculty member) to receive evaluation of professional education program credits. (Up to 24 credits may be awarded toward the Major Course Requirements.)*

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Advance to a bachelor's degree program specializing in health education, health care informatics, or health care administration;
- Secure job promotions within health-related fields for which no specific degree exists; and
- Prepare for employment in fields such as health services administration, health computing, or health education.

Licensed Practical Nurse - Academic Certificate (3312)

Division: Nursing and Health Sciences Division

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Code	Title	Credits
General Education Requirements (14 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
BIO 121	Anatomy & Physiology I [1]	4
BIO 122	Anatomy and Physiology II [1]	4
Society & Human Behavior (3)		
PSY 101	General Psychology I	3
Major Requirements (35 Credits)		
LPN 101	Fund. of Practical Nursing	8
LPN 102	Adult Health I	8
LPN 103	Adult Hlt. II/Mental Health	9
LPN 104	MaternalChildHlt/Pediatric Hlt	8
LPN 105	RoleTransition/NCLEX-PN Review	2
Total Credits		**49**

[1] Both BIO 121 Anatomy & Physiology I and BIO 122 Anatomy and Physiology II must be taken within 5 years of admission to the LPN program.

- *The minimum passing grade for all courses is "C." If you earn a grade below "C", you need to repeat that course.*
- *Students enrolled in the LPN program will be required to submit to criminal background checks, health clearance, and CPR certification in connection with their clinical placement at certain health care organizations. All expenses for criminal background checks, health clearance, and CPR certification are the responsibility of the student.*
- *Consult the LPN Program Handbook for specific information on licensure requirements.*
- *This LPN program is accredited by the*

New Jersey Board of Nursing
124 Halsey Street, 6th Floor
Newark, NJ, 07102, (973) 504-6430
www.njconsumeraffairs.gov/medical/nursing.htm *(*http://www.njconsumeraffairs.gov/medical/nursing.htm*)*

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate cognitive knowledge (including basic nursing care theory and practice, patient assessment techniques, and comprehensive treatment plan/intervention elements) required of entry-level LPNs;
- Demonstrate psychomotor skills (including medication administration, physical assessments, and assisting with teaching/instruction in care of older adults) required of entry-level LPNs; and
- Demonstrate communication skills and ethical/professional behaviors (including progress reports and written documentation of client care) expected of entry-level LPNs.

Nursing - AAS (2104)

Division: Nursing and Health Sciences Division

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Code	Title	Credits
General Education Requirements (23 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		

BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy and Physiology II	4
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (43 Credits)		
CHM 101	College Chemistry I	4
or CHM 103	General Chemistry I	
BIO 211	Microbiology	4
BIO 251	Pharmacology for Health Prof	3
NRS 104	Fundamentals of Nursing	6
NRS 114	Common Health Alterations	8
NRS 206	Complex Health Alterations	8
NRS 216	Management of Care	8
NRS 217	Prof.IssuesLeadershipSynthesis	2
Total Credits		**66**

- The minimum passing grade for all courses designated BIO, CHM, PSY or NRS is "C." If you earn a grade below "C", you need to repeat that course.
- Course substitutions are not acceptable in general education requirements.
- Students enrolled in the Nursing program will be required to submit to criminal background checks, drug screen, health clearance, and CPR certification in connection with their clinical placement at certain health care organizations. All expenses for criminal background checks, health clearance, and CPR certification are the responsibility of the student.
- Consult the NJ Board of Nursing for specific information on licensure requirements at www.njconsumeraffairs.gov/medical/nursing.htm (http://www.njconsumeraffairs.gov/medical/nursing.htm).
- Prerequisite Courses

  BIO 121 Anatomy & Physiology I

  CHM 101 College Chemistry I or CHM 103 General Chemistry I

  ENG 101 College Composition I

  PSY 101 General Psychology I

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Provide safe culturally sensitive care to patients across the lifespan;
- Practice using legal, ethical, and regulatory standards of the nursing profession;
- Collaborate with the patient and the multidisciplinary health care team to meet the needs of patients in a variety of settings;
- Manage care to promote quality positive outcomes for patients and their families;
- Demonstrate clinical judgment in assisting patient and families to promote optimal health by utilizing current evidence and available resources; and
- Utilize information technology to collect data, prevent errors, communicate effectively and maintain safe quality care.

Nursing: LPN Articulation Option - AAS (2104)

Division: Nursing and Health Sciences Division

Nursing programs are accredited by the New Jersey Board of Nursing, https://njccn.org/nj-board-of-nursing/ and the R.N. degree program is also accredited by the Accreditation Commission in Nursing (ACEN), https://www.acenursing.org (https://www.acenursing.org/).

Code	Title	Credits
General Education Requirements (23 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy and Physiology II	4
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (43 Credits)		
CHM 101	College Chemistry I	4
or CHM 103	General Chemistry I	
BIO 211	Microbiology	4
BIO 251	Pharmacology for Health Prof	3
NRS 106	LPN MOBILITY I [1]	2
NRS 111	LPN MOBILITY II [1]	6
NRS 206	Complex Health Alterations	8
NRS 216	Management of Care	8
NRS 217	Prof.IssuesLeadershipSynthesis	2

Upon successful completion of NRS 106 LPN MOBILITY I and NRS 111 LPN MOBILITY II, the LPN will be awarded NRS 999 (6 credits) for their LPN education toward the Nursing degree.	6
Total Credits	**66**

- Upon successful completion of LPN Mobility [NRS 106 LPN MOBILITY I and NRS 111 LPN MOBILITY II], the LPN graduate will be awarded 6 credits by the Registrar [implemented by a Nursing 999 designation in the student's official record] and will be applied toward advanced standing if the student continues into the Nursing AAS (2104) degree program.
- The minimum passing grade for all courses designated BIO, CHM, MTH or NRS is "C." If you earn a grade below "C", you need to repeat that course.
- Students accepted into the Nursing: LPN Articulation Option program begin with NRS 106 LPN MOBILITY I, which begins in January.
- Students enrolled in the Nursing program will be required to submit to criminal background checks, drug screen, health clearance, and CPR certification in connection with their clinical placement at certain health care organizations. All expenses for criminal background checks, health clearance, and CPR certification are the responsibility of the student.
- Consult the NJ Board of Nursing for specific information on licensure requirements at www.njconsumeraffairs.gov/medical/nursing.htm (http://www.njconsumeraffairs.gov/medical/nursing.htm).
- Prerequisite Courses

  BIO 121 Anatomy & Physiology I

  BIO 122 Anatomy and Physiology II

  CHM 101 College Chemistry I or CHM 103 General Chemistry I

  ENG 101 College Composition I

  ENG 102 College Composition II

  PSY 101 General Psychology I

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Provide safe culturally sensitive care to patients across the lifespan;
- Practice using legal, ethical, and regulatory standards of the nursing profession;
- Collaborate with the patient and the multidisciplinary health care team to meet the needs of patients in a variety of settings;
- Manage care to promote quality positive outcomes for patients and their families;
- Demonstrate clinical judgment in assisting patient and families to promote optimal health by utilizing current evidence and available resources; and
- Utilize information technology to collect data, prevent errors, communicate effectively and maintain safe quality care.

Physical Therapist Assistant - AAS (2106)

Division: Nursing and Health Sciences Division

Physical Therapist Assistant (PTA) program (2106) is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), https://www.capteonline.org (https://www.capteonline.org/).

Code	Title	Credits
General Education Requirements (20 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
BIO 121	Anatomy & Physiology I	4
BIO 122	Anatomy and Physiology II	4
Society & Human Behavior (3)		
PSY 101	General Psychology I	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (48 Credits)		
BIO 222	Kinesiology	4
HSC 109	Medical Terminology	3
PTA 101	Fundamentals of PTA	5
PTA 102	Principles of PTA	5
PTA 103	PTA Practicum I	4
PTA 106	Ther.Inter./Child Dev.&Geronto	3
PTA 201	Principles of PTA II	4
PTA 202	Principles of PTA III	4
PTA 203	PTA Practicum II	4
PTA 205	PTA Practicum III	6
PTA 206	Prof. Issues Phys.Thera.Assist	1
PTA 209	Therapeutic Exercise	2
PSY 209	Abnormal Psychology	3
Total Credits		**68**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics).

Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Work under the supervision of a physical therapist in an ethical, lawful, safe, and effective manner;
- Implement a comprehensive treatment plan developed by a physical therapist;
- Communicate regularly with the supervising physical therapist about the patient's progress and the need for adjustments to be made by the physical therapist in treatment procedures in accordance with changes in patient status;
- Perform appropriate measurement and assessment techniques within the knowledge and limits of practice to assist the supervising physical therapists in monitoring and modifying the plan of care;
- Interact with patients and families in a manner that provides the desired psychosocial support including the recognition of cultural and socioeconomic differences;
- Participate in the teaching of other health care providers, patients and families;
- Document relevant aspects of patient treatment;
- Participate in discharge planning and follow up care;
- Demonstrate effective written, oral, and nonverbal communication with patients and their families, colleagues, health care providers, and the public;
- Identify levels of authority and responsibility; planning, time management, supervisory process, performance evaluations, policies and procedures; fiscal considerations for physical therapy providers and consumers; and, continuous quality improvement;
- Read and interpret professional literature;
- Accept responsibility for professional development; and
- Modify an intervention only in accordance with changes in patient/client status and within the scope of the plan of care that has been established by the physical therapist.

Radiography - AAS (2105)

Division: Nursing and Health Sciences Division

Radiography program (2105) is accredited by the Joint Review Committee on Education in Radiologic Technology (JCERT), https://www.jrcert.org (https://www.jrcert.org/).

Code	Title	Credits
General Education Requirements (23 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one of the following:		4
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
BIO 121	Anatomy & Physiology I [1]	4
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology	3
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) course		
Major Requirements (47 Credits)		
BIO 122	Anatomy and Physiology II [1]	4
HSC 109	Medical Terminology	3
RTC 100	Radiologic Technology I	2
RTC 101	Radiologic Positioning Prin I	4
RTC 103	Patient Care and Ethics	2
RTC 104	Radiation Protection	2
RTC 105	Radiologic Technology II	2
RTC 106	Radiologic Positioning Prin II	4
RTC 107	Contrast Media	2
RTC 108	Clinical Radiogrphy I	1
RTC 109	Radiologic Pos Principles III	2
RTC 110	Radiologic ADV Posit Prin IV	1
RTC 111	Clinical Radiography II	1
RTC 112	Clinical Radiography III	1
RTC 200	Medical Surgical Disease	2
RTC 201	Radiation Biology	2
RTC 202	Clinical Radiography IV	1
RTC 203	Special Procedures	3
RTC 204	Pediatric/GeriatricRadiography	1
RTC 205	Clinical Radiography V	2
RTC 206	Clinical Radiography VI	2
RTC 207	Clinical Radiography VII	1
RTC 210	Radiography Seminar	2
Total Credits		**70**

[1] BIO 121 Anatomy & Physiology I and BIO 122 Anatomy and Physiology II must be completed at the same institution within 5 years of application to the Radiography program at Essex.

- Minimum passing grade in BIO, HSC, MTH and RTC courses is a “C”.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Students will be able to demonstrate appropriate equipment manipulation;
- Students will be able to demonstrate clinical competency on progressively more difficult patients;

- Students will be able to identify the dangers of ionizing radiation to the patient and appreciate ALARA principles;
- Students will be able to interpret and respond to patient's non-verbal and verbal needs;
- Students will be able to demonstrate team interaction skills;
- Students will be able to perform successful image evaluation;
- Students will be able to perform appropriately in role play scenarios designed to demonstrate effective patient care skills and patient interactions;
- Students will be able to learn and apply appropriate patient care;
- Students will be able to demonstrate professional behavior; and
- Student will be able to demonstrate ethical behavior becoming of an entry level radiography technologist.

Vision Care Technology - AAS (2122)

Division: Nursing and Health Sciences Division

Vision Care Technology program (2122) is accredited by the Commission on Opticianry Accreditation (COA), https://coaccreditation.com (https://coaccreditation.com/).

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
Select one of the following:		4
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 122, MTH 127		
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Technological Competency (3)		
CIS 107	Computer Literacy	3
or CIS 131	Micro Computers in Business	
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) course		
Major Requirements (42 Credits)		
BIO 125	Anatomy and Phys of The Eye	3
OPH 123	Ophthalmic Laboratory I	4
OPH 124	Ophthalmic Laboratory II	4
OPH 126	Ophthalmic Materials I	3
OPH 127	Ophthalmic Materials II	3
OPH 201	Ophthalmic Dispensing I	5
OPH 202	Ophthalmic Dispensing II	5
OPH 203	Contact Lenses I	3
OPH 204	Contact Lenses II	3
OPH 210	Principles of Refraction I	3
OPH 273	Supervised Clin Instruction	3
PHY 111	Theory of Optics	3
Additional Course Requirements (7 Credits)		
ACC 101	Prin of Accounting I Financial	4
BUS 101	Business Organization & Mgmt	3
Total Credits		**71**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Develop lensometry skills necessary for laying out lenses for edging, inspecting jobs according to standards, and neutralizing a pair of glasses;
- Discuss prescription eyewear both verbally and written with patient / customer and eyecare professionals;
- Analyzing and interpreting prescriptions;
- Identify human eye structure including its function and pathology;
- Assist patient / customer in selection of proper frames and lenses;
- Determine patient / customer physiognomic measurements (facial and eye);
- Reading / neutralizing prescriptions of existing eyeglasses both single vision and multifocal;
- Verifying eyeglasses to the prescription as to being either dispensable or not dispensable according to New Jersey standards;
- Adapt and fit prescription eyeglasses to patient / customer;
- Demonstrate proficiency in eyeglass lens edging equipment and applying rules and regulations for safety;
- Ability to interpret contact lens prescriptions and the differences from spectacles prescriptions and how they relate to the anatomy of the eye;
- Understanding of how eyeglass prescriptions relate to the anatomy and physiology of the patient / customer's eye(s);
- Understanding frame and lens materials / designs and how they relate to patient / customer's needs considering the pros and cons of their decisions;
- Understanding theory of light and optics as it relates to lens designs and materials and focusing power;
- Understanding the standards and regulations both nationally and New Jersey and how they need to be applied;
- Learning the role / responsibility / professional ethics of an Optician; and
- Discuss the use of the phoropter to determine prescriptions subjectively.

Vision Care Technology - Certificate of Achievement (3310)

Division: Nursing and Health Sciences Division

Code	Title	Credits
Major Requirements (33 Credits)		
BIO 125	Anatomy and Phys of The Eye	3
OPH 123	Ophthalmic Laboratory I	4
OPH 124	Ophthalmic Laboratory II	4
OPH 126	Ophthalmic Materials I	3
OPH 127	Ophthalmic Materials II	3
OPH 201	Ophthalmic Dispensing I	5
OPH 202	Ophthalmic Dispensing II	5
OPH 203	Contact Lenses I	3
PHY 111	Theory of Optics	3
Total Credits		**33**

- A New Jersey Apprentice Dispensing Permit should be obtained so that the Certificate of Achievement will qualify the student for taking the State licensing examination.
- The minimum passing grade for all courses is "C." If you earn a grade below "C," you need to repeat that course.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Develop lensometry skills necessary for laying out lenses for edging, inspecting jobs according to standards, and neutralizing a pair of glasses;
- Discuss prescription eyewear both verbally and written with patient / customer and eyecare professionals;
- Analyzing and interpreting prescriptions;
- Identify human eye structure including its function and pathology;
- Assist patient / customer in selection of proper frames and lenses;
- Determine patient / customer physiognomic measurements (facial and eye);
- Reading / neutralizing prescriptions of existing eyeglasses both single vision and multifocal;
- Verifying eyeglasses to the prescription as to being either dispensable or not dispensable according to New Jersey standards;
- Adapt and fit prescription eyeglasses to patient / customer;
- Demonstrate proficiency in eyeglass lens edging equipment and applying rules and regulations for safety;
- Ability to interpret contact lens prescriptions and the differences from spectacles prescriptions and how they relate to the anatomy of the eye;
- Understanding of how eyeglass prescriptions relate to the anatomy and physiology of the patient / customer's eye(s);
- Understanding frame and lens materials / designs and how they relate to patient / customer's needs considering the pros and cons of their decisions;
- Understanding theory of light and optics as it relates to lens designs and materials and focusing power;
- Understanding the standards and regulations both nationally and New Jersey and how they need to be applied;
- Learning the role / responsibility / professional ethics of an Optician; and
- Discuss the use of the phoropter to determine prescriptions subjectively.

Division of Social Sciences

Division: Social Sciences Division

Degrees

- Criminal Justice - AS (0898) (p. 125)
- Education - AA (0206) (p. 126)
- Human and Social Services - AAS (2202) (p. 126)
- Paralegal Studies - AS (2015) (p. 128)
- Physical Education - AS (0899) (p. 129)
- Social Sciences - AS (0710) (p. 130)

Academic Certificate

- Massage Therapy - Academic Certificate (6013) (p. 128)

Certificates of Achievement

- Autism Spectrum Disorders - Certificate of Achievement (3058) (p. 124)
- Child Development Associate - Certificate of Achievement (0204) (p. 125)
- Human and Social Services - Certificate of Achievement (3057) (p. 127)
- Paralegal - Certificate of Achievement (3208) (p. 128)

Autism Spectrum Disorders - Certificate of Achievement (3058)

Division: Social Sciences Division

Code	Title	Credits
Major Requirements (15 Credits)		
ECE 103	Early Care & Edu. Field Exper.	3
EDU 203	Children with Special Needs	3
EDU 240	Foundations of Autism Spectrum	3
EDU 241	Applied Behavioral Analysis	3
PSY 219	Child Psychology and Develop.	3
Total Credits		**15**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of an Autism Spectrum Disorders (ASD) program, graduates will be able to:

- Understand ASD Characteristics: Identify and explain the core characteristics of Autism Spectrum Disorders, including communication, behavioral, and social challenges.
- Apply Evidence-Based Strategies: Implement evidence-based strategies and interventions to support individuals with ASD in educational and therapeutic settings.
- Develop Individualized Support Plans: Create and adapt individualized support plans to address the unique needs of children and individuals with ASD, focusing on their strengths and developmental goals.
- Foster Inclusive Environments: Promote inclusive and supportive learning and social environments that enhance the participation and success of individuals with ASD.
- Collaborate with Families and Professionals: Work effectively with families, educators, and other professionals to provide holistic support for individuals with ASD.
- Assess and Monitor Progress: Evaluate the developmental progress of individuals with ASD and adjust interventions accordingly to optimize learning outcomes.
- Advocate for Individuals with ASD: Advocate for appropriate resources, accommodations, and services to ensure individuals with ASD receive the support they need to succeed.
- Understand Legal and Ethical Guidelines: Apply knowledge of the legal, ethical, and policy considerations related to working with individuals with ASD, ensuring compliance with educational and healthcare standards.

Child Development Associate - Certificate of Achievement (0204)

Division: Social Sciences Division

Code	Title	Credits
Major Requirements (11 Credits)		
ECE 101	Early Care and Education I	4
ECE 102	Early Care and Education II	4
ECE 103	Early Care & Edu. Field Exper.	3
Total Credits		**11**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon Completion of this program, graduates will be able to:

- Demonstrate understanding of principles of instruction in Early Childhood settings;
- Prepare and complete professional resources files;
- Demonstrate understanding of professional standards and practice skills in professional settings;
- File application and successfully sit for National Childhood Development Certification (CDA) exam; and
- Secure employment in Child Care industry.

Criminal Justice - AS (0898)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101- BIO 102, BIO 103- BIO 104, BIO 116, BIO 121- BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101-CHM 102, CHM 103-CHM 104, GEO 101-GEO 102,		
PHY 101-PHY 102, PHY 103-PHY 104, PHY 105, PHY 113-PHY 114,		
MTH 100, MTH 101, MTH 103, MTH 113, MTH 118, MTH 119, MTH 120, MTH 121, MTH 127		
(Recommended BIO 101 & BIO 102 and MTH 101 or MTH 103)		
Society & Human Behavior (6)		
POL 104	American Government	3
Select one of the following:		3
ANT 101, PSY 101, SOC 101, SOC 108		
Humanistic Perspective (6)		
Select any 200-level English Literature Course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105		
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (18 Credits)		
CJI 101	Intro to Criminal Justice	3
CJI 121	Introduction to Corrections	3
CJI 136	Criminology	3
CJI 202	Crime and Delinquency	3
CJI 205	Introduction to Criminal Law	3
Select one of the following courses:		3
CJI 102, CJI 103, CJI 111, CJI 112, CJI 120, CJI 123, CJI 203, CJI 204, CJI 210, CJI 250 (only Do NOT take 211)		
Additional Course Requirements (9 Credits)		
SPN 101 or FRN 101		3
Select any additional History (HST) course		3

Social Science elective: 3-credit Social Science course from the following disciplines, ANT, CJI, EDU, PLS, POL, PSY or SOC	3
Total Credits	**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Describe functions of various components of the criminal and juvenile justice system (i.e., law enforcement, courts, and corrections) and explain interrelationship of these components;
- Demonstrate basic knowledge of criminal law and rights of individual citizens;
- Describe role and ethical responsibilities of criminal justice professionals in the community and organization and administration of various entities in the criminal justice system;
- Analyze nature of crime and criminal behavior (e.g., theories, policies, and research);
- Explain social, political, economic, and cultural factors within society influencing development of criminological theory, corrections, laws, and criminal justice practices and application to criminal behaviors and sanctions;
- Demonstrate critical thinking skills in evaluating complexity of criminal justice issues; and
- Communicate effectively with accurate criminal justice terminology in written and/or oral form, with demonstrated proficiency in the use of technology.

Education - AA (0206)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101-BIO 102, BIO 103-BIO 104, BIO 116, BIO 121-BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101-CHM 102, CHM 103- CHM 104, GEO 101- GEO 102,		
PHY 101-PHY 102, PHY 103-PHY 104, PHY 105, PHY 113-PHY 114,		
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 102, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global and Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
EDU 101	Introduction to Education	3
EDU 233	Education Seminar I	3
PSY 219	Child Psychology and Develop.	3
Select any two Education (EDU) courses		6
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of basic principles of educational theory and practice;
- Exhibit broad-based knowledge necessary to prepare for teacher education programs;
- Demonstrate understanding and appreciation of basic principles of Humanities, Social Sciences, Science, and Mathematics;
- Demonstrate knowledge of and appreciation of various learning styles within diverse environments; and
- Express themselves in appropriate written and oral forms.

Human and Social Services - AAS (2202)

Division: Social Sciences Division

The A.A.S. degree in Human and Social Services is accredited by the **Board of the Council for Standards in Human Service Education (CSHSE)**, https://www.cshse.org/.

Code	Title	Credits
General Education Requirements (21 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Society & Human Behavior (9)		
PSY 101	General Psychology I	3
SOC 108	Social Problems	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 102, PSY 219, SOC 101, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) course		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Major Requirements (30 Credits)		
PSY 209	Abnormal Psychology	3
or PSY 225	Child&Adolescent Abnormal Psy.	
PSY 230	Life-Span Developmental Psy.	3
PSY 251	Counsel & Treat of Addictions	3
SOC 111	Helper Theory	3
SOC 121	Soc Svcs Policies & Procs I	3
SOC 228	Hum & Soc Svcs Fieldwork I	3
SOC 229	Hum & Soc Svcs Internship I	3
SOC 230	Hum & Soc Svcs Fieldwork II	3
SOC 231	Hum & Soc Svcs Internship II	3
SOC 250	Alc & Drug Abuse in Amer. Soc.	3
Additional Course Requirements (9 Credits)		
Select any three of the following courses:		9
CJI 211, PSY 210, PSY 232, PSY 250 (recommended), REL 105, SOC 113, SOC 153, SOC 201, SOC 207, SOC 252 *		
Total Credits		**60**

* PSY 250 is strongly recommended as the third course to fulfill the Program's Social Work Concentration.

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Students will be able to utilize their strong and diverse knowledge base and clinical/practical experience in the delivery of human services to clients
- Students will be able to explain the historical and philosophical foundation of human services
- Students will be able to utilize theoretical framework and empirical evidence to understand development and the interactions among human systems- individuals, groups, families, organizations, communities and societies
- Students will be able to analyze and assess the needs of clients or client groups
- Students will be able conduct various types of mental health assessments for screening clients/patients
- Students will be able to utilize the knowledge of organizational and social policies, human systems, the conditions that influence human functioning, evidence-based practices, and client-specific data to advocate on behalf of clients

Program Outcomes

https://www.essex.edu/wp-content/uploads/2024/10/Human-and-Social-Services-AAS-Student-Outcomes.pdf

Human and Social Services - Certificate of Achievement (3057)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (6 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Society & Human Behavior (3)		
PSY 101	General Psychology I	3
Major Requirements (21 Credits)		
ENG 109	Effective Speech	3
PSY 250	Theory/Prac./Couns./Psychothe.	3
SOC 101	Introduction to Sociology	3
SOC 111	Helper Theory	3
SOC 121	Soc Svcs Policies & Procs I	3
SOC 228	Hum & Soc Svcs Fieldwork I	3
SOC 229	Hum & Soc Svcs Internship I	3
Total Credits		**27**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Massage Therapy - Academic Certificate (6013)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (7 Credits)		
Written & Oral Communication (3)		
ENG 101	College Composition I	3
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
BIO 121	Anatomy & Physiology I	4
Major Requirements (32 Credits)		
BIO 122	Anatomy and Physiology II	4
HSC 109	Medical Terminology	3
HSC 151	Massage Theory & Prac. I	4
HSC 152	Massage Theory & Prac. II	3
HSC 153	Massage Theory & Prac. III	4
HSC 155	Prof. Deve. in Massage Ther. I	2
HSC 156	Prof. Dev. Mass. Therapy II	3
HSC 160	Massage Ther. Practicum I	2
HSC 161	Massage Ther. Practicum II	3
HSC 165	Self-Care for the Massage Ther	1
BUS 101	Business Organization & Mgmt	3
Total Credits		**39**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon Completion of this program, graduates will be able to:

- Take National Certification Examination to become certified as a professional massage therapist;
- Be licensed by State of New Jersey as a Massage Therapist;
- Demonstrate Shiatsu and Swedish massage;
- Work with general population as well as special populations like athletes, pregnant clients, and geriatric clients to build and maintain health;
- Demonstrate massage techniques used in medical settings to assist in the healing process;
- Develop a vision of the ideal business plan and identify steps to achieve it; and
- Prepare client records as well as financial records for success in business practice.

Paralegal - Certificate of Achievement (3208)

Division: Social Sciences Division

Code	Title	Credits
Major Requirements (21 Credits)		
PLS 101	Intro. to Law for Paralegals	3
PLS 102	Legal Research and Writing	3
PLS 105	Torts	3
PLS 107	Contracts	3
PLS 202	Adv. Legal Research & Writing	3
PLS 205	Administrative Law	3
PLS 206	Litigation Procedures	3
Total Credits		**21**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ACC 102 Prin Accounting II Managerial, HST 131 Latin American History I, MTH 221 Calc with Analytic Geom III). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Explain the role of a paralegal in today's legal system;
- Demonstrate knowledge of American legal system, fundamental legal principles, and the litigation process;
- Demonstrate knowledge of principles of legal ethics and of the Model Code of Ethics and Professional Responsibility and Guidelines for Enforcement of the National Federation of Paralegal Associations, Inc.;
- Proficiently access, locate, and research the law by both traditional and electronic methods;
- Demonstrate problem-solving and critical, analytical thinking skills within context of evaluating legal issues; and
- Communicate effectively with accurate legal terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Paralegal Studies - AS (2015)

Division: Social Sciences Division

The AS degree in Paralegal Studies is approved by the **American Bar Association,** https://www.americanbar.org (https://www.americanbar.org/).

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101-BIO 102, BIO 103-BIO 104, BIO 116, BIO 121-BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101-CHM 102, CHM 103-CHM 104, GEO 101-GEO 102,		
PHY 101-PHY 102, PHY 103-PHY 104, PHY 105, PHY 113-PHY 114,		

MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
POL 104	American Government	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (24 Credits)		
PLS 101	Intro. to Law for Paralegals	3
PLS 102	Legal Research and Writing	3
PLS 105	Torts	3
PLS 107	Contracts	3
PLS 202	Adv. Legal Research & Writing	3
PLS 204	Bus. Org. & Gov't Regulation	3
PLS 205	Administrative Law	3
PLS 206	Litigation Procedures	3
Additional Course Requirements (6 Credits)		
Select two of the following:		6
PLS 203, PLS 210, PLS 220, PLS 225		
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon completion of this program, graduates will be able to:

- Explain role of a paralegal in today's legal system;
- Demonstrate knowledge of American legal system, fundamental legal principles, and the litigation process;
- Demonstrate knowledge of principles of legal ethics and of the Model Code of Ethics and Professional Responsibility and Guidelines for Enforcement of the National Federation of Paralegal Associations, Inc.;
- Proficiently access, locate, and research the law by both traditional and electronic methods;
- Demonstrate problem-solving and critical, analytical thinking skills within context of evaluating legal issues; and
- Communicate effectively with accurate legal terminology in written and/or oral form, with demonstrated proficiency in use of technology.

Physical Education - AS (0899)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101-BIO 102, BIO 103-BIO 104, BIO 116, BIO 121-BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101-CHM 102, CHM 103-CHM 104, GEO 101-GEO 102,		
PHY 101-PHY 102, PHY 103-PHY 104, PHY 105, PHY 113-PHY 114,		
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
HLT 101	Healthful Living	3
PHE 101	Introduction to Physical Ed	2
PHE 115	First Aid and Safety	2
PHE 119	Concepts in Physical Education	2
Select one of the following:		2
PHE 262, PHE 263, PHE 266		
Select four PHE activity courses (each one credit)		4
Additional Course Requirements (12 Credits)		
BUS 101	Business Organization & Mgmt	3
Select any additional History (HST) course		3
Select any English Literature course		3
Select one Social Science course from those designated as ANT, CJI, EDU, POL, PSY or SOC		3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon Completion of this program, graduates will be able to:

- Demonstrate competency in varied physical skills, and techniques and mechanics of activity;
- Receive First Aid Certification;
- Practice preventative measures and first aid in event of accidents or illness;
- Demonstrate mastery of concepts related to health and physical fitness;
- Demonstrate knowledge of fundamentals and techniques of specific sports; and
- Qualify for employment opportunities.

Social Sciences - AS (0710)

Division: Social Sciences Division

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either one Science sequence & one MTH course or two MTH courses & one Science course:		12
BIO 101-BIO 102, BIO 103-BIO 104, BIO 116, BIO 121-BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101-CHM 102, CHM 103-CHM 104, GEO 101-GEO 102,		
PHY 101-PHY 102, PHY 103-PHY 104, PHY 105, PHY 113-PHY 114,		
MTH 100, MTH 101, MTH 103, MTH 113, MTH 119, MTH 120, MTH 121, MTH 122, MTH 127		
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
Select any five Social Science courses from those designated as ANT, CJI, EDU, POL, PSY or SOC		15
Additional Course Requirements (12 Credits)		
Select any additional History (HST) course		3
Select any two 200 level Social Science courses from those designated as ANT, CJI, EDU, POL, PSY or SOC		6
Free Elective		3
Total Credits		**60**

Notes:

1. For an explanation of why General Education courses are included in this Program, please refer to the Section on General Education for an explanation of its Purpose and Requirements.
2. This plan assumes the student is eligible to enroll in College Level Courses (designated as 100 +, e.g., ENG 101 College Composition I, HST 101 World Civilization I, MTH 100 Intro. to College Mathematics). Placement results will determine College Level Readiness in English and Mathematics.

Upon Completion of this program, graduates will be able to:

- Demonstrate knowledge of diverse cultures and social structures;
- Demonstrate knowledge of psycho-social factors influencing human behavior;
- Recognize social and political trends within societies;
- Demonstrate in-depth knowledge of formal research on varied Social Science topics;
- Demonstrate knowledge of ways of thinking and of analysis associated with Social Sciences;
- Demonstrate knowledge of skills and attitudes of professional practice in Social Sciences occupations;
- Demonstrate competency in use of technology to gather and interpret Social Science data; and
- Advance to a Bachelor's in disciples like Psychology, Sociology, Anthropology, Political Science, Social Work, Pre-Law, Urban Studies, and Gerontology.

DISTANCE EDUCATION

Distance Education



Distance education is a convenient and flexible way to take courses for college credit and non-credit, equivalent to traditional in-person courses. Students can take classes toward earning a degree, certificate or to explore personal interests. We offer distance education classes in online and hybrid formats which are described below. Registration follows the same procedures and deadlines as traditional in-person courses.

Distance Education students are expected to be active learners, proficient in reading, writing, time management and internet navigation/computer technology skills. Competence in Microsoft Word is assumed as well. All relevant course information is contained in the Instructor's Syllabus, including in some cases, that proctored tests/assignments will be required.

All distance learning is facilitated by a Learning Management System, which is a centralized training environment used to support the College's remote course offerings by acting as the hub for the College's online educational environment. "**Moodle"** is the "Learning Management System" currently used by Essex.

Online Instruction



Online instruction is a form of flexible learning, using the internet & computer technology resources, whereby students can take classes from the convenience of their home, office, or any off-campus location. An online course can be offered either according to a fixed schedule (synchronous) or with no time restrictions (asynchronous). Online learning does not replace traditional education, but instead, supports experienced technology learners who want access to courses that are specifically designed for students interested in this form of education or who may have difficulties attending traditional in-person learning.



Online learning is an excellent way to obtain credits towards an associate's degree as well as earning transfer credits towards a bachelor's degree. At Essex County College, online education provides our students with the most flexible educational alternatives for progress toward degree and certificate completion or to take classes for personal development. Current fully online associate degree and certificate offerings are listed below:

Business:

- Accounting - AS (2001) (p. 88)
- Business Administration - AS (2005) (p. 89)
- Business Career Development - Academic Certificate (3001) (p. 90)

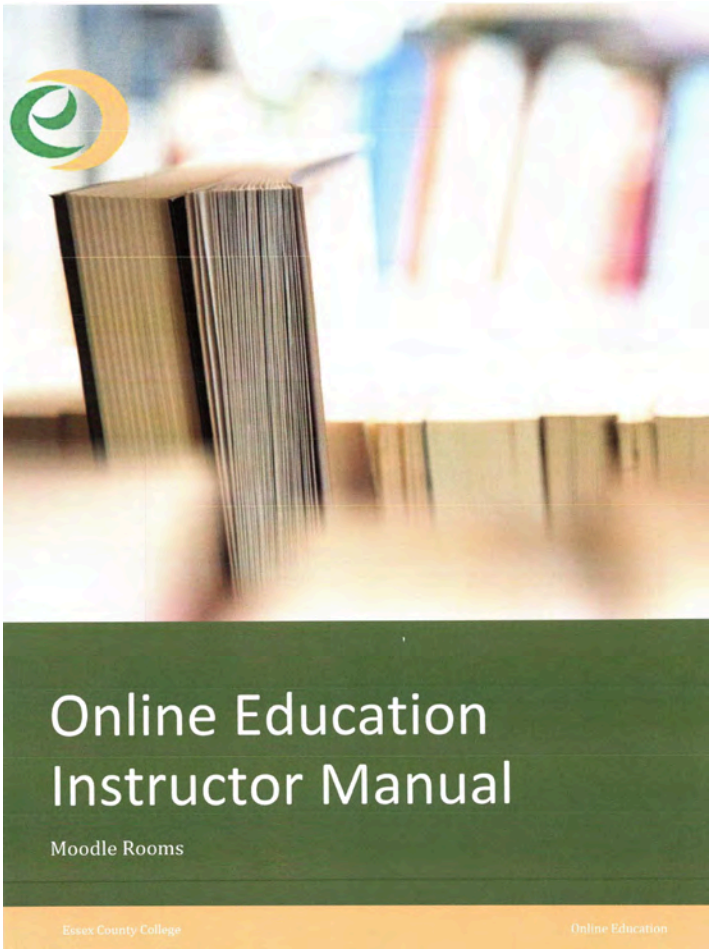
Humanities and Bilingual Studies:

- Liberal Arts: General - AA (0199) (p. 93)
- Liberal Arts: English Option - AA (019E) (p. 95)
- Liberal Arts: History Option - AA (019H) (p. 96)
- Liberal Arts: World Language Option - AA (019L) (p. 98)
- English - Academic Certificate (3073) (p. 100)
- Entertainment Production - Academic Certificate (3075) (p. 100)
- History - Academic Certificate (3074) (p. 101)
- Liberal Arts: General - Academic Certificate (0191) (p. 101)

Social Sciences:

- Education - AA (0206) (p. 126)
- Social Sciences - AS (0710) (p. 130)

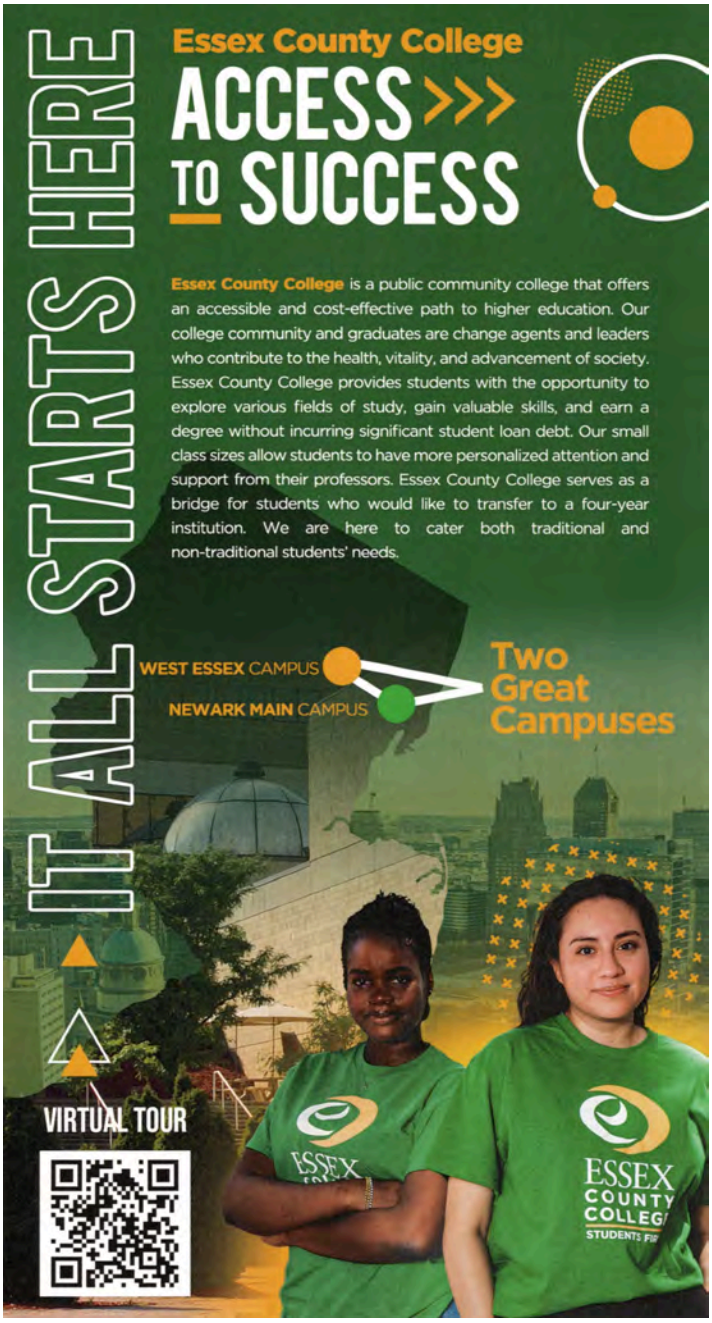
The creation of student-initiated learning communities or peer study groups online is possible using existing technology resources. In this optional configuration that provides mutual support, students will be able to develop collaborative relationships and foster a student-centered approach that can enhance the quality of online learning.



Hybrid Instruction

The hybrid instructional format offers courses that combine traditional face-to-face instruction with virtual learning. Such courses can be offered in many possible combinations, with specific scheduling and other requirements described in the course syllabus. This type of instruction has been remarkably successful because its blended nature appeals to many non-traditional students.

ACADEMIC ADMISSIONS



- Admissions Qualifications (p. 133)
- Application Procedure (p. 134)
- Admissions for Transfer Students (p. 134)
- Readmission (p. 135)
- Major Declaration (p. 136)
- Nursing and Health Sciences Admission (p. 136)
- Enrollment Status and Student Categories (p. 136)
- International Students (p. 136)
- Enrollment Services Express (p. 137)



Admissions Qualifications

Essex County College (ECC) admits any person who is at least 18 years of age and has earned a high school diploma or General Education Development (GED) certificate or who is a graduate of an approved home schooled program. High school diploma, GED or equivalent is not required for admission to ECC but is required to receive federal financial aid and admission to Nursing and Health Sciences programs. This open admission policy does not guarantee acceptance to all degree or certificate programs in Nursing and Health Sciences; these programs have additional admissions requirements. You can obtain an application by calling the main campus at 973-877-3100, or the West Essex branch campus at 973-877-6594. Alternately, you can secure an application online (https://ban8ssprod.essex.edu:9443/prod/bwgeccad.P_OnlineAdmissions) at www.essex.edu or by coming into several offices at the college, including the Welcome Center, the Office of Recruitment and Retention, and Enrollment Services Express to obtain a paper application. International applicants should consult the International Students section in this catalog. Students are admitted to ECC without regard to race, ethnicity, religion, disability, sexual orientation, national origin, or gender. ECC is ready to assist you with admissions, financial aid, or any questions you may have. Let us know how (https://www.essex.edu/why-ecc/#popmake-6237) we can help!



Application Procedure

Step 1

Request that your high school and prior colleges send official transcripts to Enrollment Services Express at the main campus. If you earned a GED, submit official documentation to Enrollment Services Express. In addition to submitting a completed application, applicants may be asked to provide current proof of residency (e.g., NJ State ID, County ID, home phone or utility bill in student's name) in order to be charged in-county tuition rates.

Step 2

New students seeking degrees or certificates are required to complete a pre-enrollment placement test. Test results determine placement in college-level or developmental courses. You can make an appointment (https://www2.registerblast.com/essex/Exam/List) to take the test after receiving an acceptance letter. Students who are not satisfied with test results can make an appointment to re-take the placement test for a nominal fee.

Exemptions from Placement testing:

1. If you have already transferred college-level credits in English composition and mathematics with grades of "C" or better.
2. If you have SAT scores of 500 or higher on verbal and/or mathematics sections, or ACT scores of 21 or higher in English/Reading and 21 or higher in Mathematics (SAT and ACT scores are good for 5 years from original test date).
3. If you took a placement test at another New Jersey college in the last 3 years; scores should be sent to the Enrollment Service Express for evaluation. Test must have been taking within the last 3 years.
4. If you have already earned an Associate or higher degree from U.S college; appropriate documentation must be provided to the Enrollment Service Express.

Step 3

If applying for financial aid, you need to complete the Free Application for Federal Aid (FAFSA). You can log on to the website www.fafsa.gov (http://www.fafsa.gov/). Applicants for financial aid must have a high school diploma, GED, or equivalent. For more information, contact the Financial Aid Office at 973-877-3200 and see Financial Requirements and Financial Services section in this catalog.



Step 4

Following placement testing, make an appointment (https://www2.registerblast.com/essex/Exam/List) to attend an orientation/advisement session. You will meet with an advisor to develop a schedule or register for classes.

Admissions for Transfer Students

Students who have completed courses at another accredited post-secondary institution and want to transfer credits to ECC must submit official transcripts from other institution(s), a completed application, and pay a non-refundable fee. **Please note that these documents become the property of ECC and will not be released to a third party or to the student.** Any transfer student who has not taken the required placement examination in the last 3 years and does not transfer credits for college level mathematics and English composition, must take the placement examination. Credit may be granted provided the course(s) is/are comparable to course required in an applicant's chosen major. As transcripts are received, credits are evaluated on a course by course basis. Credit may be granted provided the course work is comparable to or exceeds course work at ECC. A minimum grade of "C" is required for most courses to be transferable; however, courses transferred from NJ colleges and universities may include a "D" grade in non-major courses. Students will be notified via email and/or in writing as to the specific courses and credits that were accepted. To graduate, transfer students must complete at least half the credits toward their degree or certificate requirements and at least half of their major course requirements at ECC.



Transfer In of Credits

As courses at ECC are regarded as equivalent courses at many other colleges and universities in New Jersey and other states and countries, such courses from other institutions, within specified criteria, shall be regarded as potentially transferable to ECC. All decisions with respect to transfer into ECC shall be based on the principle of equivalence of expectations and requirements for native and transfer students. Students who wish to transfer credits may be granted up to half the credits for their Associate degree or certificate, usually 30 and 15 credits respectively. Acceptance of transfer credits may exempt students from placement testing and/or from certain courses.

Most academic credits submitted from regionally accredited two- or four-year institutions of post-secondary education are accepted at ECC. However, not all credits are applicable toward all majors nor all program requirements. Generally, within specified criteria, credits should transfer seamlessly between institutions granted regional/institutional accreditation by the Council for Higher Education Accreditation (CHEA). Credit from institutions with other than regional accreditation is evaluated on a case-by-case basis. Credits from courses that are equivalent to or exceed requirements for ECC comparable requirements will generally be accepted.

As a general principle, in accord with the New Jersey Comprehensive State-Wide Transfer Agreement, credits earned at a New Jersey community college that are approved and applicable under respective general education categories as listed under the State-Wide General Education Course Equivalencies, shall potentially be transferable to ECC toward an Associate degree or certificate and applicable to fulfill corresponding general education and other requirements at ECC. To determine which courses from New Jersey colleges and universities may meet transfer requirements at ECC, see NJ Transfer (www.njtransfer.org). Credit may also be granted after review of selected Advanced Placement (AP), College Level Examination Program (CLEP), and Defense Activity for Non-Traditional Education and Support (DANTES) records. Credits from international academic institutions may, within specified criteria, also be accepted after review from a recognized international academic credential evaluation organization, such as World Education Services, Inc. (www.wes.org). Developmental courses are generally considered non-transferable.

Appeals for transferability of credit may be initiated by an accepted student who has met with a Counselor or Academic Advisor for enrollment purposes. Depending on the nature of the appeal, other documentation in addition to an official transcript may be requested, such as, but not limited to, (1) letter of explanation describing why the appeal is required, (2) syllabus for each course (and outline if available), (3) complete names of textbooks or other course materials, including author(s) and publication details, (4) name of course professor/instructor. The decision from the academic division/department is final and cannot be appealed or changed.

While transfer credits will appear on the official academic transcripts, they are not calculated into the ECC grade point average. This permits students to start fresh and establish a new grade point average. However, grades received in transferred credits can be used to determine admission to certain programs and for certain other conditions of eligibility and recognition.

Readmission

Students previously enrolled at ECC who have not been enrolled for 3 or more years must apply for readmission. Students must complete and return an application for readmission online (https://ban8ssprod.essex.edu:9443/prod/bwgeccad.P_OnlineAdmissions) or in person at Enrollment Services at the Main Campus. A non-refundable readmission fee is required. Student may be required to re-submit an official copy of high school diploma or official documentation a GED has been received. Readmitted student follow policies and program requirements in the current catalog.

ECC has no general time limit on the use of credits; except as defined by external accrediting organizations, such as the 5-year limitation of BIO 121 and 122 for Nursing (2104) majors. Accordingly, any credits ever completed by students at ECC are still potentially valid, even if only as electives. Faculty of respective degree or certificate programs may propose certain program specific conditions, which will be considered by appropriate shared governance committees and subsequent administrative review before implementation. Therefore, any courses that are no longer offered, nor contained in the catalog in effect at time of readmission and/or matriculation, are still potentially available to satisfy program requirements, such as, but not exclusively, to satisfy free elective requirements in such curricula that include such.



Major Declaration



Students declare their major by indicating the appropriate curriculum code for their major on the application for admission. Only students pursuing degrees or certificates are required to declare a major. Students interested in Nursing and Health Science programs may apply to any other major and complete the pre-major requirements before being considered for admission to the program. Students requiring remedial or bilingual instruction as the result of the placement examination must complete required preparation prior to advisement for their major field of interest.

Nursing and Health Sciences Admission

Applicants to Health Sciences and Nursing programs must meet special admissions requirements. Students are admitted to programs only on approval of program admission committees and after satisfactorily completing specified pre-major requirements. For information on requirements, refer to the Nursing and Health Sciences section in the Overview of Academic Divisions.

Enrollment Status and Student Categories

ECC recognizes the following categories of student as:

Matriculated students: Students officially enrolled in programs of study leading to degree or certificate.

Non-matriculated Students: Students taking credit courses for personal interest, career advancement, enrichment, or transfer to another college where they are matriculate. **Non-matriculated students are not eligible for financial aid.** It is recommended that non-matriculated students enroll in no more than two courses a semester and that at the completion of 12 credits they consider matriculating. Credits earned while non-matriculated may be used later in a degree of certificate program at ECC if the student matriculates or they may be transferred to a different institution.

Enrollment Verification: A student who wants an official verification of enrollment status, part-time or full-time for a specific semester or term, can complete and submit to Enrollment Services an Enrollment Verification Letter Request form which is available at Enrollment Services and also online (https://essexcountycollege.wufoo.com/forms/k1942x2v0ofb725/).



International Students



International students are students who chose to undertake all or part of their post-secondary education in a country other than their own and move to that country for the purpose of studying. International students are admitted through the International Student Office, which provides advising on immigration regulations, aids in maintenance of legal status, and assists in transition to life in the U.S. ECC requires minimum English Proficiency; applicants who completed secondary education from institutions where English is not the official language of instruction are required to submit proof of English proficiency for admission as an F1 status student; TOEFL or IELTS scores are accepted. However, all students who achieve required TOEFL/IELTS score are still required to complete English and Mathematics placement testing before initial registration. Some developmental or supplemental ESL courses may be required. ECC will offer "conditional admission to an academic program" to international students who have met academic standards for admission, but do not meet minimum English language requirements. Conditional admission means the offer of full admission to the academic program is contingent upon the student completing intensive English

language coursework before they can matriculate. This is our “Pathway Program for Reasons of English Proficiency.”



All international student applicants must submit to Enrollment Services, in addition to the application for admission, the following documents, current and in English: (1) Application for Form I-20; (2) Educational credentials, which indicate equivalence of U.S. high school graduation; (3) Affidavit(s) of financial support and required financial evidence; (4) Affidavit of room & board (if applicable) and required evidence; and, (5) Immunization record(s). International students transferring from another U.S. institution must submit the following additional documents: (1) International Student Advisor’s Report Form; (2) Copy of visa page (if available); (3) All previously issued Form I-20s; and, (4) Official college transcript(s). All applications and supporting documentation must be received prior to or on the deadline. International students are not accepted for Summer sessions. For more information, contact the International Student Office or visit our website at www.essex.edu (http://www.essex.edu/).



International students are assigned to an advisor in the Enrollment Services Office. The International Student Advisor is available for direction concerning visas, international student admission, travel to other countries, employment options and communications from the U.S. Citizenship and Immigration Services. Every effort is made to bring international students into the life of the community and to make their stay in the U.S. a meaningful experience. International understanding is strengthened by the many contacts these students have in the social and cultural organizations of the College and the community. Housing facilities are not provided by the College.

Enrollment Services Express

Enrollment Services Express (ESX), located on the 4th floor of the main campus, provides customer service to current and prospective students offering one-stop service in admissions, registration, graduation, grades, transcripts, and general inquiries. To contact write or call:

Essex County College

303 University Avenue

Newark, NJ 07102

Phone: (973) 877-3100, Email: esx@essex.edu

ACADEMIC REGISTRATION

Registration dates will be announced in advance by the college. Students can register online at webservice1.essex.edu (https://webservice1.essex.edu/) or in-person at designated registration sites. We encourage students to take advantage of Academic Advisement (https://catalog.essex.edu/services-students/academic-support-services/academic-advisement/).

For current information on registration procedures, please visit: https://www.essex.edu/registration/





Holds



A "Hold" may be placed against the records of any student who does not provide a valid address, pay all bills by deadlines, return library materials, complete immunization requirements, return athletic equipment or other College property, respond to official College correspondence, make unsatisfactory progress, or comply with other College regulations. A "Hold" prevents a student from registering for classes or receiving grades or a transcript.

Academic holds of Probation, Suspension, and Dismissal can also prevent a student from registering for classes and are explained under Academic Progress.

Course Schedule

A schedule of classes listing the days and times for each course will be published and are generally available prior to registration. The course schedule can also be viewed online through the college website. ECC reserves the right to change or cancel any course if this is deemed necessary by departmental or college needs.





Registration Procedures

- New Students (p. 139)
- Non-Matriculating Students (p. 139)
- Returning Students (p. 139)

New Students

1. Apply to the college by completing and submitting an application for admission and complete the placement testing. An appointment for placement testing can be made at: www.registerblast.com/essex/exam/list (https://www2.registerblast.com/essex/exam/list).
2. Attend new student orientation/advisement and complete the registration process. An appointment for new student advisement and registration can be made at: www.registerblast.com/essex/exam/list (https://www2.registerblast.com/essex/exam/list).
3. Make payment to the Bursar's Office.

Non-Matriculating Students

1. Apply to the college by completing and submitting an application for admission.
2. Report to the academic Division Chair where the course is being offered.
3. Non-matriculated students must meet and be able to verify course prerequisites.
4. Take the completed, signed advisement/registration form to a designated registration site or be registered in the division/department.
5. Make payment to the Bursar's Office.

Returning Students

1. Report to your major academic division/department at the main or branch campus for advisement on any scheduled registration dates.
2. Students can register online at webservice1.essex.edu (https://webservice1.essex.edu/), or in person at designated registration sites, including the Welcome Center, Student Development and Counseling, and their major division/department.
3. Make payment to the Bursar's Office.



Prerequisites/Corequisites

Prerequisites

Course prerequisites can include any one or more of the following: completion of other courses with a minimum grade; reading, writing, and/or math levels; other placement tests and/or requirements; major restrictions; co-requisite courses (must be taken with the course); and/or departmental approvals.



Students are advised to check requirements for course(s) before registration. Students not meeting prerequisites will be unable to

complete registration for those respective course(s). Students who have met requirements through other methods such as transfer course(s) and/or placement scores should contact Enrollment Services or respective Divisional Chair to request a waiver.

Adding and/or Dropping Courses



Registered students can drop or add courses anytime during the registration and add/drop period. Courses dropped during the Add/Drop period will not appear on the student's permanent transcript and will not be billed.

Auditing a Course

The ability to audit a course is intended to encourage students to explore academic areas of interest.

No credit is granted for audited courses and audit grades cannot be used toward graduation requirements. Once a student declares intent to audit, the audit grade cannot be changed to a letter grade.

A grade of "Au" will be awarded at the end of the semester or term and recorded on the student's record.

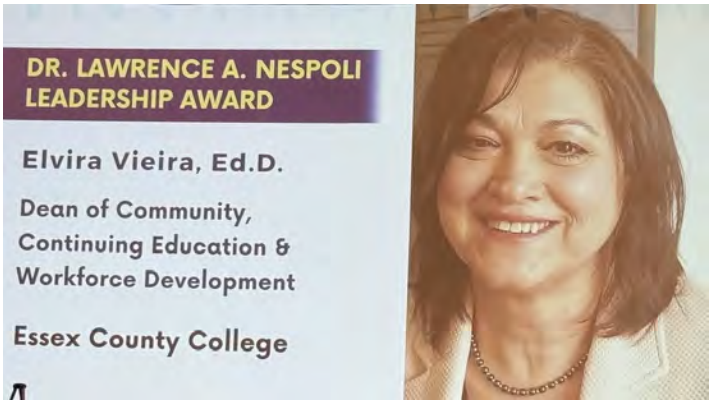
Enrollment into a course as an audit student will be made on a space available basis.



Withdrawal

After the Add/Drop period is over, students wishing to stop attending or to avoid an undesired grade for the course may withdraw. Such must be done officially on a student's portal or in person at Enrollment Services. Withdrawal results in a grade of "W" which does not affect a student's grade point average. Billing charges for the withdrawal(s) remain in place and the course appears on permanent transcripts. Students choosing to withdraw who are receiving financial aid should be aware financial aid may be removed for withdrawal from a course or courses; students reported for not attending classes may also be subject to an award adjustment. If remaining aid is less than their bill, the student is responsible for ensuring any bill balance is paid. Deadlines for withdrawal are posted each academic period.

COMMUNITY, CONTINUING EDUCATION & WORKFORCE DEVELOPMENT



The Community, Continuing Education and Workforce Development area (CCEWD) addresses the dynamic educational needs of a diverse county population. Over the past 4 decades there has been considerable growth and convincing evidence of a responsive and responsible approach to new challenges as demonstrated by myriad offerings. Annually, approximately 10,000 credit and non-credit full and part-time students, both adults and youth, participate in CCEWD programs specifically designed to meet the needs of county residents.



State-of-the-art computer labs and training centers enable participants to acquire the knowledge required to help them make the right choices for themselves. In addition to credit courses and degree and certificate programs, CCEWD participants can receive basic skills and career assessment, basic skills instruction, high school equivalency (HSE) preparation, English as a second language



(ESL) instruction, job readiness instruction, job search activities, customized short-term training, industry recognized credential training, computer instruction, life skills training, self-empowerment activities, cultural activities and direct job placement. CCEWD's credit and non-credit programs are offered at the main campus, FOCUS extension center and the West Essex branch campus.

ECC offers a wide range of non-credit and credit courses and programs to help meet the lifelong learning and cultural needs of the community, and enhance advancement opportunities for area professionals. Programs are offered at conveniently scheduled times - usually in the late afternoons, evenings, and on Saturdays. Courses in career and personal development, computer training, allied health, and one-semester certificate programs are designed to enhance the professional, personal, and vocational needs of area residents. Employees can earn Continuing Education Units (CEUs) that document newly acquired or upgraded skills that often lead to new job opportunities. Faculty have a broad range of academic and business backgrounds.





Adult Learning Center

The Adult Learning Center (ALC), under the auspices of CCEWD, addresses the literacy needs of the community funded by NJ State Department of Labor. ALC primarily serves clients in the urban areas of Essex County, including the City of Newark, providing English as a Second Language (ESL), Adult Basic Education (ABE), civics, computer literacy as well as instruction to individuals with low literacy skills and High School Equivalency (HSE) preparation. ALC serves a diverse population of refugees, immigrants, dislocated workers, unemployed individuals and Welfare to Work clients.



Our mission is to provide adult learners with literacy instruction and skills necessary for employment, self-sufficiency, and career/educational advancement; to support the literacy development of their children and to assist them in becoming active participants in their communities. For educationally and economically disadvantaged families, adult education programs prove to be an effective and efficient approach that benefits parents and their ability to support the literacy development of their children.

Corporate and Business Training Center



The Corporate and Business Training Center offers NJ employers training programs for their businesses. Program offerings are for a fee and customizable to company needs. Training can range from a one-day workshop to multi-month programs. The Center also provides grant funded training through the NJ Department of Labor to NJ eligible companies.













Educational Opportunity Fund Program



The Educational Opportunity Fund (EOF) Program provides support services and financial assistance to enhance the educational process of its participants. The EOF program offers counseling and tutorial services, workshops, seminars, cultural activities, and financial grant assistance for educational expenses. To be eligible for program participation, students must be residents of NJ for at least 12 months, be enrolled full-time as matriculated students, demonstrate potential and motivation, and exhibit a willingness to actively participate in the educational process.





Students must also meet financial aid eligibility requirements. Every summer, incoming students (meeting EOF eligibility) who have never taken a college-level course are invited to apply for the Pre-Freshman 6-week summer program where students take classes to strengthen their basic skills and seminars to enhance their knowledge about college life. The EOF application is available online and at the EOF office.



Extension Center Programs



The College offers credit courses and non-credit enrichment courses, workshops, and seminars at a variety of conveniently located sites throughout Essex County. The College's main extension center is FOCUS. Multilingual programs offered there attract a large number of students who wish to learn English. Once enrolled at this site, whether it be in non-credit or credit courses, students are apprised of other educational opportunities at the Main and West Essex campuses. FOCUS operates during the evening, Monday through Friday, and on Saturdays. The location is:

FOCUS
Hispanic Center for Community Development
433 Broad Street
Newark, NJ 07102
(973) 624-2528

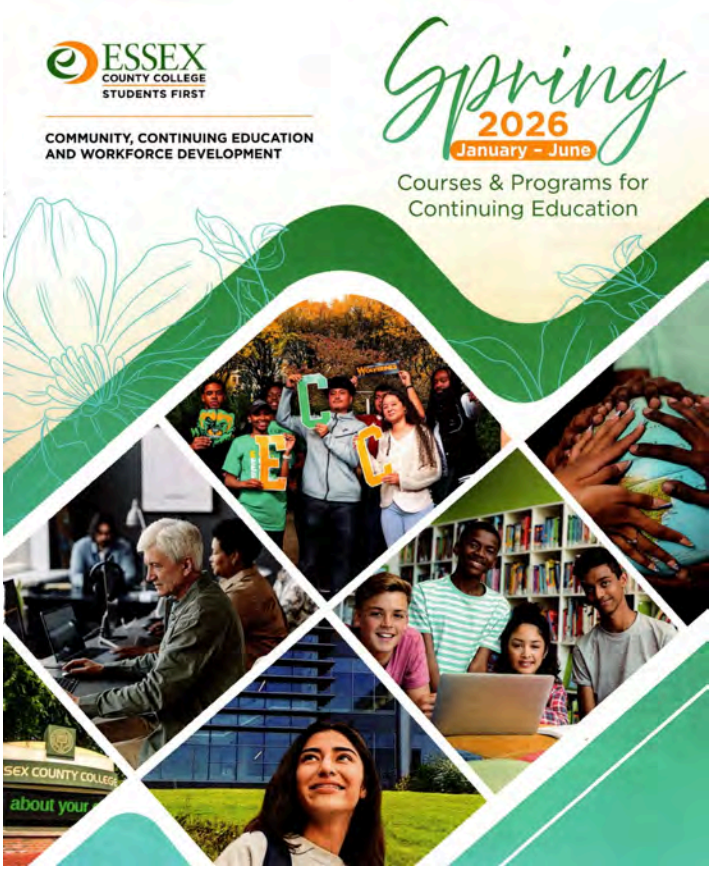
ECC also has service agreements with other community-based organizations, adult schools, civic groups, and agencies. Specific non-credit courses and workshops can be designed and organized through the Community and Continuing Education area if requested by a particular group or agency. ECC offers Continuing Education Units (CEUs), a nationally acceptable unit of measurement applicable to non-credit, continuing education courses. A certificate of completion is awarded after successful participation in a CEU certified non-credit course.

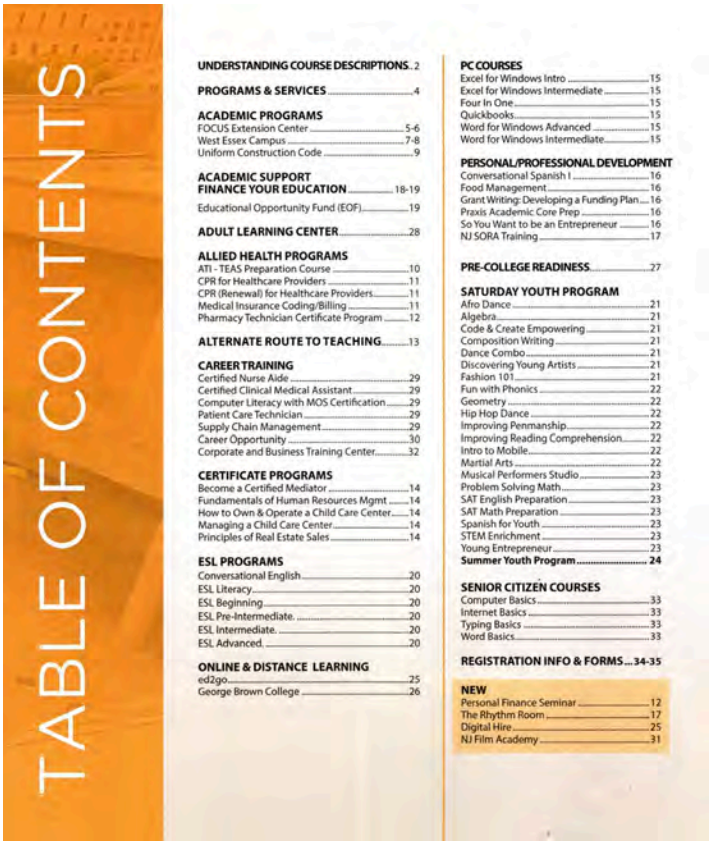


On-Campus Continuing Education

The On-Campus Continuing Education (OCCE) Department oversees operations for Adult evening and weekend programs, the Saturday and Summer Youth Programs and the Senior Education Program.

Spring 2026 Courses & Programs for Continuing Education (https://www.essex.edu/wp-content/uploads/2025/12/CCEWD_Spring-2026_non-credit-catalog.pdf)




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This department has enrolled thousands of students who desire to attain skills or pursue numerous continuing education opportunities for professional development and personal enrichment. Courses and programs offered in the areas of Allied Health, professional and personal development, and computer and online training are designed to enhance the continuing education needs of the Essex County Workforce.

Additional information can be found on the ECC website: www.essex.edu/continuing-ed/ (https://www.essex.edu/continuing-ed/). (https://www.essex.edu/wp-content/uploads/2025/12/CCEWD_Spring-2026_non-credit-catalog.pdf)



Youth Programs

Youth Programs make a difference in the lives of many children from diverse economic and cultural backgrounds. The **Saturday Youth Program** provides academic and personal enrichment courses for elementary through high school children for 10 weeks. The program is designed to promote a positive atmosphere for learning, which facilitates improvement in student behavior and achievement. The **Summer Youth Program** operates for 6 weeks during July and August for ages 6-13 providing academic instruction, recreation, and cultural indoor and outdoor activities, through a fun-filled academic program that is challenging, creative and non-competitive.

MIDDLE SCHOOL TO COLLEGE (M2C)



Using the experience of the College's Dual Enrollment Program, ECC has engaged the Newark Board of Education's middle school students by offering after-school and/or Saturday morning programming that promotes career exploration, stimulates awareness of postsecondary opportunities and bolsters educational attainment beyond middle and secondary school. All activities are intentional and serve the purpose to promote deeper student engagement.

Activities and services are promoted and publicized in collaboration with designed target schools and are specifically structured in order to promote retention and motivate students to complete middle and secondary schools, and to enroll in a program of postsecondary education

Each student will receive a narrative driven progress report at the end of the program. A copy of the report will be forwarded to the Middle School administration for its records.



Senior Education Program

Our Senior Education Program traditionally provides a variety of learning experiences for Seniors both on and off campus. On campus we have basic computer courses which include: Computer, Internet, Typing, Windows & Word Basics. Off campus, at various Senior Centers in towns such as Irvington, East Orange, Orange, Maplewood, and Newark, we offer Arts & Crafts and Senior Fitness. These courses are available free of charge for seniors age 60 or older.



Non-Credit Enrollment Services

The Non-Credit Enrollment Services Office is responsible for maintaining the Non-Credit Registration System for CCEWD overseeing all activities related to non-credit offerings. Services include liaison between the ECC Department of Information Technology for system maintenance and continued development; liaison between the ECC Academic Affairs Department for management of classroom and lab assignments; guidance to program directors, coordinators and support staff in following non-credit policies, and in completing



required documents, forms and reports; responding to requests for non-credit course enrollment and course offering information from the NJ Commission on Higher Education and Middle States Commission on Higher Education; development and approval of new and revised non-credit offerings; liaison between the ECC Marketing Department and CCEWD area-wide recruitment activities; preparation and mailing of

the area-wide brochure twice annually; coordinating the centralized Continuing Education Unit (CEU) certificate system; providing Notary Public services in support of educational programming; maintaining centralized records for course approvals, state approvals, course outlines and registration/enrollment documents; responding to annual enrollment audit requests for non-credit documents; and directing student support services as related to admission, registration and non-credit course activities.



Pre-College Readiness Program

Pre – College Readiness Experience



Essex County College reaches out throughout Essex County with programs that help high school students bridge the gap to college, and get a jump-start on their college careers in the process. We offer:

School Tours

Request a personal or a group tour to give students an introduction to Essex County College, learn about majors/minors, see facilities/labs, meet current students and staff, and have the chance to ask questions.

Six – Week Early College Summer Program

Propels students, particularly those entering their senior year into a college-ready mindset. Offered to rising high school juniors and seniors or qualified students during July – August.

Concurrent Enrollment: Earn College Credits While In High School

If a student's goal is not to earn an Associates Degree, College Credits earned through Dual Enrollment can be used later toward degree requirements at ECC and/or transferred to a four-year college or university. Alternatively, students, not in Dual Enrollment, who wish to enroll in Essex County College courses while still in high school may apply to the College and take classes as a visiting student on any of our two campus locations. Courses are offered during the fall, spring and summer semesters. General Essex County College tuition and fees apply.



Coming Soon

Discounted tuition rates for high school students residing in Essex County. Applicants must be at least 15 years of age at the time of registration and at least in their 2nd marking period of 10th grade (sophomore year) in high school. Placement testing or Academic Division pre – approval may be required for certain courses. Interested students should regularly visit the ECC website (www.essex.edu (http://www.essex.edu/)) for more information.

High School Dual Enrollment

Director: Yelena Pirtskhalava

Dual Degree Program Description

The Dual Enrollment program at ECC allows students from partnering high schools to take college courses while simultaneously pursuing their high school diploma. Dual Enrollment courses are taught at the high school and on the Essex County College campus by ECC professors, adjunct faculty, or by high school teachers qualified to teach college courses. This program provides an opportunity for high-school students to get an early start on their college careers by enrolling in classes offered by Essex County College that count towards both their High School Diploma and an ECC Associates Degree, with the intention of their achieving simultaneous graduation.

History

ECC offered a limited number of college courses, via several unconnected initiatives, to high school students since the late 1990's, but it was not until the Fall of 2017 that the Dual Enrollment Program began in its current form as a structured, cohesive offering. Starting with a cohort of 22 Newark East Side HS juniors, taking credit classes toward an Associates in Arts Degree in Liberal Arts. 17 successfully graduated with both a HS Diploma and Associates Degree in June 2019.

In the same period, Dean Vieira, who initiated the Early Scholar path to graduation partnership, attended a national conference, which confirmed that many colleges throughout the country were offering similar programs. She also became aware of an increasing number of peer reviewed literature and articles in the higher education publications about dual enrollment, and based upon this evidence, she made plans to grow the ECC program. To improve and maintain academic standards, she also sought membership with the **National Alliance of Concurrent Enrollment Partnerships (NACEP)** which allows the staff to be part of the ongoing dialogue on serving students through the program. Her area's efforts resulted in a program that is increasing every year, that now includes high schools from many cities and towns in Essex County, and is Objective A in Goal IV of the Colleges 2024 – 2029 Strategic Plan.



Essex County High School Dual Enrollment Partners (as of January 2025)

- Belleville HS
- Bloomfield HS
- East Orange Campus HS
- Essex County Schools of Technology
  - Donald Payne HS
  - Newark Tech HS
  - West Caldwell Tech HS
- Great Oaks Legacy Charter School
- James Caldwell HS
- Irvington Rita L. Owens STEAM Academy
- Montclair HS
- Newark Public Schools District
  - American History HS
  - Barringer HS
  - Central HS
  - Eagle Academy HS
  - East Side HS
  - Science Park HS
  - Technology HS
  - University HS
  - Weequahic HS
  - West Side HS
- Orange HS

Essex County High School Students Receiving Associates Degree by Year

Year	Number of Graduates
2019	17 East Side HS
2020	60 East Side HS
2021	53 (21 Newark Tech; 32 East Side HS)
2022	96 (57 East Side HS; 23 Newark Tech; 16 West Side HS)
2023	107 (11 West Side HS; 5 Orange HS; 24 Newark Tech; 67 East Side HS)

2024	131 (10 Orange HS; 22 Newark Tech; 3 University High School; 83 East Side HS; 13 West Side HS)
2025	142 (19 West Side HS; 9 University High School; 79 East Side HS; 12 Orange HS; 23 Newark Tech)



Institutions Dual Enrollment Students Transferred To After Receiving Their ECC Associates Degree

- American Institute, Clifton
- Bergen Community College
- Berkeley College – Newark
- Bradford Institute
- Caldwell College
- Drew University
- Essex County College (2nd Major)
- Fairleigh Dickinson University
- Kean University
- Montclair University
- Moravian University
- New Jersey City University
- New York University
- New Jersey Institute of Technology
- Princeton University
- Rowan University
- Rutgers University – Newark
- Smith College
- Stockton University
- The College of New Jersey
- Tufts University
- University of Albany
- University of Pittsburgh

Training, Inc.

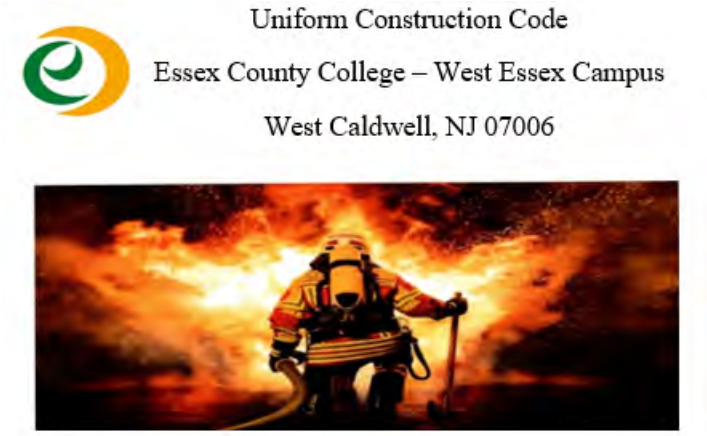


Since 1986, ECC Training, Inc. has served over 5,000 trainees from Essex County with the primary goal of increasing chances for trainees to learn specific job skills, secure employment after completing job training, and finding paths to long-term careers.

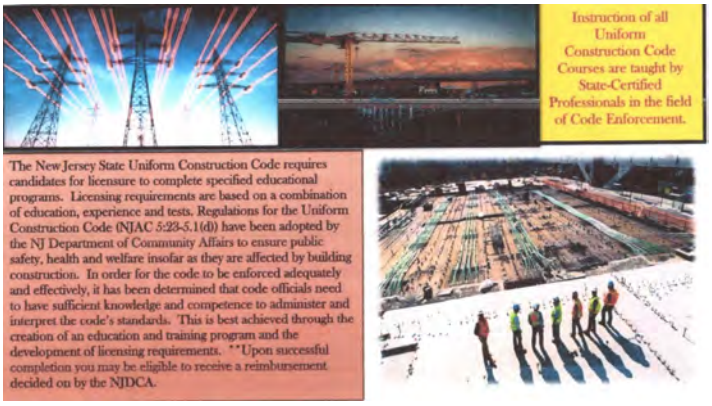
It is a unique job-training program conducted in a professional business setting. Participants get on-the-job experience in real or simulated work situations and receive extensive training and support in job-search skills.



Uniform Construction Code Program



Uniform Construction Code (UCC) classes are taught at West Essex Campus, West Caldwell, NJ 07006. For more information, please contact:
Ms. Drake (973) 877-3175
Email: tikee11drake@essex.edu



FINANCIAL REQUIREMENTS AND FINANCIAL SERVICES



- Tuition and Fees (p. 152)
- Laboratory Fees (p. 153)
- Essex County Residents (p. 153)
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- Scholarships (p. 160)

Tuition and Fees

Tuition and fees at ECC are established by the College's Board of trustees. Those presented here are effective July 1, 2025.

Tuition

Tuition is based on the total number of credit hours or instructional hours for which a student registers. Fees are non-refundable except for course cancellations and for withdrawals during the first week of classes. Essex County College reserves the right, with no prior notice, to restructure tuition and fee rates.

For more information about tuition payment options, payment plans, or tuition payment due dates visit https://www.essex.edu/bursar.

Tuition and Fees Schedule

Item	In County	Out of County
Application Fee	30.00	30.00
Course Audit Fee Per Credit	139.66	279.34
CEU Certificate Fee	8.00	8.00
CLEP (Service Fee Per Credit)	28.50	28.50
CLEP (Exam Fee Per Subject)	85.00	85.00
Course Change Add/Drop Fee Per Transaction	20.00	20.00
College Payment Plan Default Fee	100.00	100.00
College Payment Plan Fee	50.00	50.00
Degree Audit Fee (Additional Degree/ Certificate)	30.00	30.00
Degree Audit Fee (First Degree/Certificate)	60.00	60.00
Dishonored Check Fee	40.00	40.00
Dishonored ACH Fee	40.00	40.00
General Fee Per Credit Hour	34.49	34.49
ID Card Replacement Fee	10.00	10.00
Late Payment Fee	30.00	30.00
Late Registration Fee	25.00	25.00
Non-Credit Computer Lab Fee (Per Instructional Hour)	1.00	1.00
Non-Credit Tuition Per Instructional Hour	13.00	13.00
WEC Off-Campus Registration Fee Per Course (As Applicable)	10.00	10.00
Focus & Ironbound Off-Campus Registration Fee Per Course (As Applicable)	15.00	15.00
Technology Systems Fee for Online Classes	15.00	15.00
Course Digital Material Fee from The Bookstore & All E-Text for Each Course	75.00	75.00
COURSE LAB FEES VARIED PER CLASS (AS APPLICABLE)		

Parking Fee	75.00	75.00
Readmission Fee	30.00	30.00
Registration Reinstatement Fee	100.00	100.00
Schedule & Bill Replacement Fee	1.00	1.00
Student Activity Fee Per Credit Hour	8.58	8.58
Testing-Out Fee Per Credit Hour - Letter Grade	139.66	279.34
Transcript Fee - Official Copy	10.00	10.00
Transcript Fee - Unofficial Copy	10.00	10.00
Tuition Per Credit Hour	139.66	279.34
Tuition Per Credit (Out of County-On-Line)		195.53

Students should also consider other expenses (meals, books, transportation, etc.), which will vary widely from student to student. Book charges for some fulltime students may be as high as $900 per semester. A student whose funds are limited must plan carefully for a workable budget. ECC recognizes that many students need financial assistance in order to attend college. To help them, the Financial Aid Office administers various types of federal and state aid. Counselors also have information and can give advice concerning employment opportunities and methods of handling personal finances.

Laboratory Fees

A laboratory fee is charged in addition to tuition for specific courses. This fee helps defray the costs of additional class hours, special instruction, special equipment and material, special facilities, and/or expendable supplies required in course(s). The fee varies depending on course.



COURSE	FEE	COURSE	FEE	COURSE	FEE	COURSE	FEE
ACC 232	$40	CIS 152	$40	MET 201	$75	NRS 104	$1,250
ARC 101	$75	CIS 153	$40	MET 202	$75	NRS 106	$725
ARC 102	$75	CIS 235	$40	MET 210	$75	NRS 108	$600
ARC 201	$75	CIS 237	$40	MET 211	$75	NRS 111	$1,025
ARC 202	$75	CMS 110	$60	MET 215	$75	NRS 114	$1,250
BIO 100	$85	CMS 121	$60	MET 221	$75	NRS 206	$1,250
BIO 101	$85	CMS 136	$60	MET 250	$75	NRS 216	$1,250
BIO 102	$85	CMS 210	$60	MUS 121 (1 Credit)	$250	NRS 217	$250
BIO 103	$85	CMS 219	$60	MUS 122 (1 Credit)	$250	OPH 123	$800
BIO 104	$85	CSC 104	$60	MUS 221 (1 Credit)	$250	OPH 124	$800
BIO 116	$85	ELC 115	$75	MUS 222 (1 Credit)	$250	OPH 203	$800
BIO 121	$85	ELC 120	$75	MUS 153 (1 Credit)	$250	OPH 204	$800
BIO 122	$85	ELC 211	$75	MUS 154 (1 Credit)	$250	PHY 101	$85
BIO 125	$60	ELC 218	$75	MUS 253 (1 Credit)	$250	PHY 102	$85
BIO 211	$85	ELC 221	$75	MUS 254 (1 Credit)	$250	PHY 103	$85
BIO 220	$85	ELC 222	$75	MUS 261 (1 Credit)	$250	PHY 104	$85
BIO 222	$85	ELC 224	$75	MUS 261 (2 Credits)	$500	PHY 111	$60
BIO 225	$85	ELC 228	$75	MUS 262 (1 Credit)	$250	PHY 113	$85
BIO 228	$85	ENR 103	$50	MUS 262 (2 Credits)	$500	PHY 114	$85
BIO 237	$85	ENR 105	$75	MUS 263 (1 Credit)	$250	PHY 203	$30
BIO 290	$85	ENR 106	$75	MUS 263 (2 Credits)	$500	PTA 101	$800
BIO 230	$85	ENR 205	$75	MUS 264 (1 Credit)	$250	PTA 102	$800
CET 211	$75	ENR 220	$75	MUS 264 (2 Credits)	$500	PTA 201	$800
CET 212	$75	ENR 250	$75	MUS 265 (1 Credit)	$250	PTA 202	$800
CET 221	$50	GEO 101	$85	MUS 265 (2 Credits)	$500	RTC 100	$100
CET 225	$50	GEO 102	$85	MUS 266 (1 Credit)	$250	RTC 101	$800
CHM 100	$85	HSC 151	$75	MUS 266 (2 Credits)	$500	RTC 105	$800
CHM 101	$85	HSC 152	$75	MUS 267	$250	RTC 106	$100
CHM 102	$85	HSC 153	$75	MUS 267	$500	RTC 108	$50
CHM 103	$85	HSC 160	$75	MUS 268	$250	RTC 109	$800
CHM 104	$85	HSC 161	$75	MUS 268	$500	RTC 111	$50
CHM 203	$85	HSC 162	$75	MUS 269	$250	RTC 112	$50
CHM 204	$85	LPN 101	$1,015	MUS 269	$500	RTC 202	$50
CHM 299	$60	LPN 102	$1,015	NMT 101	$75	RTC 203	$800
CIS 107	$40	LPN 103	$1,015	NMT 201	$75	RTC 205	$50
CIS 131	$40	LPN 104	$1,015	NMT 202	$75	RTC 206	$50
CIS 135	$40	LPN 105	$215			RTC 207	$50
CIS 136	$40					Off Campus - WEC	$10
CIS 137	$40					Off Campus - Focus	$15
CIS 139	$40						

LAB/COURSE FEES
Updated 08-28-2024
COURSE FEES ARE SUBJECT TO CHANGE

Essex County Residents

To qualify for the in county tuition rate, students must have continuously resided in State of New Jersey for at least one year and must have established permanent residency in Essex County before the first day of the semester. Students who have established permanent residency in Essex County before the first day of the semester, but have resided in the State of New Jersey for less than a year, will be charged the out of county tuition rate. Students moving from out of county address to in county, and in county residents who have met the 1 year state residency requirement, must submit a Change of Address form (https://essexcountycollege.wufoo.com/forms/kmis71z1x692a0/) and a Tuition Rate Adjustment (https://essexcountycollege.wufoo.com/forms/k1hi5gqr0xt4fgf/) Request form with supporting document to Enrollment Services before the first day of the semester.



Out of County Residents

All other students who have not established permanent residency in Essex County are charged at the "Out-of-County Resident" tuition rate. These include students with F-1, H-1 or J-1 Visa, Temporary Residents, and those with Employment Authorized status.



Tuition Payment Methods

- Full Payment (p. 154)
- Tuition Payment Mail Drop System (p. 154)
- Deferred Payment Option (p. 154)
- Consequences of Not Meeting Payment Obligations (p. 154)

Full Payment

Full payment of registration bills may be made in cash, by check (certified or personal), by money order, by credit card (Visa/Master Card or Discover Cad), or via web services (https://webservice1.essex.edu/). Any student who has previously presented a dishonored check to the College cannot pay tuition with a personal check. Full payment by cash or credit card will be accepted at the Cashier window at the Fourth Level in the main campus and at Bursar's Office in the West Essex Branch Campus.

Tuition Payment Mail Drop System

If you are paying your bill by money order, cashier check, certified check, or personal check, it is not necessary to wait on line. You can mail your full payment to the Bursar's Office or use the Tuition payment mail drop system available for your convenience in Room 4121 (Bursar's Office) at the Main Campus and at the Bursar's Office window at the West Essex Branch Campus. Simply follow the instructions imprinted on the envelopes provided to ensure proper payment. If any of your previous personal checks were returned to the College for insufficient funds, you can still use the tuition payment mail drop system, but you must pay by money order, cashier check, or certified check.

Deferred Payment Option

For students who are unable to pay the full amount of their bill at registration, the College makes available a deferred payment plan. The plan allows the student to pay the tuition bill in a number of installments. Contact the Bursar's Office at (973) 877-3099 to obtain a detailed description of the plan.

Consequences of Not Meeting Payment Obligations

Students who do not make the required first payment by the scheduled due date may have their registration canceled. Non-attendance does not constitute an effective withdrawal.

- Students who enrolled in the deferred payment plan will be charged a deferred payment default fee if their account is not paid in full by the end of the semester. This fee is in addition to any late fee assessments.
- ECC's collection policy is to forward past due accounts to a designated collection agency. If your account is forwarded, it may have a detrimental effect on your ability to obtain credit in the future.

Tuition Refund Policy

All cash paying students (non-financial aid) who officially withdraw from ECC (by completing and submitting a withdrawal form online or in person at Enrollment Services), or officially drops a course(s), may receive a tuition refund based on refund schedule available at Bursar's Office. Students who withdraw after dates listed in the schedule will be responsible for payment of the entire bill. Students who are on a deferred payment plan must also follow the schedule and arrange to pay any outstanding balance if the recalculation of tuition and fees is larger than the amount already paid. To be eligible for a refund or adjustment, a student must officially drop or withdraw from the class. **Non-attendance does not constitute an official withdrawal and is not covered by the refund policy.** The processing of refunds takes approximately 30 days. Refund checks are made available through the Bursar's Office. Fees are non-refundable except for course cancellations and for Drops prior to the first day of the semester.

Financial Aid Refund Policy

Students receiving financial aid who totally withdraw may have to return all or part of funding from the student financial aid programs.

Tuition Waivers

- Senior Citizens (p. 155)
- Unemployment (p. 155)

Senior Citizens

Tuition and fees will be waived in credit courses for senior citizens under certain conditions. In order to qualify, individuals must be:

1. Residents of Essex County;
2. Sixty (60) years of age or older; and
3. Registered in courses on a space available basis, subsequent to the determination that the minimum enrollment of tuition-paying students has been met.

Unemployment

Tuition may be waived for students who are unemployed. Students must be referred by their local unemployment office. Students must declare a major and apply for financial aid. Registration will be on a space-available basis.



Financial Aid

Financial Aid



The Financial Aid Office administers funds from federal and state sources in the form of grants, scholarships, and employment, or a combination of all three, ECC's financial aid program is designed to assist students who seek an education but lack the means to finance it. Applicant eligibility and program guidelines are determined by federal and state regulations. The Financial Aid Office is located in the "green" section next to EOF.

From the entrance across from the Physical Education building, enter and go to the left to enter the green area. Phone: 973-877-3200. Email: financialaid@essex.edu. Website: http://www.essex.edu/fa.

Staff are available to answer questions regarding student aid programs, policies and procedures. Hours of operation are available at http://www.essex.edu/fa. Financial Aid forms and documents are available at https://www.essex.edu/forms-and-documents/.

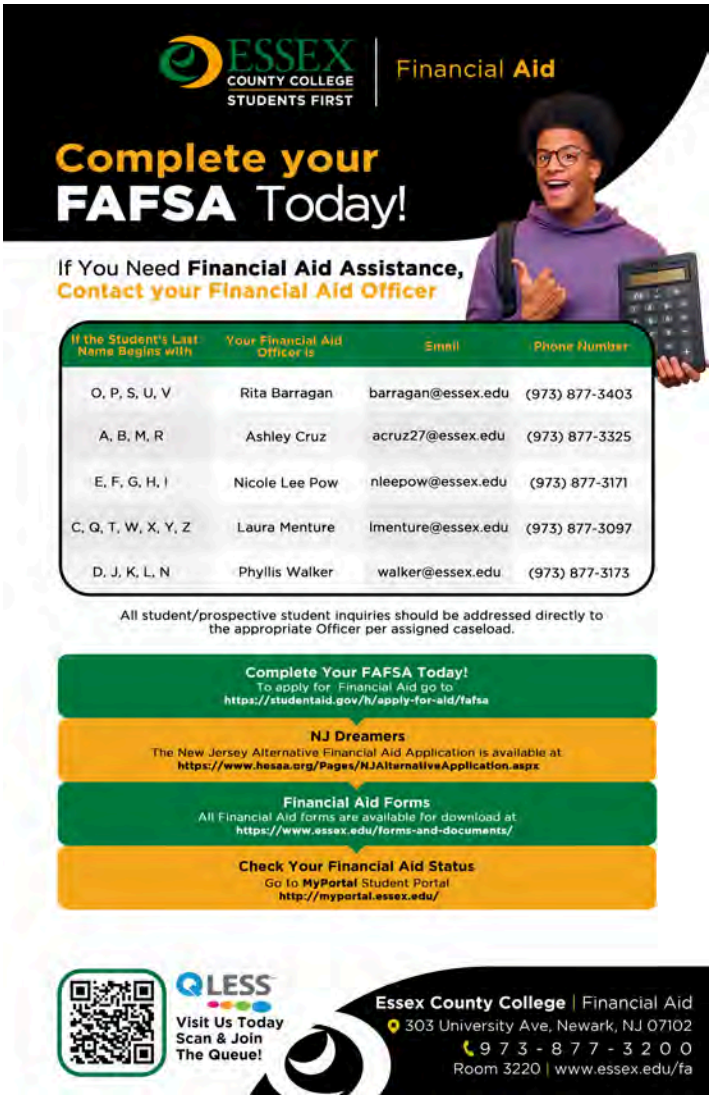
All student/prospective student inquiries should be addressed directly to the appropriate Officer per assigned caseload.

For security reasons, the Financial Aid Office will only respond to student inquiries from/to the student's Essex County College email address.

Student Financial Status Available on the Student Portal

Students can access their financial aid status on the MYECC Student Portal myecc.essex.edu (http://myecc.essex.edu/).

The Financial Aid Office does not need to see a student unless the Officer specifically requests the student visit the office.





The Essex County College Office of Financial Aid is pleased to announce that it is using the QLess system to enhance customer service. QLess allows students to virtually join a line without having to physically wait in line so a student can now get other things done while awaiting to be called for service.

How does QLess work?
After virtually joining the line, QLess will provide a student with:

1. an approximate wait time to receive service
2. alert you when you are 10 minutes away from your turn.
3. allow you to ask for more time if it does not fit your schedule
4. gives you text updates every 30 minutes if you opt for the notifications
5. Informs you when you are next for service, you will receive a text asking you to return to the Office of Financial Aid

How can I join (queue) a virtual line?
QLess is simple and easy to use. Students can join a virtual line in three different ways.

1. **Scanning the QLess QR Codes**

2. **Using the QLess App**
   - Download the QLESS app for your smartphone
   - The QLESS Mobile App is available for both Apple® and Android™ devices
   - This will allow to you see organizations that are using QLESS
   - Enter **"07102"** in the location search box
   - Choose **"Essex County College Financial Aid"** queue
   - Enter student name, cell phone number and email address (to receive alerts)
   - Join a virtual line
   - Receive wait time updates
   - Manage your spot in line
   - Get notified when it's your turn

3. **Text**
   - You can join a line by texting the following characters to (973)318-3466
   - Text **"ECC Financial Aid"** to join the line
   - You will receive notifications and text alerts, which will keep you informed about your approximate wait time for you to reach the front of the line
   - You can also request additional time or remove yourself from the line

QLESS

Types of Financial Aid

There are several forms of financial aid including gift aid, work-study, and loans:

- **Gift aid**: grants and scholarships that you do not have to pay back. Each grant and scholarship may have specific requirements to maintain eligibility/renewal. Grants are often need-based while scholarships are usually merit-based. Grants and scholarships are directly applied to a recipient's College charges. Occasionally you might have to pay back part or all of a grant if, for example, you withdraw from school before finishing a term.
- **Work-Study**: Student aid that provides part-time employment for students enrolled in school to help pay educational expenses. Eligible applicants can earn up to the amount listed on their financial aid eligibility notice through earnings from a work-study job. Earnings are delivered to the student via paychecks.
- **Loans**: Borrowed money that must be paid back in accord with terms and conditions of the loan, typically with interest.

Financial Need

Financial need is defined as cost of attendance minus expected family contribution, or, as expressed: NEED = COA – EFC. Most student financial assistance is based on financial need. If eligible, applicants may receive combination of gift aid and work-study. Students may also pursue private educational loans if desired, though the College cautions only do so if absolutely necessary. Community college costs are cost effective relative to other sectors of higher education. If students plan to continue higher education after graduation, it is best to defer consideration of student loans to minimize accumulated indebtedness.

- **Expected Family Contribution (EFC)**: Calculated by the federal government and used to calculate how much financial aid, if any, is available based on information provided in the *Free Application for Federal Student Aid* (FAFSA®). It's not the amount of money a family will have to pay for college, nor is it the amount of federal student aid that will be received. Expected family contribution is reported on the Student Aid Report (SAR).
- **Cost of Attendance**: Total amount (not including grants and scholarships) that it will cost to go to school during the school year, which includes tuition and fees; housing and meals; and allowances for indirect expenses like books, supplies, transportation, loan fees, and dependent care. For students attending less than half-time, the Total Cost of Attendance includes tuition and fees; an allowance for books, supplies, and transportation; and dependent care expenses.

Financial Aid Package

Any combination of student financial assistance is referred to as a financial aid "package". Eligibility for Federal student aid and State of NJ-based student financial assistance is based on the filing of the *Free Application for Federal Student Aid* (FAFSA®), general eligibility requirements for federal and state student aid programs, and specific program requirements.

Student Financial Assistance Programs Available



- Federal Student Aid (p. 157)
- State of NJ Student Aid (p. 157)
- Free Application for Federal Student Aid (FAFSA) (p. 158)
- Return of Title IV Funds Policy (p. 158)
- Financial Aid Refund Policy (p. 159)

Federal Student Aid

Federal Student Aid Programs available for enrollment at ECC:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Federal Work-Study

General Eligibility Requirements for Federal student aid programs:

- ALL require the FAFSA® (https://fafsa.gov (https://www.fafsa.gov/)). Applicants must have a Federal Student Aid ID (FSA ID) to sign electronically. Alternatively, applicants can download and file a paper version, if desired, though submission of a paper FAFSA® will take longer to process.
- Applicants must demonstrate financial need for Federal student aid.
- Applicants must be U.S. citizens or eligible noncitizens; have a valid Social Security number (except for students from the Republic of Marshall Islands, Federated States of Micronesia, or Republic of Palau); be registered with Selective Service, if male and between ages 18-25).
- Applicants must be enrolled or accepted for enrollment as a regular student in an eligible degree or certificate program; and maintain satisfactory academic progress.
- Applicants must sign the certification statement on the Free Application for Federal Student Aid (FAFSA®) stating they are not in default on a federal student loan and do not owe money on a federal student grant and will use federal student aid only for educational purposes; and
- Applicants must show they are qualified to obtain a college education by having a high school diploma or recognized equivalent such as a General Educational Development (GED) certificate; or completing a high school education in a homeschool setting approved under state law (or—if state law does not require a homeschooled student to obtain a completion credential—completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law); or enrolling in an eligible career pathway program and meeting one of the "ability-to-benefit" alternatives.

Additional Federal Student Aid Eligibilities:

- **Green card** – Applicant is eligible if they have Form I-551, I-151, or I-551C – also known as a "green card" – showing applicant is a US permanent resident.
- **Arrival-departure record** – Applicant's Arrival-Departure Record (I-94) from U.S. Citizenship and Immigration Services must show one of the following: Refugee; Asylum Granted; Cuban-Haitian Entrant (Status pending); Conditional Entrant (valid only if issued before April 1, 1980); Parolee.
- **Battered immigrant status** – Applicant is designated a "battered immigrant-qualified alien" being a victim of abuse by citizen or permanent resident spouse, or the child of a person designated as such under the Violence Against Women Act.
- **T visa** – Applicant holds T-visa or a parent with a T-1 visa.

The US Department of Education provides guidance (including multi-media content) on how to create a Federal Student Aid ID and how to complete the FAFSA®: https://studentaid.gov/sa/resources (https://www.studentaid.gov/sa/resources) (Spanish content available).

State of NJ Student Aid

State of NJ-based financial aid programs administered by the NJ Higher Education Student Assistance Authority ("HESAA") available:

- Tuition Assistance Grant
- NJ STARS
- Governor's Urban Scholarship
- World Trade Center Scholarship
- NJ Survivor Tuition Benefits Program
- Law Enforcement Officer Memorial Scholarship
- Governor's Industry Vocations Scholarship for Women and Minorities
- Community College Opportunity Grant

HESAA website provides details on student aid programs: https://www.hesaa.org (https://www.hesaa.org/).

"NJ Dreamers" - Applicants who are not a United States citizen or eligible noncitizen but have attended a NJ high school for at least three (3) years; graduated from a NJ high school or received the equivalent of a high school diploma in NJ; registered for Selective Service (male students only); and able to file an affidavit stating they have filed an application to legalize immigration status or will file an application as soon as eligible, are available to apply for student aid from the State of New Jersey using the NJ Alternative Financial Aid Application: https://www.hesaa.org/Pages/NJAlternativeApplication.aspx.

Student aid available from the NJ Department of Children and Families through NJ Foster Care Scholarships: https://www.nj.gov/dcf/home/foster_scholars_program.html.

Funds are also available from the Educational Opportunity Fund (EOF), a campus-based program from funds provided by the NJ Office of the Secretary of Higher Education that provides financial assistance and support services (e.g. counseling, tutoring, and developmental course work) to students from educationally and economically disadvantaged backgrounds who attend participating institutions of higher education in the State of New Jersey. For details, see College EOF webpage: http://www.essex.edu/eof/.

The Community College Opportunity Grant is a "last dollar" fund for which all students enrolled in at least 6 credits per semester in either the Fall or Spring and have adjusted gross income of $0 -$65,000 will be considered; no separate application needed. If the FAFSA® or NJ Alternative Financial Aid Application for NJ Dreamers has been filed, applicants will be automatically considered. This grant is only available if there is a remaining balance due after application of other federal and state aid for which the applicant is eligible. There are restrictions on types of fees that the program will cover. For complete details: https://www.hesaa.org/Pages/CCOG.aspx.

Information on programs noted above are available in the Financial Aid Office's publication, *Financial Aid Counseling Tips for Students* (FACTS), available: http://www.essex.edu/fa.

Free Application for Federal Student Aid (FAFSA)

To apply for Federal and NJ State financial aid, students must complete and submit *Free Application for Federal Student Aid* (FAFSA®) for each year. FAFSA® can be filed online: https://www.fafsa.gov (https://www.fafsa.gov/). The US Department of Education has a smartphone application for FAFSA® called *MyStudentAid*. If these options cannot be utilized, applicants can download a paper version and submit it to US Department of Education. If download is not possible, contact Federal Student Aid Information Center to request a copy at 1-800-4-FED-AID (1-800-433-3243). If hearing impaired and need assistance with FAFSA®, call TTY line at 1-800-730-8913.

To file the FAFSA® electronically, applicants need to have a US Department of Education FSA ID, which serves as applicant's electronic signature and identifier to let applicants access their personal information in various US Department of Education systems.

FAFSA® allows applicants the ability to import federal tax data directly from the Internal Revenue Service (IRS) using the IRS Data Retrieval Tool. Federal tax information will be available within 2 weeks of electronic filing of taxes or 6-8 weeks if paper return was filed. We encourage applicants to use this tool as it simplifies the application process and minimizes verification documentation possibly asked for later. For complete details on the IRS Data Retrieval Tool: https://studentaid.gov/sa/resources/irs-drt-text (https://www.studentaid.gov/sa/resources/irs-drt-text). Although FAFSA® can be filed any time after October 1 for the next academic year, it must be filed by May 1 to ensure full consideration for Federal student aid and NJ State grants. The FAFSA® must include ECC's Federal School Code: 007107. FAFSA® should be filed after applicant has filed for admission but at least 6 weeks prior to registering for classes. After FAFSA® is received by Federal processors, applicants will receive a Student Aid Report (SAR) either in the mail or via email. SAR contains information filed on the FAFSA® and, if there is no missing items or other problems with the information submitted, the SAR will also contain an Expected Family Contribution (EFC), a measure of family's financial strength and calculated according to formula established by law including family's taxed and untaxed income, assets, and benefits (such as unemployment or Social Security); also considers family size and number of family members who will attend college that year.

Return of Title IV Funds Policy

In the following example, the student's institutional charges will be adjusted by the amounts that must be returned to the Title IV programs. Please note that charges used in these examples may not reflect true College charges.

Example: Student is full-time living off-campus. Student's financial aid package consists of: Federal Pell Grant of $3,047.00 and Federal Supplemental Educational Opportunity Grant (FSEOG) of $500.00. Student withdraws on 10/09, which is day 35 out of 108 days in the Fall semester. 35/106 = 33% of Title IV aid earned by the student. Title IV funds = $3547 X 33% = $1170.51 in funds earned; to be returned: $3547 - $1170.51 = $2376.49 to be returned to Federal student aid programs. In this case, $2376.49 would be returned to the Federal Pell Grant program and student's amount of Federal Pell Grant funds adjusted.

Note, Return of Title IV calculations might result in a balance due to the College. This policy is published on the Office's website and in *Financial Aid Counseling Tips for Students (FACTS)*.

Treatment of State Aid for Withdrawal

Adjustments to NJ state financial aid follow the State refund policy for withdrawals, made in accord with the chart below for students who withdraw:

Semester	Percentage of Tuition Refund
Week 1	100%
Week 2	90%

Week 3 and 4	50%
Week 5, 6 and 7	25%

(Tuition Charges x % Refund) x (State Aid ÷ Total Aid) (indicated in chart) (except work-study)

STATE OF NJ STUDENT AID REFUND EXAMPLE:

If student withdrew in second week of the semester, with $3959 tuition charges, a $2350 TAG award, and $5200 in aid (excluding work-study), refund would be calculated as follows: ($3959 x .90) x ($2350 ÷ $5200) $3563 x 45 = $1610 returned to NJ (TAG program). This policy is published in *Financial Aid Counseling Tips for Students* (FACTS).

Financial Aid Refund Policy

Students receiving financial aid who totally withdraw will have to return all or part of the funding from the student financial aid programs.

Enrollment, Registration and Financial Aid Programs

Availability of student aid partially depends or enrollment status and registration status. Federal student aid is available to eligible students registered on at least half-time (at least 6 credits). Students registered for 6-11 credits will have Federal Pell Grants prorated according to registration level and will be eligible for consideration for part-time Tuition Assistance Grants and the Community College Opportunity Grant. Students registered for less than 6 credits will have Federal Pell Grants prorated according to registration level and will not be eligible for consideration for other student aid programs. For financial aid purposes, classes registered for must be directly applicable to applicant's declared major.



Satisfactory Academic Progress

Student aid programs require satisfactory academic progress in order to continue to receive funds, if eligible. The qualitative standard is a minimum 2.0 grade point average, and credit completion of at least 67%. Satisfactory academic progress is evaluated once per year. The Satisfactory Academic Progress policy is available in *Financial Aid Counseling Tips for Students (FACTS)*.

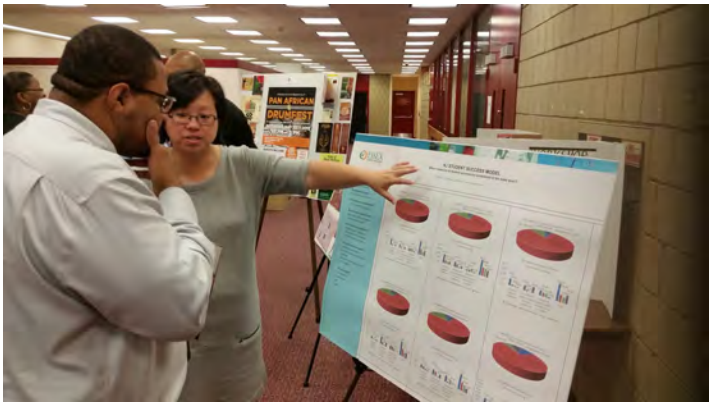
Disbursement

Student aid is disbursed by the Bursar to student billing accounts as noted in the published academic calendar. If a credit balance results from disbursement of Federal student aid ECC must remand the credit balance within 10 days of date of disbursement. Credit balances can be remanded by paper check or by direct deposit (if registered with the Bursar).

Other Required Institutional Policies and Disclosures

- Consumer Information Disclosures (p. 159)
- National Student Loan Data System (NSLDS) (p. 159)
- Availability of US Department of Education Resources (p. 159)
- State of NJ Higher Education Student Assistance Resources (p. 160)

Consumer Information Disclosures



ECC provides links to key information that allows students and the general public to make informed decisions about our college and post-secondary education in general. Listing of required consumer disclosures is available in *Financial Aid Counseling Tips for Students (FACTS)* or on this website: http://www.essex.edu/consumer-information/. This list complies with federal regulations ("Student Right-to-Know" and Campus Security Act" – P.L. 101-542, "Family Educational Right and Privacy Act" (FERPA), federal non-discrimination policies including the Americans with Disabilities Act, and public health and safety laws), as well as state laws.

National Student Loan Data System (NSLDS)

ECC, as required by federal regulation, reports data on enrollment as well as Federal Pell Grants, to the National Student Loan Data System (NSLDS) using the National Student Clearinghouse. Students can access their information on the National Student Loan Data System (NSLDS), which may include federal student loan history of a student.

Availability of US Department of Education Resources

US Department of Education produces publications and multi-media to advise prospective and current students about federal student aid.

State of NJ Higher Education Student Assistance Resources

HESAA produces publications on the student aid programs it administers. The HESAA main web-site has sections for Students and for Parents: https://www.hesaa.org (https://www.hesaa.org/).

Non-Discrimination Policy

Essex County College prohibits sex discrimination in any education program or activity that it operates. Individuals may report concerns or questions to the Title IX Coordinator. The notice of non-discrimination is located at **https://www.essex.edu/notice-of-non-discrimination/.**



Financial Aid Checklist

To ensure that your student aid application is processed, please use this checklist as a guide:

- Applied and accepted for admission to Essex County College
- Submit the *Free Application for Federal Student Aid* (FAFSA®).
- Set up your NJ FAMS account, complete the state questions if they were not done on the FAFSA, and respond to any request for information from NJ HESAA.
- Set up and check your myECC portal account and ECC email account frequently. Promptly respond to any requests for information from our office.
- Register for classes. Be mindful of the impact of your registration level and student aid options.
- If you do not expect student financial assistance to cover all of your College charges, you may wish you consider enrolling in the College's deferred payment plan. See the Bursar's website for details.

Financial Aid Website

The Financial Aid Office website includes information on student aid for enrollment at ECC. It includes the *Financial Aid Counseling Tips for Students* (FACTS) publication, which provides counseling advice on the student aid process, policies and procedures. It also includes a list of financial literacy/education resources: http://www.essex.edu/fa.

Scholarships

ECC awards many scholarships to both returning and graduating students. There are three types of scholarships for returning students: presidential, international, and external donor scholarship.

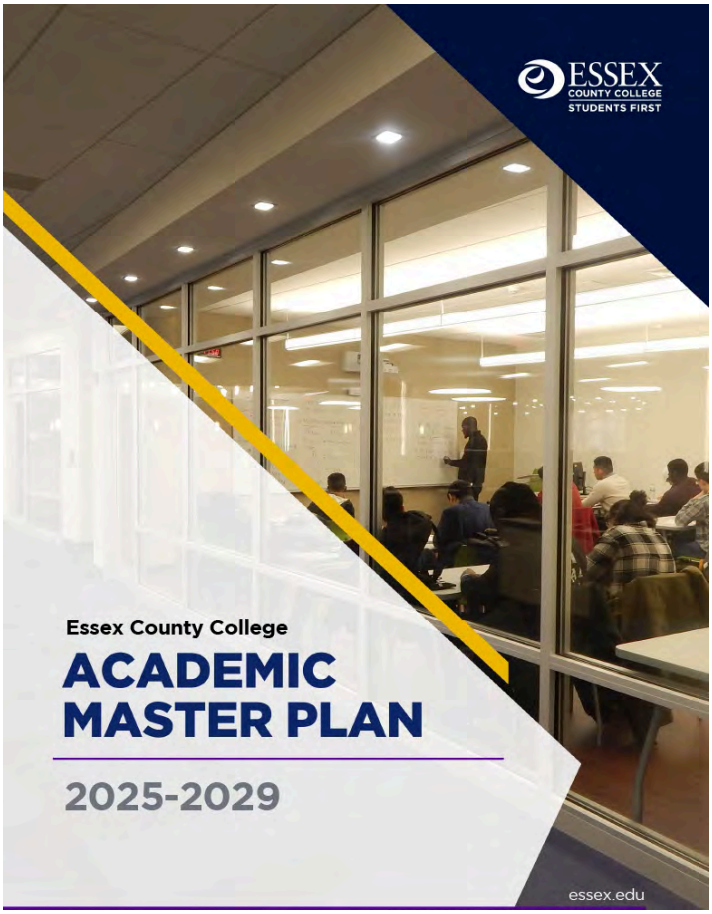
Returning students may apply for international or external donor scholarships. Presidential Scholarships are awarded by the President of ECC. Criteria for external donor scholarships vary from one type to another. Students receiving financial aid may not eligible for Presidential scholarships. External donor scholarships may be awarded based on a student's unmet financial need. Students must apply for scholarships 15 days prior to the last day of classes.

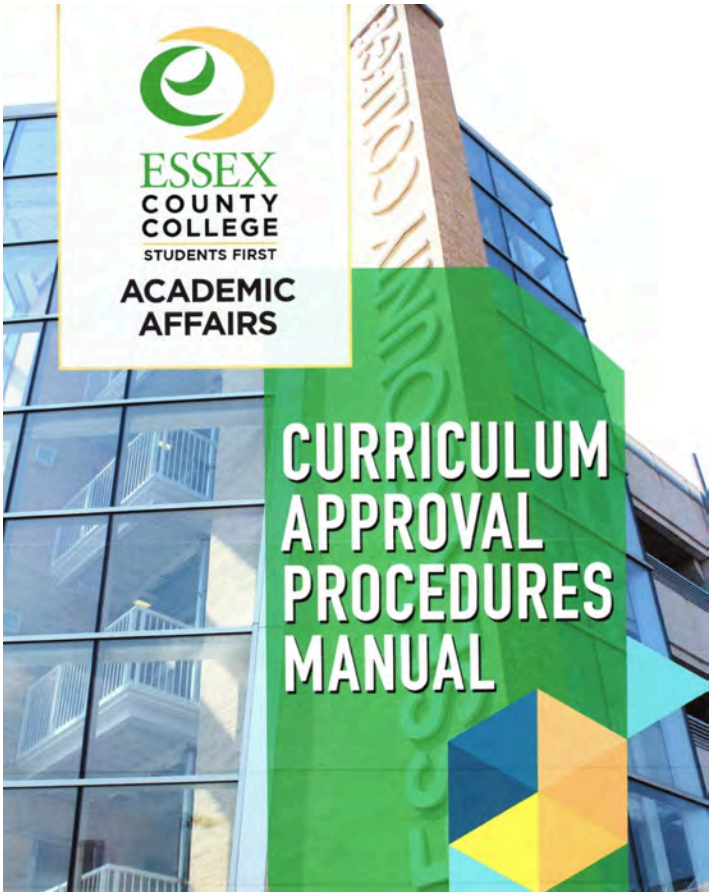
Graduating students may apply for transfer scholarships. Every year, organizations provide scholarships to graduating students from ECC who have been accepted as transfer students at 4-year colleges and universities. This category of scholarships does not exclude students on financial aid. See Types of Scholarships (http://www.essex.edu/scholarships/).



ACADEMIC POLICIES

academic master plan (https://www.essex.edu/wp-content/uploads/2025/10/Academic-Master-Plan.pdf)





- Academic Calendar (p. 161)
- Academic Standing (p. 164)
- General Education (p. 167)
- Grades (p. 171)
- Grade Point Average (p. 171)
- Graduation (p. 172)
- Academic Integrity (p. 174)
- Student Right-to-Know (p. 175)

Academic Calendar

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- Academic Calendar 2025 - 2026 (p. 161)
- Academic Calendar 2026 - 2027 (p. 163)

Academic Calendar 2025-2026 *

FALL 2025

Event	Notes	Date
Convocation 2025		August 25
Labor Day	College Closed	September 1
Fall I (15 Weeks) Start Date		September 2
Late Registration & Add/Drop (Fall I)		September 2 - 9
Last Day to Declare Course Audit (Fall I)		September 9

Fall II Registration		September 15
Fall II (10 Weeks) Start Date		October 1
Late Registation & Add/Drop (Fall II)		October 1 - 8
Columbus Day	College Closed	October 13
Last Day to Declare Course Audit (Fall II)		October 13
Last Day of Remove of Incomplete Grade from Spring 2025		October 24
Midterm Warnings Due to the Registrar (Fall I & Fall II)		October 27
Registration for Winter Intercession 2025-2026 & Spring I 2026		November 13
Last Day to Withdraw (W) from Fall I & Fall II Courses		November 18
WU Reporting Period (Fall I & Fall II)		November 19 - 21
Thanksgiving Holiday Weekend	College Closed	November 27 - 29
Fall I & Fall II End Date		December 20
Grades Due to the Registrar (Fall I & Fall II)		December 22
Winter Holidays Recess	College Closed	December 24 - January 2
	WINTER INTERSESSION 2025-2026	
Winter Intersession (10 Days) Start Date		December 23
Last Day to Withdraw (W) from Winter Intersession		December 26
Winter Intersession End Date		January 8
Grades Due to the Register (Winter Intersession)		January 9

SPRING 2026

Event	Notes	Date
Spring I (15 Weeks) Start Date		January 12
Late Registration & Add/Drop (Spring I)		January 12 - 16
Last Day to Declare Course Audit (Spring I)		January 16
Martin Luther King Jr. Day	College Closed	January 19
Spring II Registration		January 26
Spring II (10 Weeks) Start Date		February 9
Late Registation & Add/Drop (Spring II)		February 9 - 13
Last Day to Declare Course Audit (Spring II)		February 13
President's Day	College Closed	February 16
Last Day for Removal of an Incomplete Grade from Summer 2025		February 27
Mid-Term Warnings Due to the Registrar (Spring I & Spring II)		March 6
Registration for Summer I & Summer II 2026 and Fall I 2026		March 9
Last Day to Withdraw (W) from Spring I & Spring II Courses		March 27
WU Grade Reporting Period (Spring I & Spring II)		March 30 - April 2
Spring Holiday Weekend	College Closed	April 3 - April 4
Spring I & Spring II End Date		April 29
Grades Due to the Registrar (Spring I & Spring II)		May 1

SUMMER I 2026

Event	Notes	Date
Summer I (7 Weeks) Start Date		May 11
Late Registration & Add/Drop (Summer I)		May 11 - May 15
Last Day to Declare Course Audit (Summer I)		May 15
Memorial Day	College Closed	May 25
Last Day to Withdraw (W) from Summer I Courses		June 7
Commencement		TBD
WU Grade Reporting Period (Summer I)		June 8 - June 12
Last Day for Removal of an Incomplete Grade from Fall 2025		June 12
Juneteenth	College Closed	June 19
Summer I End Date		June 25
Grades Due to the Registrar (Summer I)		June 26
Summer Recess	College Closed	June 29 - July 3

SUMMER II 2026

Event	Notes	Date
Independance Day	College Closed	July 6
Summer II (6 weeks) Start Date		July 13
Late Registration & Add/Drop (Summer II)		July 13- 17
Last Day to Declare Course Audit (Summer II)		July 17
Last Day to Withdraw (W) from Summer II Courses		August 5
WU Reporting Period (Summer II)		August 6 - 10
Summer II End Date		August 20
Grades Due to the Registrar (Summer II)		August 24
Convocation 2026		August 24
Fall 2026 Start Date		September 2

***The Academic Calendar may be subject to change.**

Developed: 1/15/2025

Cabinet Approved: 2/5/2025

Academic Calendar 2026-2027 *

FALL 2026

Event	Notes	Date
Convocation 2026		August 24
Fall I (15 Weeks) Start Date		September 2
Labor Day	College Closed	September 7
Late Registration & Add/Drop (Fall I)		September 2 - 11
Last Day to Declare Course Audit (Fall I)		September 11
Fall II Registration Begins		September 21
Fall II (10 Weeks) Start Date		October 5
Late Registation & Add/Drop (Fall II)		October 5 - 9
Last Day to Declare Course Audit (Fall II)		October 9
Columbus Day	College Closed	October 12
Last Day for Removal of Incomplete Grade from Spring 2026		October 26
Midterm Warnings Due to the Registrar (Fall I & Fall II)		October 30
Registration for Winter Intercession 2026-2027 & Spring I 2027		November 9
Last Day to Withdraw (W) from Fall I & Fall II Courses		November 18
WU Reporting Period (Fall I & Fall II)		November 19 - 24
Thanksgiving Holiday Weekend	College Closed	November 26 - 28
Fall I & Fall II End Date		December 21
Grades Due to the Registrar (Fall I & Fall II)		December 22
Winter Holidays Recess	College Closed	December 24 - January 1
	WINTER INTERSESSION 2026-2027	
Winter Intersession (10 Days) Start Date		December 23
Last Day to Withdraw (W) from Winter Intersession		December 28
Winter Intersession End Date		January 8
Grades Due to the Register (Winter Intersession)		January 9

SPRING 2027

Event	Notes	Date
Spring I (15 Weeks) Start Date		January 11
Late Registration & Add/Drop (Spring I)		January 11 - 15
Last Day to Declare Course Audit (Spring I)		January 15
Martin Luther King Jr. Day	College Closed	January 18
Spring II Registration Begins		January 25
Spring II (10 Weeks) Start Date		February 8
Late Registation & Add/Drop (Spring II)		February 8 - 12
Last Day to Declare Course Audit (Spring II)		February 12
President's Day	College Closed	February 15
Last Day for Removal of an Incomplete Grade from Summer 2026		February 22
Mid-Term Warnings Due to the Registrar (Spring I & Spring II)		March 12
Registration for Summer I & Summer II 2027 and Fall I 2027		March 15

Last Day to Withdraw (W) from Spring I & Spring II Courses		March 26
WU Grade Reporting Period (Spring I & Spring II)		March 29 - April 2
Spring Holiday Weekend	College Closed	March 26 - March 27
Spring I & Spring II End Date		April 28
Grades Due to the Registrar (Spring I & Spring II)		April 30

SUMMER I 2027

Event	Notes	Date
Summer I (7 Weeks) Start Date		May 10
Late Registration & Add/Drop (Summer I)		May 10 - May 14
Last Day to Declare Course Audit (Summer I)		May 14
Memorial Day	College Closed	May 31
Last Day to Withdraw (W) from Summer I Courses		June 7
Commencement		TBD
WU Grade Reporting Period (Summer I)		June 8 - June 10
Last Day for Removal of an Incomplete Grade from Fall 2026		June 10
Juneteenth (Observed)	College Closed	June 18
Summer I End Date		June 24
Grades Due to the Registrar (Summer I)		June 25
Summer Recess	College Closed	June 28 - July 2

SUMMER II 2027

Event	Notes	Date
Independance Day (Observed)	College Closed	July 5
Summer II (6 weeks) Start Date		July 12
Late Registration & Add/Drop (Summer II)		July 12- 15
Last Day to Declare Course Audit (Summer II)		July 15
Last Day to Withdraw (W) from Summer II Courses		July 26
WU Reporting Period (Summer II)		August 2 - 5
Summer II End Date		August 19
Grades Due to the Registrar (Summer II)		August 23
Convocation 2027		August 23
Fall 2027 Start Date		September 1

***The Academic Calendar may be subject to change.**

Developed: 1/15/2025

Cabinet Approved: 2/5/2025

Semesters and Terms

The full Fall and Spring semesters are typically about 15 weeks long and include embedded 10-week sub-semesters. Winter Intersession runs for about 2 weeks between Fall and Spring. Summer terms are typically 6-8 weeks long. Students must enroll in at least 1 academic semester or term within a 3-year period to maintain active enrollment status. Academic period lengths are subject to change as circumstances require.



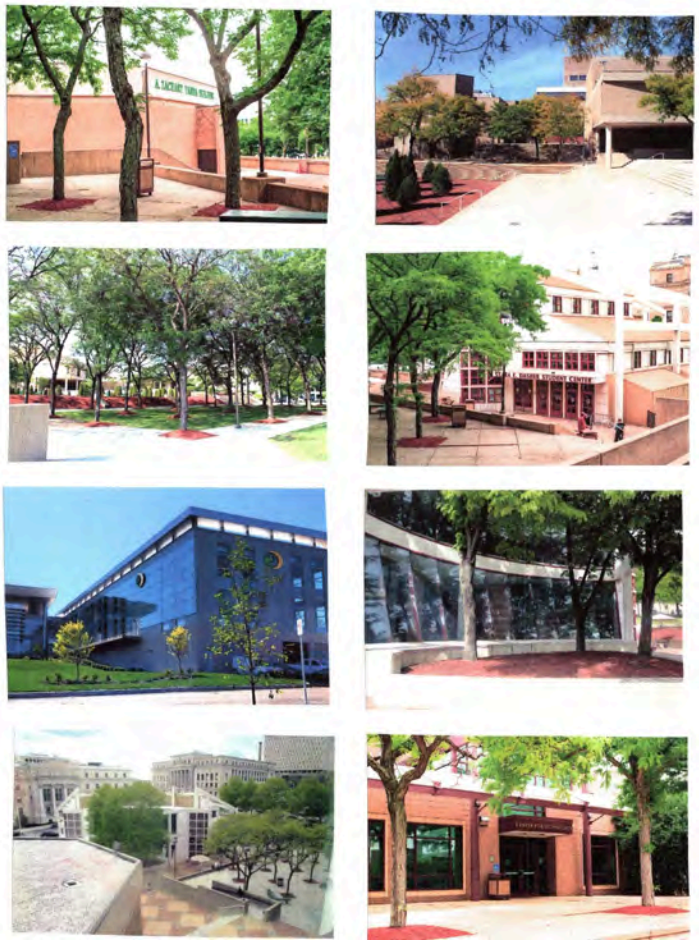
Academic Program Course Load

A normal course load for full-time students is 12-16 credits during a semester and 6-9 for a summer term. Students on an International Student Visa must be enrolled full-time, i.e., 12 or more credits per semester. Students wishing to take 16.5-18 credits in a given semester must have a Grade Point Average (GPA) of 3.0 or higher. Students wishing to take 19-21 credits in a given semester must have a GPA of 3.5 or higher, any such course load must be approved by a Divisional Chairperson. An Academic Dean must approve requests in excess of 21 credits.

Academic Standing

- Transfer Credit (p. 165)
- Credit by Examination (p. 165)
- Change of Major (p. 166)
- Repeating a Course (p. 166)
- Time Limits (p. 166)
- Academic Progress (p. 166)

- Attendance (p. 166)
- Academic Forgiveness (p. 167)



Transfer Credit

Credits transferred from other regionally accredited colleges and universities may be included in the total numbers of credits earned at ECC. In order to transfer, such credit must be related to courses and programs offered by ECC. Courses transferred from other institution of higher learning must carry the grade of "C" or higher. Grades of "D" may be accepted for transfer from NJ public colleges and universities in non-major course categories unless if a "C" grade is prerequisite for other required course(s). To graduate, transfer students must complete a minimum half of their major requirements and half their degree or certificate requirements at ECC. Credits from institutions not accredited by regional accredited agencies (e.g. Middle States) may not be accepted.

As courses at ECC are regarded as equivalent courses at other colleges and universities, such courses from other institutions, within specified criteria, shall be regarded as potentially transferable to ECC. All decisions with respect to transfer into ECC shall be based on the principle of equivalence of expectations and requirements for native and transfer students. Students who wish to transfer credits may be granted up to half the credits for their Associate degree or certificate, usually 30 and 15 credits respectively. Acceptance of transfer credits may exempt students from placement testing and/or from certain courses.

Most academic credits submitted from regionally accredited two- or four-year institutions of post-secondary education are accepted. However, not all credits are applicable toward all majors nor all program requirements. Generally, within specified criteria, credits should transfer seamlessly between institutions granted regional/institutional accreditation by the Council for Higher Education Accreditation (CHEA). Credit from institutions with other than regional accreditation is evaluated on a case-by-case basis. Credits from courses that are equivalent to or exceed requirements for ECC comparable requirements will generally be accepted.

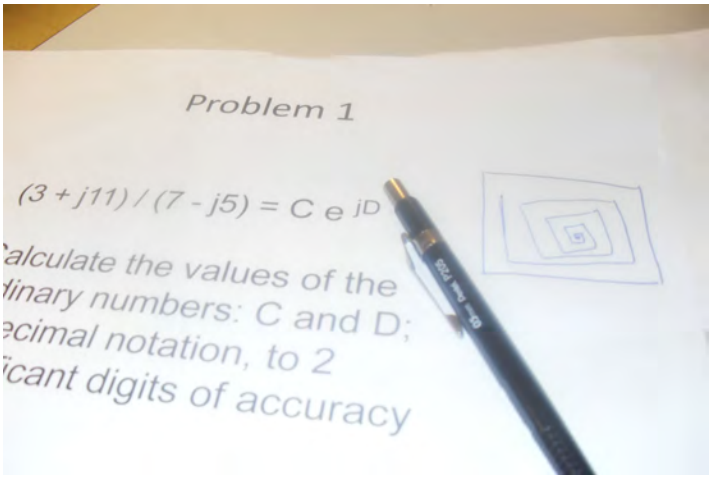
As a general principle, in accord with the NJ Comprehensive State-Wide Transfer Agreement, credits earned at a NJ community college that are approved and applicable under respective general education categories as listed under the State-Wide General Education Course Equivalencies, shall potentially be transferable to ECC toward an Associate degree or certificate and applicable to fulfill corresponding general education and other requirements at ECC. To determine which courses from NJ colleges and universities may meet transfer requirements, see NJ Transfer (www.njtransfer.org). Credit may also be granted after review of selected Advanced Placement (AP), College Level Examination Program (CLEP), and Defense Activity for Non-Traditional Education and Support (DANTES) records. Credits from international academic institutions may, within specified criteria, also be accepted after review from a recognized international academic credential evaluation organization, such as World Education Services, Inc. (www.wes.org). Developmental courses are generally considered non-transferable.

While transfer credits will appear on official academic transcripts, they are not calculated into the ECC grade point average. This permits students to start fresh and establish a new grade point average. However, grades received in transferred credits can be used to determine admission to certain programs and for certain other conditions of eligibility and recognition.

Credits from courses that are equivalent to or exceed requirements for ECC comparable requirements will generally be accepted. For example, a 4 credit course can be used to satisfy a 3 credit requirement, but not necessarily the reverse; or, three 1 credit courses can be used to satisfy a 3 credit free elective. All 100- to 400-level courses at two-year or four-year institutions that deal with the same subject matter can be accepted as equivalent to corresponding 100- and 200-level courses at ECC. Although by definition, 300- and 400-level courses at four-year institutions may not necessarily have course equivalents at community colleges, the reverse is not necessarily true. Courses without an exact ECC equivalent may also transfer with a 999 designation; but credits can be designated to fit more specific degree requirements if the academic unit considers it appropriate. English literature courses, for example, are potentially general education literature courses whether the home institution designates it as a 100- or 400-level course or even, perhaps if not as an English course per se.

Credit by Examination

ECC's Credit by Examination Program enables students with appropriate knowledge and experience to secure college credit. Credit will be granted to student admitted to ECC who pass examinations approved by Enrollment Services and appropriate academic departments. In some instances, it may not be possible to offer credit by examinations because no relevant test exists in certain disciplines. When granted, a grade of "CR" will be entered as transfer credit on each student's transcript.



Credit by examination may be granted for the Defense Activity for Non-traditional Education Support (DANTES) and the College Level Examination Program (CLEP) (https://clep.collegeboard.org/register). Students interested in applying for credit by examination should contact either Enrollment Service Express Center or the appropriate academic division.

Change of Major

To change a major, a student should discuss the prosed change with a counselor or faculty advisor, complete a Change of Major/ Curriculum Code form and return the signed form to the Enrollment Services Express Center or submit the change online. Graduation requirements will be those in effect at the time the student matriculates in the new major.

Students should ensure that any credits completed or accepted for transfer to ECC remain applicable to their new major requirements and also check if any non-accepted courses completed at a previous college could now be considered for transfer.

Repeating a Course

When a student earns a low grade, like a "D" or "F," they may repeat the identical course in an effort to earn a higher grade. Although the lower grade remains on the transcript, only the higher of the two grades will be calculated in the cumulative grade point average (CGPA). A student may choose to repeat a course to earn a better grade, to enhance their knowledge of course content, or to meet a program's time limit for acceptable courses. Previous grade remains on transcript only highest counts in CGPA. If a student receives an "M" grade, the student must repeat the course successfully or score sufficiently on appropriate retest before advancing to next level course.

Time Limits

ECC has no general time limit on the use of credits; except as defined by external accrediting organizations, such as the 5 year limitation of BIO 121 and 122 for Nursing (2104) majors. Accordingly, any credits ever completed by students at ECC are still potentially valid, even if only as electives. Faculty of respective degree or certificate programs may propose certain program specific conditions, which will be considered by appropriate shared governance committees and subsequent administrative review before implementation. Therefore, any courses that are no longer offered, nor contained in the catalog in effect at time of readmission and/or matriculation, are still potentially available to satisfy program requirements.

Academic Progress

Guidelines for academic progress and good academic standing include the following:

- **Good academic standing** is defined as a cumulative grade point average (GPA) of 2.0 or above. Students are advised that they must attain an overall GPA of 2.0 or above to graduate from ECC's degree or certification programs.
- **Probation** is defined as a cumulative combined GPA of less than 2.0. A student whose cumulative combined GPA goes below 2.0 is placed on academic probation.
- **Conditional Probation** is defined as a cumulative GPA of less than a 2.0 followed immediately by an academic period GPA of 2.0 or higher, but with the resulting new cumulative GPA still less than 2.0.
- **Suspension** (for one academic period) occurs when a student with a cumulative combined GPA of less than 2.0 earns a GPA of less than 2.0 in a successive term. A student who is suspended may appeal for reinstatement or may remain suspended for 1 academic period. A previously suspended student who attains a cumulative GPA of less than 2.0 will be dismissed.
- **Dismissal** from ECC occurs for 2 years when a student who after suspension achieves an academic period GPA of less than 2.0.

Students are responsible for ensuring that they complete all requirements of their degrees and certificates listed in the departmental handouts and the official College catalog. Students on Probation, Suspension, or Dismissal must get approval from a Counselor before registering for classes.

Financial Aid Students: Visit our website at https://www.essex.edu/fa/ to review the Academic Progress Policy for students receiving financial aid.

Attendance

Regular and prompt attendance is essential for academic success. Faculty members take attendance at each scheduled class session. Students are expected to attend and be on time for all classes. Individual faculty members may establish specific attendance policies and it is the responsibility of the student to know and follow attendance policies as required for each course. Insufficient attendance at regularly scheduled classes may negatively affect a student's final grade.

A student who is absent from all classes during the first ten class days of the fall and spring semester, or the first five days of the summer terms, will be recorded as a "No show". A withdrawal will appear on the student's record and the student will be notified of the "No Show" status in one or more courses, which may affect their eligibility for financial aid and veteran's benefits.

Students with irregular attendance, who have not officially withdrawn from a class, may be recorded as "Not in Attendance" and may receive a grade of "F" or, if they stopped attending and did not complete the course may receive a grade of "WU" (Withdrawal Unofficial). The WU will not be calculated into the grade point average, but the F will. These statuses may also affect their eligibility for financial aid and veteran's benefits.

Academic Forgiveness

Academic Forgiveness

The College's Academic Policies provide previously enrolled student who have been away from school at least three years and have successfully completed a minimum of 12 college level credits with a grade of "C" and above an opportunity to pursue a single "fresh start" at ECC. Under this policy, all courses together with grade earned prior to readmission will remain on the student's transcript but will not be used in computing the student's overall grade point average; neither can any of the previously taken course be used to fulfil degree or certificate requirements. The academic forgiveness policy also provides that a student may request the grade for a course no longer offered at the college be excluded from their cumulative grade point average. Applications must be made through an academic counselor who will review and discuss it with the student before submitting it to the chairperson of the division in which that course was originally housed. If approved by the chairperson, it is forwarded to the Chief Academic Officer.

General Education

GENERAL EDUCATION CORE COMPETENCIES AND GOALS

As part of Essex County College's mission, the College seeks to transform lives so that students can achieve a better future through education. Essex students are thus empowered to become agents of change in their own lives, in their communities and in the world. Mastery of the general education courses prepares students with critical thinking, writing, problem solving, research and analytical skills that lay the foundation for academic excellence. Essex's comprehensive core of general education courses is affirmed by the State of New Jersey. These courses ensure that no matter the degree chosen, all Essex students will graduate with a comprehensive academic perspective, as well as the more specialized knowledge of the major course requirements.

Essex County College firmly believes that broad-based knowledge best prepares students for further education at four-year institutions, as well as for the demands of a competitive marketplace and the global economy. Therefore, depending on the degree and major chosen, students may take a number of courses in the following categories:



General Education Core Competencies

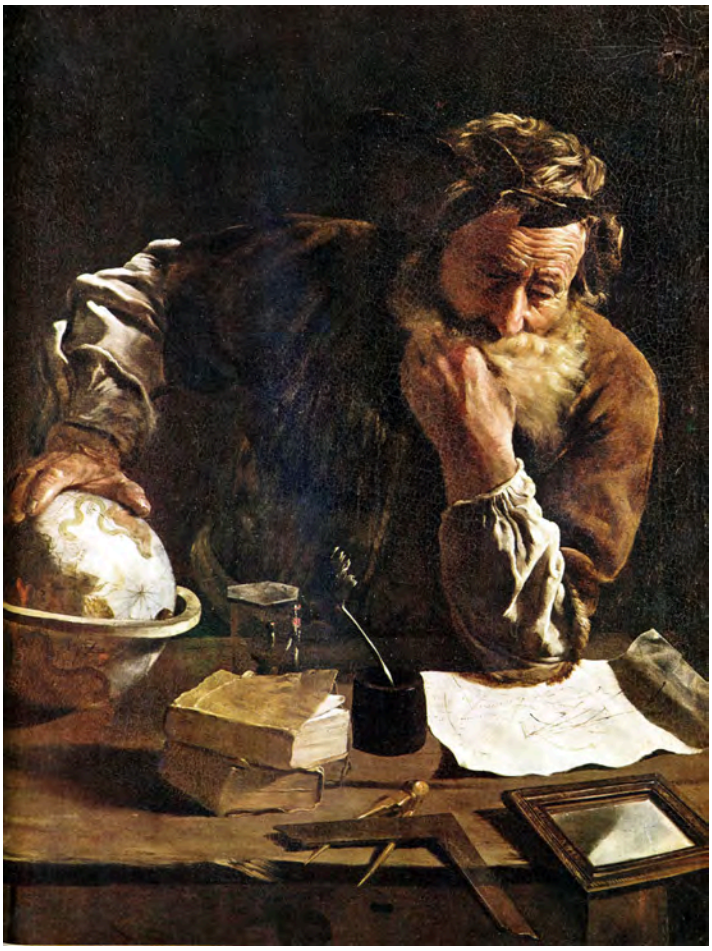
The following core competencies should, to the greatest extent possible, be embedded in all general education courses:

A. Written and Oral Communication in English:
Students will communicate effectively in oral, written, nonverbal, and visual media.



1. Students will read, write, illustrate, and listen actively, critically, and reflectively and respond logically, informatively, persuasively, and creatively.
2. Students will evaluate and revise their communication, writing and speaking clearly and effectively in standard formal American English with use of inclusive language.
3. Students will understand, analyze, and assess nonverbal, cultural, and gender communication in small group and public communication settings.

B. Critical and Ethical Thinking and Problem Solving:
Students will use critical thinking and problem-solving skills in analyzing information in an ethical manner.



1. Students will distinguish among opinions, facts, and inferences identifying and critiquing underlying and implicit assumptions.
2. Students will thoughtfully evaluate diverse perspectives and alternate points of view by asking informed questions and making informed judgments.
3. Students will solve problems by applying discipline-appropriate methods and standards.
4. Students will integrate their knowledge, take an ethical position on issues or situations, and defend their stance with logical arguments.

C. Information and Computer Literacy:

Students will recognize when data and information is needed and have the skills to locate, evaluate, and effectively use information for college-level work.

1. Students will recognize the value of using the information to strengthen arguments and articulate research project questions.
2. Students will identify resources and construct strategies for locating information and data to answer research project questions in their particular study fields, possibly using web search engines and data analysis tools.
3. Students will understand factors that affect the quality of data and information and extract pertinent information needed for specific research questions and integrate it cohesively.
4. Students will respect the privacy, security, and ownership of data and information they use, including ethical considerations focusing on avoiding plagiarism.
5. Students will demonstrate media literacy by accessing, analyzing, and evaluating messages in various media modes, genres, and forms with an appreciation of the impacts of technologies on societies.

D. Collaboration, Cooperation, Intra-Cultural, and Inter-Cultural Responsibility:

Students will demonstrate interpersonal skills required for effective performance and understand the privileges and responsibilities of being a citizen in diverse and pluralistic societies, both locally and globally.

1. Students will demonstrate communication skills that promote effective functioning and interpersonal relations with individuals and groups, including effective cross-cultural communication.
2. Students will employ strategies, like brainstorming, role playing and consensus building, which promote productive and supportive interpersonal interaction in individual and group settings.
3. Students will demonstrate understanding of the behaviors and beliefs of different social groups with pluralistic societies, including those based on culture, ethnicity, race, religion, creed, disability, marital status, national origin or ancestry, age, gender, socio-economic status, and sexual orientations.

General Education Goals

Goal 1. Written and Oral Communication in English:

Students will communicate effectively in both speech and writing.

1.1 Students will read, write, and listen actively, critically, and reflectively.

1.2 Students will logically, informatively, persuasively, and creatively respond orally and/or in writing to what they read, hear, and see.

1.3 Students will evaluate and revise their written and/or oral communication.

1.4 Students will write and speak clearly and effectively in formal standard English.

1.5 Students will understand, analyze, and assess nonverbal, cultural, and gender communication in both small group and public communication settings.

Goal 2. Mathematics:

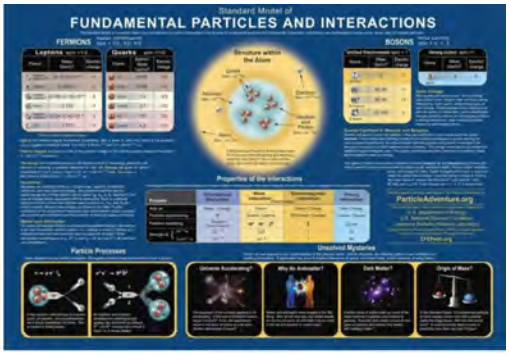
Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

2.1 Students will develop graphical, numerical, analytical and verbal models to describe quantitative relationships that exist in the world and communicate these concepts effectively.

2.2 Students will investigate and interpret these models using the mathematical skills, tools and reasoning appropriate to each type of model.

2.3 Students will draw logical conclusions by applying a variety of mathematical problem-solving strategies.

2.4 Students will demonstrate an understanding that mathematics is a precise language that is used to solve complex problems in many disciplines.



This chart of the particles and interactions details how the particles of the Standard Model interact according to the three fundamental forces that Quantum Field Theory describes. When gravity is added into the mix, we obtain the observable Universe that we see, with the laws, parameters, and constants that we know of governing it. Mysteries, such as dark matter and dark energy, still remain.

(Credit: Contemporary Physics Education Project/DOE/SNF/LBNL)

Goal 3. Science:

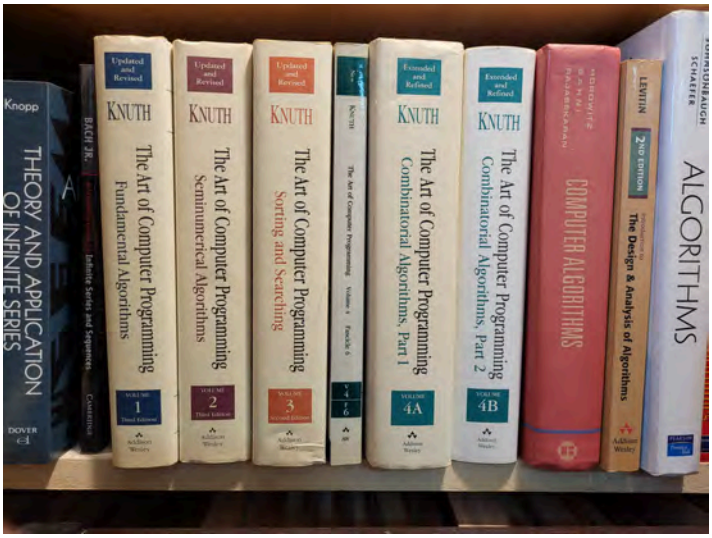
Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

3.1 Students will apply the scientific method of inquiry to solve problems utilizing critical thinking techniques to reason, listen, follow directions, make observation, and draw conclusions based on verifiable evidence by converting word problems to the appropriate mathematical language.

3.2 Students will use scientific theories and knowledge to understand the Natural Sciences and assess the impact of scientific theories, discoveries, and technological changes on society.

3.3 Students will integrate scientific principles and scientific discovery, and will critically investigate the impact of science and scientific discovery on our understanding of the natural universe.

Goal 4. Technology or Information Literacy:
Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.



4.1 Students will demonstrate proficiency with electronic communications as appropriate to academic and professional use.

4.2 Students will demonstrate the ability to use a particular technology or group of technologies to analyze or solve problems.

4.3 Students will demonstrate proficiency in the proper use of interfaces, files, essential productivity software, web browsers and search engines.

4.4 Students will describe accurately and analyze the impact computer technology has on modern society.

4.5 Students will explain the social and ethical issues surrounding a particular technology or group of technologies and articulate their opinions about such issues using written and oral communication.

4.6 Students will gather information from various resources, search tools, and strategies, evaluate and analyze that information, and then select information and use it correctly to answer a research question.

4.7 Students will respect the privacy, security and ownership of the information they locate and use, recognizing and honoring the ethical considerations relevant to data and information use with a particular focus on eliminating plagiarism.

4.8 Students will demonstrate competencies in utilizing computing devices and software skills to command programming languages to take advantage of education, information, and cultural opportunities in digital societies.

Goal 5. Social Science:
Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.

5.1 Students will critically evaluate behavioral or societal issues using theories and concepts from a social science perspective.

5.2 Students will analyze and appreciate how social and political institutions and organizations influence individual development and behavior.

5.3 Students will demonstrate an understanding of the ways social scientists gather, analyze data, integrate knowledge, and draw conclusions.

Goal 6. Humanities
Students will analyze scholarly works in the fields of art, music, or theater; literature; philosophy and/or religious studies; and/or will gain competence in the use of a foreign language.



6.1 Students will interact with texts, performance and visual media, demonstrating an awareness of significant themes and their contexts. They will analyze themes and contexts, while articulating their connections, meanings and values to self, society, and others.

6.2 Students will draw upon the visual, literary and performing arts and/or the study of philosophical and religious systems of thought and practice in order to expand their understanding of cultural, historical, and intellectual imagination.

6.3 Students will critically engage and use project-based learning to demonstrate an awareness of and critically engage with a range of historical and contemporary performances and visual and literary works and the approaches commonly used to analyze them.

6.4 Students will demonstrate communicative competence in a language other than English and their own and show appreciation of that added language's cultural and historical context.



Goal 7. History:

Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.

7.1 Students will demonstrate an understanding of the causes of major historical events and analyze the impact of those events on a nation or civilization.

7.2 Students will critically interpret primary and secondary historical documents and critically evaluate the influence of perspective, time, and culture on the writer's point of view.

7.3 Students will explain major ideas, movements, and technological discoveries, and their impact on western, world, and American society.

Goal 8. Diversity and Global Perspective:

Students will understand the importance of a global perspective and culturally diverse peoples.



8.1 Students will link culture, its practices and perspectives, with its geographical and/or historical conditions.

8.2 Students will analyze how the differences in people's backgrounds are important to U.S. society and the global community.

8.3 Students will identify and evaluate the consequences of prejudicial attitudes and discriminatory actions.

8.4 Students will analyze the impact of globalization on the economic and political structures of various nations and cultures.

8.5 Students will demonstrate an understanding of the behaviors and beliefs of different social groups within a pluralistic society.

The Following Charts have been extracted from the New Jersey Council of County Colleges (NJCCC), November 2024, Comprehensive List of General Education Courses at all New Jersey County Colleges. It displays all currently approved General Education Courses at Essex County College, where the eight Categories in the Chart refer to those specified by the NJCCC.

General Education Courses at Essex County College
List Updated by NJCCC November 2024

1. Written & Oral Communication: this category is "locked" and includes Comp I, Comp II, and Oral Communication	
Comp I	ENG 101
Comp II	ENG 102
Technical Wrtg-AAS only	ENG 105
Interper./Oral CM	ENG 109
2. Mathematics: all courses that build on algebra	
Intro Coll Math	MTH 100
Concepts Math	MTH 103
Coll. Algebra	MTH 113
Technical Math-AAS Only	MTH 109
Precalc	MTH 118
Precalc I	MTH 119
Precalc II	MTH 120
Discrete Math	MTH 136
Calculus & Differential Equations	
Unified Calc	MTH 114
Calc I	MTH 121
Calc II	MTH 122
Unified Calc II	MTH 213
Calc III	MTH 221
Differential Equat	MTH 222
Basic Calculus	MTH 127
Linear Algebra	MTH 239
Math: Statistics	
Elem. Stats	MTH 101
Elem. Stats II	MTH 102
Mathmtcl Stats	MTH 141
3. Science: Any course in the biological or physical sciences that provides scientific principles; no professional courses	
Biology	
College Bio I	BIO 101
College Bio II	BIO 102
General Bio I	BIO 103
General Bio II	BIO 104
Fund. A&P	BIO 116
A & P I	BIO 121
A & P II	BIO 122
Microbiology	BIO 211
Genetics	BIO 237
Earth Science, Ecology & Environment	
Environ Science	BIO 220
Meteorology	PHY 114
Astronomy	PHY 113
Geology I	GEO 101
Geology II	GEO 102

General Education Courses at Essex County College
List Updated by NJCCC November 2024

Chemistry	
College Chem	CHM 101
College Chem II	CHM 102
General Chem I	CHM 103
Gen Chem II	CHM 104
Physics	
Concept. Physics	PHY 105
Physics I	PHY 101
Physics II	PHY 102
General Physics I	PHY 103
General Phys II	PHY 104
4. Tech/IL: common computer skills needed to access, process, and present information; not limited to one application, language, or program.	
Fund'ls of Comp Sci	CSC 100
Computer Literacy	CIS 107
Understd Microcomps	CIS 131
Information Literacy Skills	ILS 101
5. Social Science: introductory courses from anthro, econ, geography, political sci, psych, or soc; course not designed for a program or major; history courses excluded from this category	
Cultural Anthro	ANT 101
Physical Anthro	ANT 105
Macroecon	ECO 101
Microecon	ECO 102
Political Science - American Government, International Relations, Comparative Government, Political Theory	
Intro to Politics	POL 101
Amer Gov't	POL 104
Gen. Psych	PSY 101
Intro to PSY II	PSY 102
Child Psych	PSY 219
Sociology	
Prpls of Soc	SOC 101
Soc of Family	SOC 219
Social Problems	SOC 108
6. Humanities: broad-based courses in appreciation of art, music, of theatre; literature; foreign language; history; philosophy and religious studies	
Art Appreciation	ART 100
Art History I	ART 101
Art History II	ART 102
African Amer Art	ART 200
Music: appreciation and historical surveys; performance-based courses not accepted for General Education	
Music Apprec	MUS 100
Music World's Peoples	MUS 110
Music His I	MUS 108
Jazz Apprec	MUS 109
Black Contribs to Mus	MUS 117
Theater/Cinema: appreciation and historical surveys; performance-based courses not accepted for General Education	
Intro to Cinema/Film	CIN 101
History African-Amer Film	CIN 103

General Education Courses at Essex County College
List Updated by NJCCC November 2024

Literature: broad-based surveys of major genres, geographical areas, ethnic, social, and cultural groups	
Amer Lit I	ENG 221
Amer Lit II	ENG 222
West. Lit Trad	ENG 205
Mod Lit Misterpc	ENG 215
Intro Poetry	ENG 254
Intro Drama	ENG 250
Intro Novel	ENG 256
Lit & Film	ENG 225
Afr & Carib Lit	ENG 232
Intro Theater	ENG 250
Shakespeare	ENG 208
Afric Amer Lit	ENG 237
Black Lit in Amer	ENG 238
Women's Lit	ENG 263
Contemp Wom's Lit	ENG 264
Survey of Modern Biography	ENG 290
Latin Amer Lit	ENG 242
Science Fiction	ENG 275
Philosophy	
Intro Probs in Phi	PHI 101
Religious Studies	
Comparative Religion	REL 105
Foreign Language: all courses in target language accepted; conversation at the intro level, language acquisition for specific professions, literature in translation and "topics" courses not accepted for Gen Ed	
Arabic I	ARB 101
Arabic II	ARB 102
French I	FRN 101
French II	FRN 102
Intermed Fr I	FRN 201
Intermed Fr II	FRN 202
Italian I	ITL 101
Italian II	ITL 102
Spanish I	SPA 101
Spanish II	SPA 102
Intermed Span I	SPA 201
Intermed Span II	SPA 202
7. History: broad-based course in World, Western, non-Western or American History	
Western Civ I	HST 101
Western Civ II	HST 102
U.S. HIS I	HST 111
U.S. HIS II	HST 112
World Civ I	HST 101
World Civ II	HST 102
Mod Eur to FrRev	HST 161
Mod Eur Sin FR	HST 162

General Education Courses at Essex County College
List Updated by NJCCC November 2024

African Hist I	HST 134
African Hist II	HST 135
Asian Civ I	HST 136
Asian Civ II	HST 137
Latin Amer I	HST 131
Latin Amer II	HST 132
Afric Amer His I	HST 121
Afric Amer His II	HST 122
His of Amer Immigration	HST 206
Wom in US HIS	HST 204
Islam & the Black Experience	HST 205
Genocide & Holo	HST 208
8. Diversity: primary purpose is to expose students to a multicultural society or people; non-introductory languages allowed	
Cultural Anthro	ANT 101
Physical Anthro	ANT 105
Appreciation of Art	ART 100
Art History I	ART 101
Art History II	ART 102
Afric-Amer Art	ART 200
African-Amer Film	CIN 103
World Civ I	HST 101
World Civ II	HST 102
Latin Amer His I	HST 131
Latin Amer His II	HST 132
Afric Amer His I	HST 121
Afric Amer His II	HST 122
African History 1	HST 134
African History 2	HST 135
Genocide & Holocaust	HST 208
Asian History 1	HST 136
Asian History 2	HST 137
HIS Amer Immig	HST 206
Islam and the Black Experience	HST 205
Women in Amer. H	HST 204
Jazz Appreciation	MUS 109
Western Lit Survey	ENG 205
Afric-Amer Lit	ENG 237
Black Amer Writers	ENG 238
African & Carib Lit	ENG 232
Women in Lit	ENG 263
Women as Author/Lit by Women	ENG 264
Contemporary Lit	ENG 215
Latin Amer Lit	ENG 242
Black Contribs to Music	MUS 117
Music of World's Peoples	MUS 110
Compar Relig	REL 105
Death & Dying	SOC 207
Psych of Sexuality/Human Sex	PSY 232
Soc Black Cmty in Amer	SOC 205

Grades

- Grading System (p. 171)



Grading System

Quality Points Per Letter Grade

	Description	Point Value
A	Superior	4.0
B+	Very Good	3.5
B	Good	3.0
C+	Above Average	2.5
C	Satisfactory	2.0
D	Passing	1.0
F	Failing	0.0
I	Incomplete	0.0

Grades of "D" may not fulfill certain course prerequisites and major course requirements and may not transfer to other institutions, but otherwise they may not need to be retaken.

Incomplete Grade denotes student has completed 75% of assigned course work with a grade of C or better but did not complete all course requirements. The faculty member must attach completed ECC Change of Grade Form if work is completed with the agreed timeframe. After 6 months, the "I" will be recorded as an "F."

The following grades are not calculated in the GPA:

	Description	Point Value
AU	Audit	0.0
CR	Credit	0.0
M	Making Progress (insufficient to move to the next level)	0.0
N	Not Attending	0.0
NC	No Credit	0.0
NG	No Grade received	0.0
P	Passing	0.0
R	Repeat	0.0
S	Satisfactory	0.0
T	Tutorial	0.0
U	Unsatisfactory	0.0
W	Withdrawal	0.0
WU	Withdrawal Unofficial	0.0

Grade Point Average

Academic achievement during a semester or term is measured by a student's grade point average (GPA). The measure of academic achievement for all work completed is referred to as the cumulative Grade Point Average (CGPA).

A semester GPA is determined in the following way:

1. Allowing 4 points for an A, 3.5 points for a B+, 3 Points for a B, 2.5 points for a C+, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of semester hours for the course, thus arriving at the grade points earned for each course.
2. Add the grade points in each course to obtain the sum of grade points for the semester's work.
3. Divide the total grade points by the total number of semester hours attempted to calculate the semester grade point average.

The following example illustrates the GPA of a student with grades in five courses.

Course	Grade	Semester Hours	Points Equivalents	Total Points
Biology	B	4	3.0	12.0
Math	C	3	2.0	6.0
English	C+	3	2.5	7.5
Sociology	C	3	2.0	6.0
Business	B	3	3.0	9.0
Total		16		40.5

40.5 (total grade points) divided by 16 (semester hours attempted) = 2.53 GPA

The CGPA is calculated in the same way as the semester GPA except that all attempted semester hours are taken into account. The student's CGPA will include only those courses taken at Essex County College.

Grade Reports

Final grades are recorded as part of each student's permanent academic transcript. Midterm grade warnings are issued to students whose work is unsatisfactory, but are for advisory purposes only and are not part of student's permeant academic transcript.

Students can view grades online at https://webservice1.essex.edu/.

Grade Changes- Time Limit

All approved grade changes must be submitted to the Enrollment Services Express Center (Registrar's Office) within one year of the Original grade assignment.

Class Standing

A freshman is defined as a matriculated student working toward a degree who has earned 29.5 or fewer college-level credits. A sophomore is

defined as a matriculated student working toward a degree who has earned 30 or more college-level credits.

Dean's List

A Dean's List is published every semester. Full-time students named to this list must have earned a grade point average of 3.5 or higher in that semester, no "I" grade and any grade lower than "C" for the semester in which the student is named. Only college-level courses are computed. Part time student are also eligible. To qualify, part time students must also have earned a 3.5 or higher grade point average, no grade of "I", no grade lower than "C", and at least 12 college-level credits within a given academic year.

Transcripts

A Transcript is the student's permanent academic record. Students can access their Transcript online via *webservices.essex.edu.*

Official Transcripts are directly sent to other colleges or third parties, upon written request and authorization by the student.

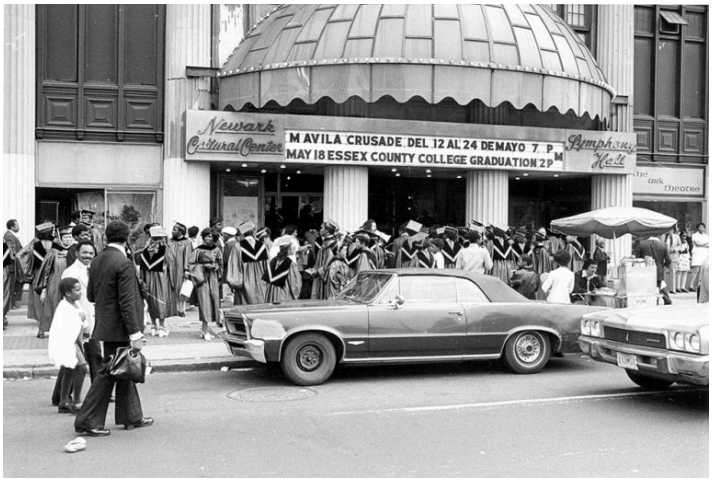
A Transcript fee is charged to current and former students for each Transcript generated.

Transcripts will not be issued until all outstanding obligations to the College are satisfied.

Graduation

- Degree Students (p. 172)
- Certificate Students (p. 173)
- Graduation Requirements (p. 173)
- Graduation with Honors (p. 173)
- Commencement (p. 173)





Degree Students

Upon completion of 40 credits, currently enrolled and matriculated students receive degree audits to determine compliance with the requirements in their primary major. Students who are approved for a second major should file a Degree Audit Request Form at the Enrollment Services Office during their final semester.

Graduation with an Associate degree requires completion of all required coursework; completion of the **FYE 097 First Year Experience course (2 Credits)**; CGPA of 2.0 or higher; grades of "C" or better in required courses in the major course category; at least half the total of required credits taken at ECC; at least half of the total required major course credits taken at ECC; and, all monies owed to the college to have been paid.

Students wishing to pursue a second degree should meet with the Chair of the major for the second degree and complete an "Application for Second Degree" form if approved indicating which major is primary and which is secondary, which must also be approved by the Academic Dean or Chief Academic Officer, who will forward it to the Registrar. Second degree students must complete a Degree Audit Request form in Enrollment Services immediately during their final academic period. However, a student who earns a degree in a given program cannot subsequently earn a degree in a similar program without taking additional course work. A student has not been approved for a second degree until the Registrar issues an official notification.



Certificate Students

Graduation with a certificate requires completion of all required coursework; CGPA of 2.0 or higher; grades of “C” or better in required courses in the major course category; at least half the total of required credits taken at ECC; at least half of the total required major course credits taken at ECC; and all monies owed to the college have been paid. Students in a certificate program should file a Certificate Audit Request form at Enrollment Services during their final semester. Students may earn multiple certificates, credits used to satisfy requirements for one certificate can be used to satisfy requirements for other certificate and degree programs. However, a student who earns a degree in a given program cannot subsequently earn a certificate in the same program without taking additional course work.

Graduation Requirements

Students who have successfully completed all requirements for degree and certificates will be graduated from the College. Students are governed by graduation requirements in effect at the time of their matriculation or readmission if applicable. Credits transferred from other colleges and universities or earned by examination will be included in the total number of credits earned.



Graduation with Honors

Students will be graduated with honors as follows:

Highest Honors	CGPA 3.85 to 4.00
High Honors	CGPA 3.65 to 3.84
Honors	CGPA 3.50 to 3.64

These honors will be noted on students’ transcripts.

Commencement

An annual commencement (Graduation) ceremony is usually held in late May or early June. Students who have completed degrees and academic certificates with 30 or more credits will be invited to participate in the annual commencement ceremonies. Students completing their certificate or degree requirements during the first summer term will be permitted to participate in the annual commencement.





Academic Integrity

Essex County College's trustees, faculty, and administrators are dedicated to mutual respect and the free exchange of ideas in classroom, laboratory, and other academic settings. Students who enroll at ECC join with these other individuals in adherence to guidelines regarding free inquiry, academic honesty, and civility in the classroom and related forums.



The College's administration recognizes the common interest of faculty and students in the pursuit of the truth and understanding This includes the right to present and the obligation to receive divergent views when legitimate intellectual differences exist.

Students are advised that their obligations in this respect include but are not limited to the following:

- To present only such homework assignments, term papers, examination papers, etc. that are the results if their own work;
- To honestly pursue research and scholarship by acknowledging sources used in term papers and other assignments;
- To never fabricate sources and data;
- To practice fairness in competing with peers through recognition of others' rights to gain access to information and materials, respect for others' right to access to facilities and equipment, and adherence to rules governing their use;
- To accurately represent the results of experimental, survey, and other findings; and
- To respect the rights of others to hold differing views based on reason, research, and recognized standards of evidence.

Moreover, any theft or alteration of academic materials, or the destruction of the academic work of others, constitutes a serious breach of academic integrity. In the case of an alleged infraction, the appropriate divisional chairperson will handle the matter and if necessary initiate formal charges with an Academic Dean or Chief Academic Officer.

Artificial Intelligence Tools Statement

Artificial Intelligence (AI) resources may be used by students if an assignment clearly states that is it an acceptable option or if the instructor explicitly permits it in the syllabus. In such cases, a student may only use the specific tools identified as acceptable and they must adhere to the College's standards for attribution, validation and

transparency. This means the student must (1) fully document all material not generated by them, (2) check AI generated information and take full responsibility for its accuracy and (3) identify where and how they used any AI tools and how they contributed to their work.

Assessment may focus on how the student improved on and surpassed the initial AI contribution. Usage of any AI tools without permission is unacceptable and will be considered an academic integrity violation - an act of plagiarism which can result in the failure of the assignment. If a student has any doubts about what is acceptable, please discuss them with the class instructor. The College is actively securing software that detects the usage of Artificial Intelligence Tools.

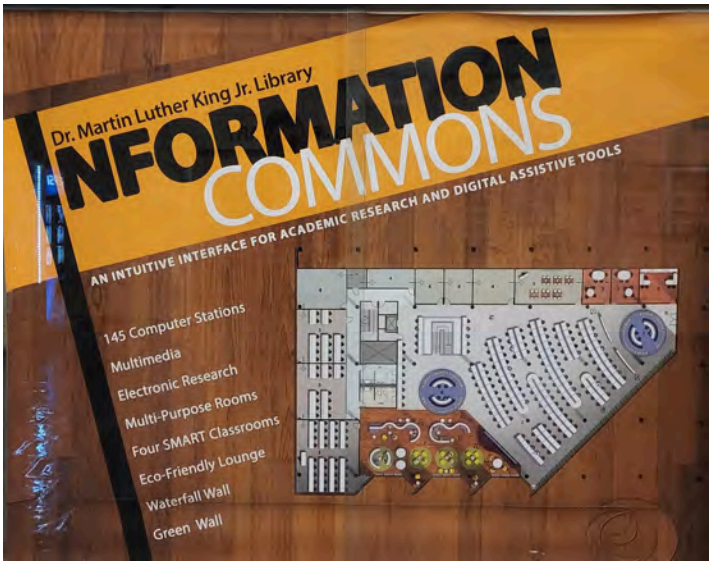
Student Right-to-Know

Students are advised that graduation rates and time to graduation by programs are available from the Office of Institutional Effectiveness, Planning and Assessment. Graduation rates for student athletes on scholarships are available from the Dean of Students Affairs Office.



SERVICES FOR STUDENTS

- Academic Support Services (p. 177)
- Student Development and Counseling (p. 178)
- Office of Retention and Academic Advisement (p. 184)
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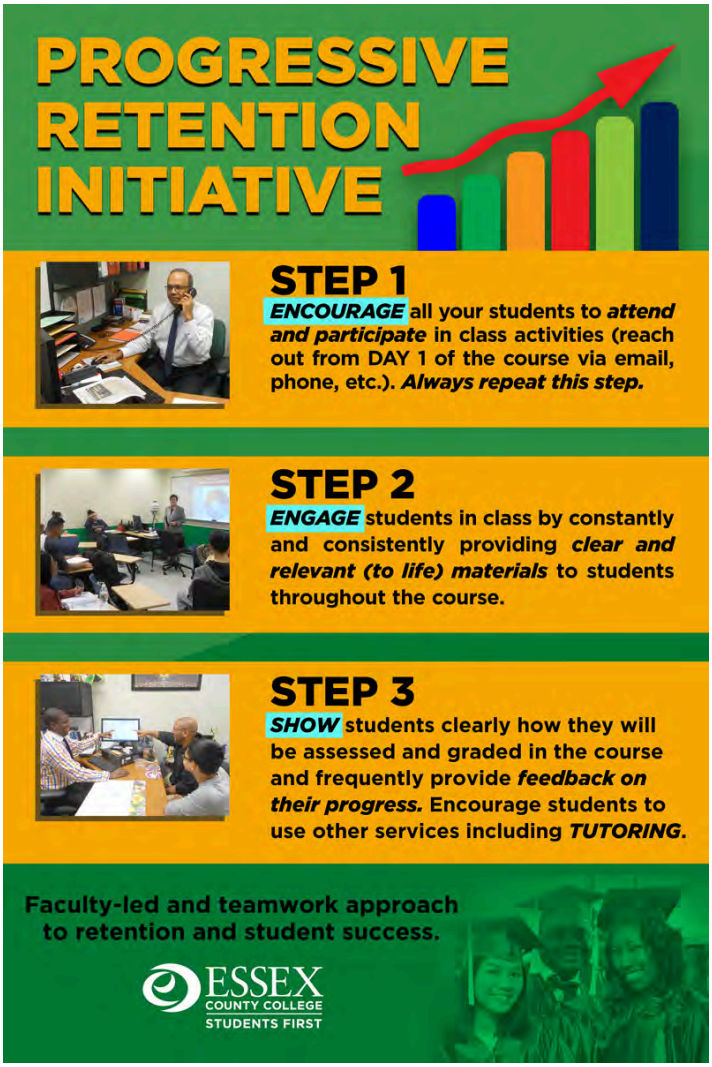






Academic Support Services

- Academic Advisement (p. 178)









Academic Advisement

Before the beginning of each semester, matriculated students are encouraged to meet with a faculty advisor in his/her major area or counselor to select appropriate courses. Students are urged to meet with their advisor or counselor each semester in order to review plans and progress-to-date, as well as course load and schedule. Curriculum guides (list of required courses for each program) are available in academic departments, in Student Development and Counseling, and online. Students are responsible for ensuring they complete all requirements for their degrees and certificates listed in these guides and in the College catalog.

Also see About Academic Divisions section for complete set organized by division.



Student Development and Counseling

The Office of Student Development and Counseling provides Counseling, Disability Services, a Career Resource Center, Federal Work-Study Placement, and Transfer Services.


ESSEX COUNTY COLLEGE STUDENTS FIRST
STUDENT DEVELOPMENT & COUNSELING
The Office of Student Development and Counseling offers
ACADEMIC COUNSELING
Get help planning your courses, staying on track for graduation, and improving study skills.
MENTAL HEALTH COUNSELING
Confidential support for stress, anxiety, or personal challenges to promote well-being.
DISABILITY SERVICES
Accommodations and resources to ensure equal access to learning for students with disabilities.
CAREER SERVICES
Explore career options, build your résumé, and prepare for interviews and internships.
TRANSFER SERVICES FOR GRADUATING STUDENTS
Guidance on transferring credits and preparing to continue your education at a four-year college.
Location: Room 4122 (4th Floor - Newark Campus)
For Information Contact
Office of Student Development and Counseling (SDC)
(973) 877-3350
studevcounselor@essex.edu


ESSEX COUNTY COLLEGE STUDENTS FIRST
STUDENT DEVELOPMENT & COUNSELING
LINKEDIN PROFESSIONAL HEADSHOT
• Students will receive free Professional Headshots.
Note: Please wear professional clothes for your headshot photo.
Date:
Friday, November 21, 2025
Time:
1:00 PM - 4:00 PM
Location:
Room: 3130 (3rd Floor)
Media Production & Tech
Contact Us:
Ms. Shirlgandy Saint Jean
Director of Student Development and Career Services
973-877-3399
ssaintj2@essex.edu
ESSEX COUNTY COLLEGE STUDENTS FIRST





- Counseling (p. 181)
- Career Resource Center (p. 181)
- Disability Support Services (p. 181)
- Center for Adult Transition (p. 183)
- Transfer Advisement (p. 183)



Counseling

Students who would like assistance with academic and personal concerns may visit the Office of Student Development and Counseling in Room 4122 to receive counseling regarding both academic and personal matters. The office's professionally trained Counselors are available to help students to understand College academic programs, requirements and procedures step-by-step. Students will also receive assistance with self-improvement goals, study and test-taking skills, time management, personal issues, and career related decision-making. No appointment is necessary and students may come to Room 4122 on a walk-in basis to see a Counselor. The main office may be reached at (973) 877-3350.



Career Resource Center

Students may successfully get onto their career path by using the services of the Career Resource Center (CRC) located in the Office of Student Development and Counseling in room 4122. There students can take a career assessment, explore career options, discover which majors match their career profile, learn about job skills, as well as prepare a resume and cover letter to highlight their education and experiences. To prepare for internship and job interviews students may go through a mock-interview and networking simulation. The CRC provides a presentation at New Student Orientation, career planning presentations for classes, employer tabling recruitment events, employer information panels, and mini-career fairs as well as career exploration field trips to prepare students for career opportunities. The main office may be reached at (973) 877-3350 or by email at crc@essex.edu.



Disability Support Services

ECC welcomes students with disabilities into all of the College's educational programs. It is the policy and practice of the college to promote inclusive learning environments. If a student has a documented disability, they may be eligible for reasonable accommodations in compliance with college policy, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and/or the NJ Law Against Discrimination. Please note, students are not permitted to negotiate accommodations directly with professors, Chairpersons, and Deans. To request accommodations or assistance, a student must self-identify with the Office of Student Development and Counseling, Coordinator of Disability Services. The Coordinator of Disability Services is available on the main campus in Room 4122 and may also be reached by telephone at 973-877-3071 or by email at disability@essex.edu.



Accommodations

Academic accommodations should be reasonable and individualized. Some faculty have expressed concerns that they are receiving accommodation letters for students that stipulate double-time for examinations and completion of other assignments. They find this troubling with respect to maintaining academic standards.

What is an Accommodation

A reasonable accommodation is a modification in the way that something is done that is acceptable to both the institution and the student. An accommodation is a different way to do a particular task. An accommodation must also be necessary for the student to perform well and does not change the nature of the expectations of the course. It is important to make sure that all accommodations are "reasonable" in nature, otherwise the institution will have the right to refuse what is requested. For instance, requesting the use of a calculator in a remedial mathematics class that is based on computation would not be reasonable. An accommodation could, for example, include allowing a student with a disability to tape record lectures instead of taking notes.

According to the Americans with Disabilities Act (ADA), an accommodation cannot alter the nature of the course or program. Appropriate academic accommodations create equal access to education, as long as they do not create a substantial change to an essential component of the curriculum. The college determines this aspect. An accommodation is a change that: 1) is required by law, 2) helps students with disabilities have a fair chance of success, 3) gives an equal chance to learn in, work in, and enter a building or other facility, 4) is chosen for the individual student's needs, and 5) is needed when similar tasks are done in other places. The college makes a reasonable effort to provide accommodations. However, students with a disability must meet all academic prerequisites and requirements of their courses and programs.

Reasonable accommodations must be individualized and flexible. They must also be based on the nature and severity of the disability for a particular student and in relationship to the conditions of an academic environment. An accommodation cannot be provided if it is determined that it jeopardizes the integrity of a course or program.

Asking for an accommodation is a personal choice that each student makes themselves. Some students may not want to request accommodations for various reasons. Some feel that they can manage a class without using an accommodation. Choosing not to receive an accommodation is up to the individual; however, it may be to their advantage to do so as it may assist them in being able to complete their class work in a successful manner and pass their courses. It is especially important to ask for an accommodation early in the semester rather than later. Such requests are best made before the end of the Add/Drop period. This is particularly critical before the first examination since any that are requested afterward do not alter the initial performance in the course. This is to say that an accommodation is not retroactive. Ideally, requests for accommodations should be made during the first week of class, after the student has attended the first class session, received the course syllabus, confirmed the name of the instructor, and decided on their semester schedule. Of course, an accommodation can only be made after the appropriate documentation on the nature and severity of the disability, and how it impacts a major life area, has been reviewed.

When is Accommodation Required

A college is only required to accommodate a "known" disability of an otherwise qualified applicant or student. The requirement will generally be initiated by a request from an individual with a disability. Accommodations must be made on an individual basis, since the nature and extent of a disabling condition will vary with each individual. If the individual does not request an accommodation, the school is not obligated to provide one. If a student with a documented disability requests a specific accommodation, the college may offer that accommodation or an alternative one if the alternative would also be effective. The actual responsibility for determining eligibility of a student for any accommodations rests with the institution.

Under the law, only if the student has disclosed a disability to the appropriate individual or office, and provided appropriate documentation is the instructor responsible for providing any accommodation. Appropriate documentary verification of both the nature and severity of the disability is required, such as a psycho-educational assessment report for a student with a specific learning disability or for another with an emotional disability.

Reasonable Accommodation

Reasonable accommodation is a key nondiscrimination requirement of the ADA due to the unique nature of discrimination experienced by individuals with disabilities. A reasonable accommodation is any adjustment or modification to a school environment that will enable a qualified applicant or student with a disability to participate in the educational process. Many individuals with disabilities can perform academically without any need for accommodations. Yet there are others who could be excluded because of the existence of unnecessary barriers. The notion of reasonable accommodation also includes adjustments to assure that a qualified individual with a disability has rights and

privileges in school equal to those of students without disabilities. Accommodations do not substantially change the instructional level, the content or the performance criteria, but are made in order to provide a student equal access to learning and equal opportunity to demonstrate what is known. Accommodations shall not alter the content of any test or provide inappropriate assistance to the student within the context of the test.

Essential Academic Standards

The concept of essential academic standards ensures that colleges and universities cannot fundamentally alter their programs of instruction to accommodate students with disabilities. Essential academic tasks are those activities that are fundamental and necessary to meet the critical course or program requirements, as well as certification or licensing requirements. The necessity of colleges and universities to insist that students with disabilities meet all academic standards, such as maintaining a certain grade point average (GPA), as well as the technical standards has been upheld in the courts.

Center for Adult Transition

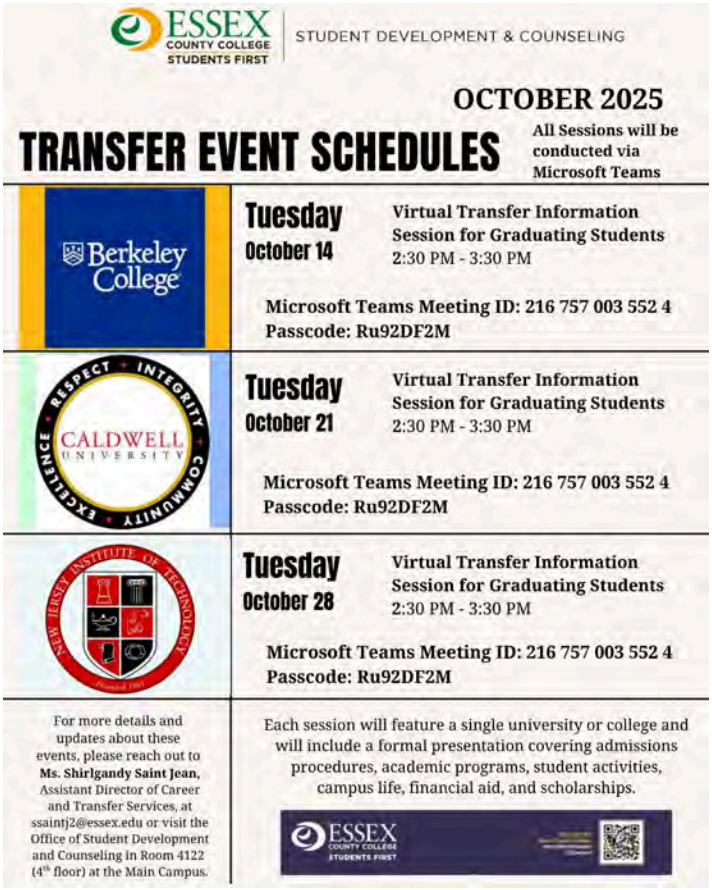
Center for Adult Transition

The Center for Adult Transition (C.A.T.) program in partnership with the New Jersey Department of Education: OSHE (Office of the Secretary of Higher Education) provides students who have Developmental and Intellectual Disabilities the support and resources necessary to experience more successful transitions. C.A.T assists these students as they move from secondary to post-secondary education and adult employment, to help them explore independent living opportunities by providing appropriate skills acquisition. They are encouraged to become successful through tutoring, financial literacy and additional related services. For more information please contact C.A.T. at Student Development and Counseling, Room 4122, 4th floor, (973) 877-3152.



Transfer Advisement

ECC students are encouraged by the Office of Student Development and Counseling to “Begin With the End In Mind” so that once they complete their academic degree at ECC, they are informed and prepared to successfully make a smooth transition to a 4-year college or university. The advisor for transfer students collaborates with local colleges and universities so that ECC students will be well informed about possible academic paths. Transfer services include transfer workshops, formal opportunities to meet with admissions representatives, Transfer College Fairs for graduating students, Instant Decision Days for graduating students with admissions representatives, and trips to colleges and universities. Students may visit the advisor for transfer students in room 4122 to plan their path into their educational future. The main office may be reached at (973) 877-3350.





Office of Retention and Academic Advisement



The Office of Retention and Academic Advisement provides continuing support for student-centered advisement, including English as a Second Language students. The office is responsible for the integration, facilitation, coordination, and fostering of outcomes driven efforts that support student success. These objectives are achieved through a seamless advisement and registration process. The office serves as the primary liaison between academic divisions and success coaches who provide advisement and academic support to all students. Success coaches are assigned to the office and divisional departments to build partnerships with students. They also assist students with the development of skills and habits that contribute to college success, such as academic and career goal setting, learning strategies, time management, organization, and empowerment. The office oversees the Balance Forgiveness and Success Program (BFSP) which assists students with prior balances to re-enter ECC by providing financial assistance and advisement support. The BFSP is offered to students who have a cumulative grade point average of 2.0 or higher, desire to earn an Associate's degree at ECC, and have an outstanding balance of $1000 or less. The application for the BFSP is available online (https://www.essex.edu/academic-advisement/#:~:text=Click%20here%20for,1%2C000)%20or%20less) or at the Office of Retention and Academic Advisement.





Welcome Center

The Welcome Center is located immediately inside the Main Entrance of ECC on West Market Street, on the second level. Our Welcome Center is a one-stop student services center that provides smooth and efficient student services for Enrollment, Testing/Multiple Measures Assessment, Academic Advisement/Registration, and guidance with Financial Aid/EOF and information about academic divisions.



You are invited to visit the Welcome Center in person, which can be reached at (973)877-4477 or via email at welcomecenter@essex.edu (hamza@essex.edu).

For detailed information about Welcome Center services, go to: https://www.essex.edu/welcome-center/.

Veterans Affairs



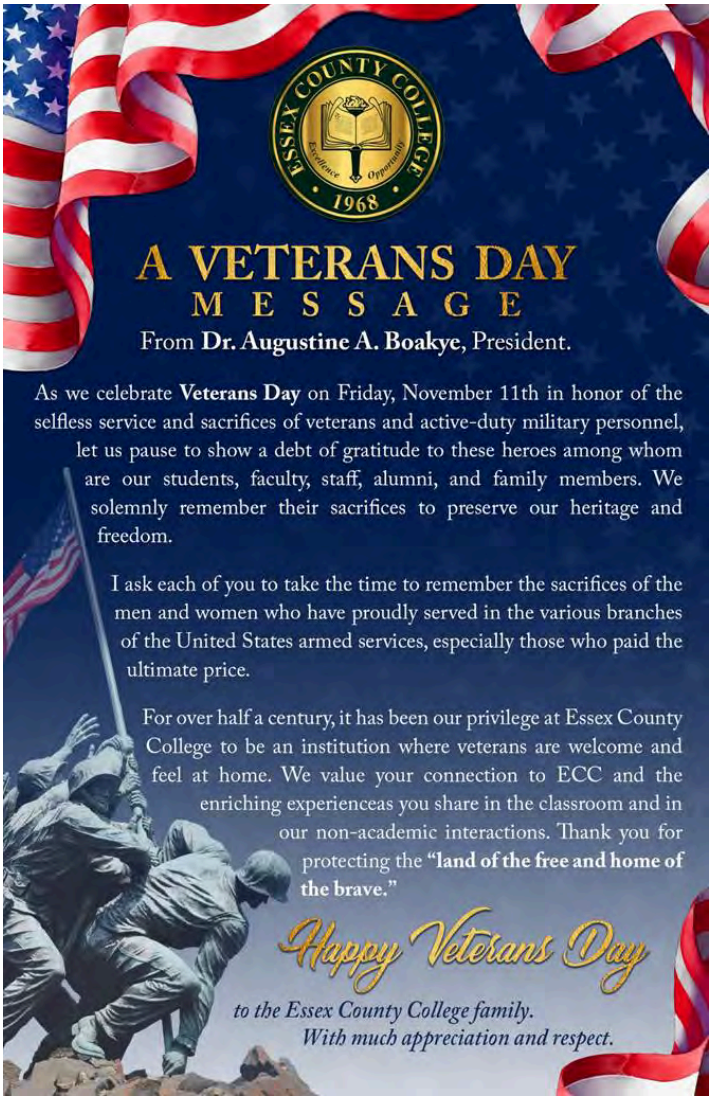


The Office of Veterans Affairs (OVA) provides assistance to the veteran population at ECC. The office is located on the fourth level of the megastructure as part of Enrollment Services and provides enrollment certification services for qualifying veterans and eligible dependents. Eligibility determination is made by the Veterans Administration. ECC complies with Principles of Excellence for Educational Institutions Serving Service Members, Veterans, Spouses, and Other Family Members, which were developed to strengthen consumer protection for our service-members, veterans, and their families, as well as ensure access to information needed to make informed decisions concerning use of their educational benefits.

Service-members who served after Sept. 10, 2001 are eligible for Post 9/11 GI Bill© (Chapter 33) Educational Benefits. The Post-9/11 GI Bill© provides up to 36 months of education benefits. Some service-members may also transfer unused GI Bill© benefits to their dependents. If a service-member was released from active duty before January 1, 2013, there is a 15-year time limitation for use of benefits. For individuals whose last discharge date is on or after January 1, 2013, the time limitation has been removed. The Marine Gunnery Sergeant John David Fry Scholarship (Fry Scholarship) is available for children and spouses of service-members who died in the line of duty after September 10, 2001. The Montgomery GI Bill© (MGIB) is available to those who enlist in the U.S. Armed Forces.



There are two main programs: (1) **Montgomery GI Bill© Active Duty (MGIB-AD)** (Chapter 30) Benefits are generally payable for 10 years following release from honorable active service; and, (2) **Montgomery GI Bill© Selected Reserve (MGIB-SR)** (Chapter 1606) For Reservists with a 6-year obligation in the Selected Reserve who are actively drilling; eligibility normally ends the day the individual leaves the Selected Reserve. ECC permits any member of the **New Jersey National Guard** to enroll and receive up to 16 credits per semester tuition-free provided that member completed all requirements. ECC complies with N.J. Statutes § 18A:62-4.2 - Tuition Benefits for Members of N.J. National Guard; State Payment. Any member of the N.J. National Guard whose enrollment on a tuition-free basis is interrupted by deployment to active duty shall be permitted to receive the free tuition benefit after discharge from service under conditions other than dishonorable. A veteran may be eligible for Veteran Readiness and Employment (Chapter 31) benefits if he/she is or will be discharged under other than dishonorable conditions and incurred or aggravated a service-connected disability which entitles him/her to VA disability compensation.



The Survivors' and Dependents' Educational Assistance (DEA) Program (Chapter 35) offers education and training opportunities to eligible dependents of Veterans who are permanently and totally disabled due to a service-related condition or of Veterans who died while on active duty or as a result of a service-related condition. Based on **PL 115-407** an Enrollment Certificate for Chapter 33 and Chapter 31 will be submitted to the VA on or before 1st day of class as long as eligible students submit the following: (1) Certificate of Eligibility or its equivalents; and, (2) Provide written request to be certified. They may not withdraw from the College without notification to the Certifying Veterans Officer. The date of withdrawal will be the determining date for benefits. ECC degree and certificate programs are approved by the New Jersey Department of Military and Veterans' Affairs, The State Approving Agency under Title 38, U.S. Code, Section 1775, for veterans training. Students receiving VA educational benefits are charged in-state tuition.



Parking

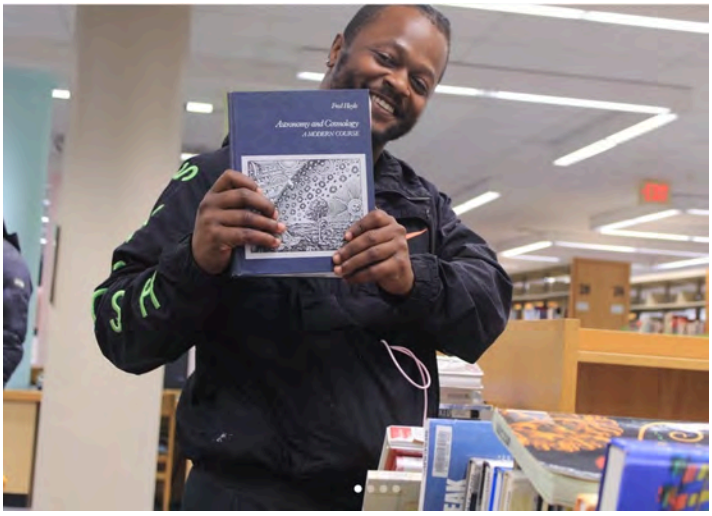
Parking is available for students at ECC when a valid parking decal is properly displayed on the student's vehicle. Decals can be purchased at the Bursar's Office per semester/term. A parking decal is valid only during the semester/term for which it is purchased. Student parking privileges are on a first-come, first-served basis. Information on student parking can be obtained from the Public Safety Department, at the main campus.



Campus Store



ECC has a Campus Store on the main campus on the first level of the megastructure. The store carries textbooks and school supplies as well as paperbacks for supplementary classroom assignments and general reading pleasure. Software, computer storage media, greeting cards, and many other items are available, as well as a large selection of gift items and apparel bearing the distinctive Essex County College crest.



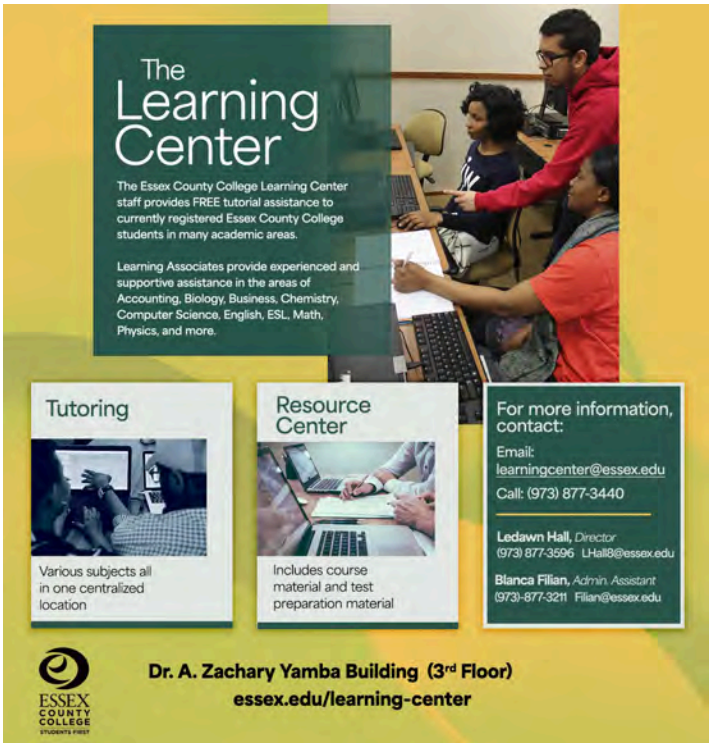
Student Identification

All I.D. cards are issued free of charge to new students by the Public Safety Department. To obtain an I.D. card, all students must have two pieces of identification (a driver's license and a Social Security card are commonly used). Students must also present proof of tuition and fee payment for current registration. The student's I.D. card authorizes access to ECC and use of its facilities (e.g., library and computing labs); therefore, it must be retained and updated by the student throughout the student's stay at ECC. Lost or mutilated cards may be replaced upon payment of a fee at the Public Safety Department. Further information regarding I.D. cards can be obtained from the Department.

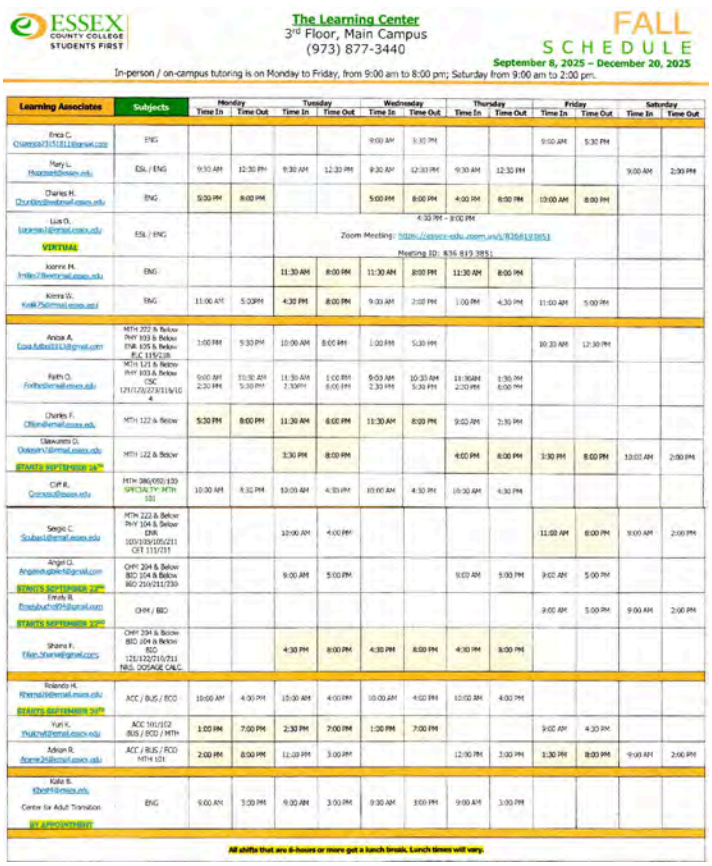


Learning Center

The Learning Center is currently located on the third Level within the MLK Library on the main campus. The Center provides students with academic support in many academic areas, in particular, Accounting, Biology, Chemistry, Math, Physics, English, English as a Second Language, and Computer Science. Assistance is available to students on an individual basis or in a small group, Monday through Saturday. Schedules are designed to accommodate the needs of both full- and part-time students and are posted at the Reception Desk. The goal of the Learning Center is to assist students in acquiring and maintaining superior skills and an understanding of their areas of study.











College Libraries

Main Campus Martin Luther King Library

The Martin Luther King, Jr. Library is located in the A. Zachary Yamba Building on the main campus in Newark. It maintains a collection of Print and non-print items such as but not limited to CDs, DVDs, videocassettes, and other media as well as access to more than 10,000 periodicals titles via on line databases. Holdings are accessed via the online public-access catalog (OPAC) which is available locally and remotely. Collections are designed to meet the academic, informational, cultural, and recreational needs of students and the community. The many services include open stacks, a reserve collection, interlibrary loans, photocopier machines, audiovisual hardware for individual use, wireless Internet access, and small group study rooms. There are also professional librarians and technical assistants to assist all patrons.

On April 24, 2024, a newly renovated MLK was dedicated with a Grand Reopening Ceremony, attended by a representation of College Administrators, Faculty & Staff, as well Essex County Officials and Community Organizations personnel.

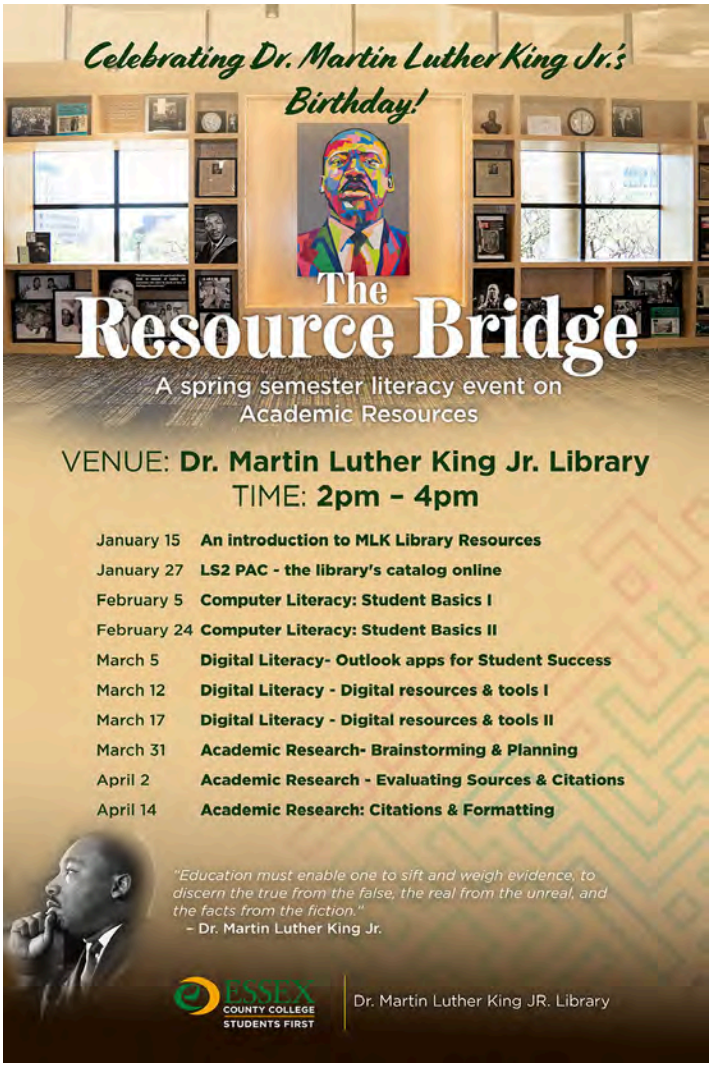




The Library is a member of the Reciprocal Borrowing Libraries of Essex County (ReBL) and the Virtual Academic Library Environment (VALE). The King Library hosts the student-centered technology-rich Information Commons on its upper level at the Main Campus. In the Commons, students, faculty and staff have access to multi-use, state-of-the-art facility which includes: 141 computer stations providing integrated access to multimedia and electronic resources; heavy-duty printers; 7 collaborative classrooms with SMART technology; one teaching lab equipped with computer stations for bibliographic instruction; and wireless network connection throughout.







West Essex Branch Campus Library

The West Essex Branch Campus Library is an essential academic support hub for students, faculty, and staff. It offers access to a curated collection of print and digital resources, including textbooks, scholarly journals, and research databases. The Library provides quiet study areas, and assistance from dedicated staff for research and citation support. Its mission is to foster student success and lifelong learning in a welcoming, accessible environment that reflects the needs of the local campus community. The Library also supports circulation, inter-campus borrowing, library orientations and access to media or purchasing of text as requested by faculty or Chairpersons of the College's Academic Divisions.

The Branch Campus Library is connected to a second Level **Information Commons**, that provides access to twenty four computers for assistance with homework, research, bibliography references. It is a dynamic, collaborative space within the library designed to support students' academic and creative pursuits through access to technology, information resources, and expert assistance. Blending traditional library services with modern digital tools, the Commons serves as a hub where students can research, write, design, and collaborate in a flexible, tech-enhanced environment.

Equipped with computer workstations and access to online databases and software, the Information Commons empowers users to engage deeply with their coursework and projects. Knowledgeable staff, including librarians and IT support personnel, are available upon request to provide one-on-one help with everything from research strategies and citation formatting.

Whether working independently or as part of a team, students benefit from a space that encourages innovation, problem-solving, and academic success. The Information Commons bridges the gap between information access and application, preparing students with the skills they need in today's digital learning landscape.



Information Technology Student Services

COMPUTER LOANER SERVICE



Students in need of a computer can apply directly by filling out the form in the link below. Please note, inventory is limited.

https://essexcountycollege.wufoo.com/forms/student-device-loaner-request-form/

STUDENT SYSTEM SUPPORT SERVICES

Services are available to students on a FIRST COME FIRST SERVE basis. Students in need of internet access may qualify for the Federal Affordable Connectivity Program. Go to https://www.fcc.gov/acp to learn if you qualify for this service.

For information on all Information Technology services, please visit: it.essex.edu/ (https://it.essex.edu/)

The Center is a convenient computer lounge, located on the 3rd Level of the Main Campus near the ***Behold*** statue and is open daily from 8:30 am to 4:30 pm. Students can receive on-site tech support for their devices and have other questions answered, such as those indicated in the poster below.

For further information, call (973) 877-4401.



INFORMATION COMMONS VIRTUAL COURSE SUPPORT



Media Production and Technology Center

The Media Production and Technology Center (MPT) provides high quality audio-visual support services for classroom presentations, lectures, conferences, and special events. Located on the third level of the megastructure, MPT maintains and distributes an inventory of audiovisual equipment for use on campus. Available audiovisual equipment includes LCD projectors with computers, DVD/VHS players, digital video camcorders, public address equipment, and video/audio duplication equipment. MPT is also home to the College's educational channel, ECC TV Cablevision 77/FiOS 37.





Mary B. Burch Theater

The Burch Theater was designed by theater consultant and Broadway designer Ming Cho Lee. The stage is equipped with a memory lighting board, 12-line counterweight fly system, orchestra shell, sprung dance floor, and a concert-sound system for use with its performing arts programming system. The College presents professional actors, dancers, musicians, and lectures at the theater as part of its mission to educate the student body and the community. The theater provides a training ground for students enrolled in acting and theater design courses. Co-curricular student productions are produced each year by the Burch Theater.







Africana Institute and Center for Global Education & Experiences

The Africana Institute serves as a research, education, and communication center for the study of the history and life of people of African, African-American, and Caribbean descent. Its focus is on the historical and contemporary experiences of Black people. The institute's educational and cultural programs and resources are designed to raise the awareness of students and the greater community about the African diaspora, and to increase and improve intra and interracial dialogue and relations. The Center for Global Education & Experiences in concert with the institute is dedicated to expanding opportunities for international education and experiences.

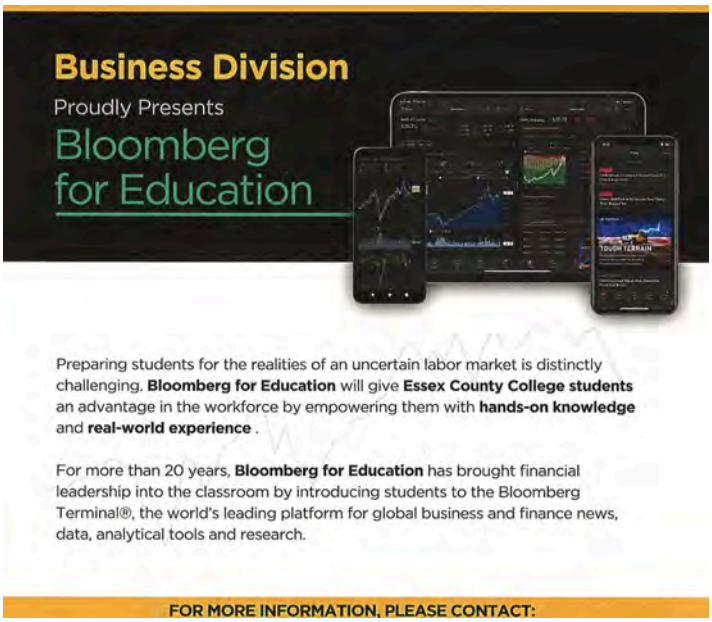








Bloomberg Terminals on Campus



Lan Wang

Bloomberg Lab Coordinator

lwang1@essex.edu/(973)877-3217

Germaine Albuquerque

Assistant Professor/Chair, Business Division

albuquer@essex.edu/(973)877-4423

Jean-Wilner Alexandre

Associate Professor/Economics & Finance

Jalexn5@essex.edu/(973)877-3199

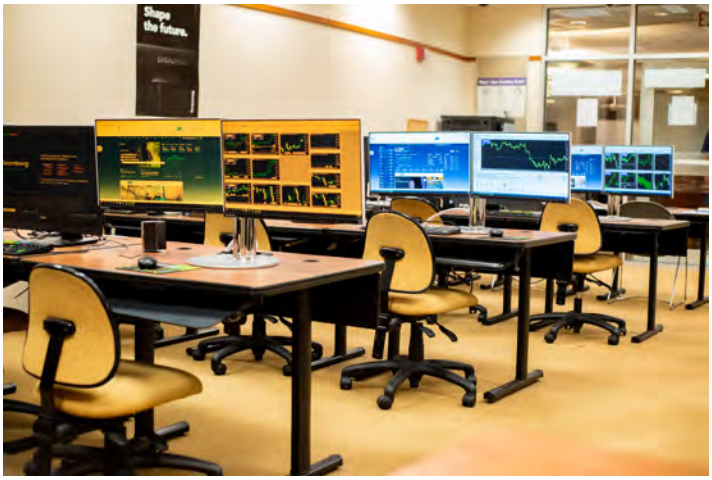
Raquel Pernia

Professor/Accounting

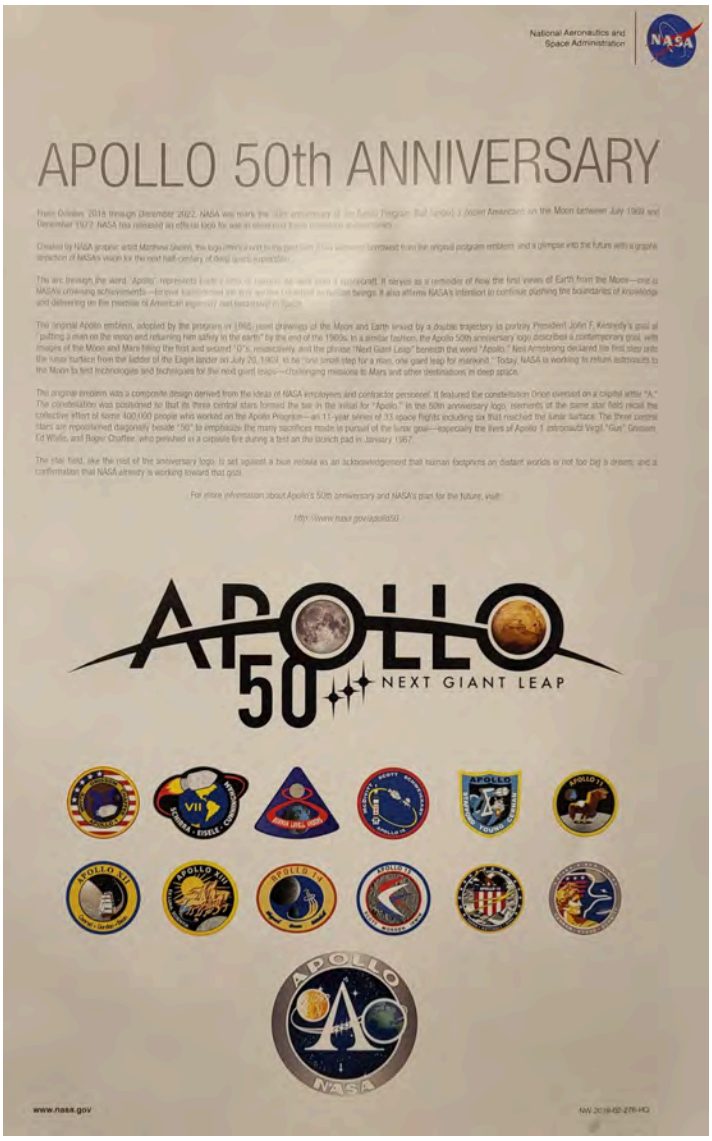
pernia@essex.edu/(973)877-3095

Bloomberg Terminals are a modern icon of financial markets used by more than 325,000 of the world's most influential decision makers. ECC now has full access to this real-time financial market data from Bloomberg as do top business and financial industry experts, such as historical data, market moving news, and analytics. This enables students to become familiar with tools used in financial services, and reinforces classroom theories, while faculty can use to further their own research.





NASA at ECC



ECC is one of two New Jersey community colleges, among six nationally, participating in National Aeronautics and Space Administration (NASA)'s newest education initiatives under National Community College Aerospace Scholars (NCAS) program. This initiative is for under-represented and minority students interested in the STEM (Science, Technology, Engineering, Math) majors in community colleges. Students participate in a five-week online course, including discussions about the mission and vision of NASA, live video chats with NASA experts; and designing rovers that mimic conditions in Mars using lego cubes. Students completing the program spend four days that include networking with NASA scientists and engineers, building the future mars Rover, and developing presentations for competitive showcases to a panel of judges. Graduates have the opportunity to work with top scientists at NASA, obtain undergraduate NASA internships and scholarships, and secure careers in NASA SPACE Centers.



Phi Theta Kappa

Phi Theta Kappa is the international honor society for 2-year college students. Membership in Phi Theta Kappa enables students to gain public recognition for their academic achievement and it provides opportunities for leadership, scholarship, fellowship, and service.



For further details see the LIFELINE (https://www.essex.edu/wp-content/uploads/2025/04/LIFELINE_HANDBOOK_04_07_2025.pdf) Student Handbook.

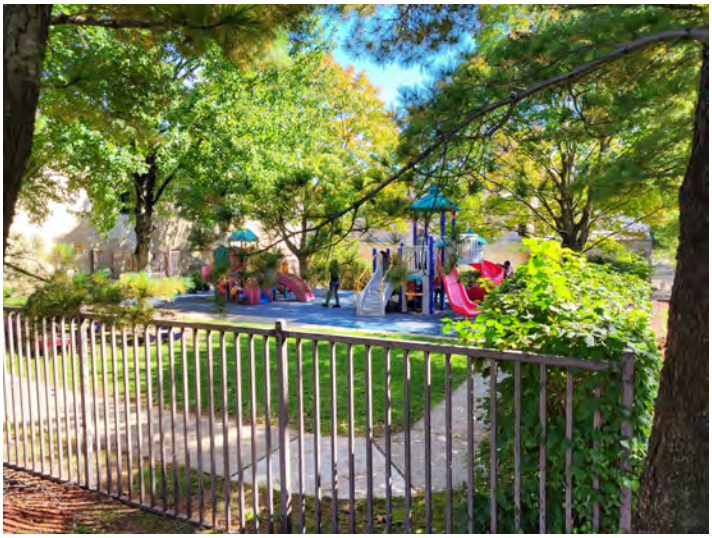


Child Development Center

The ECC Child Development Center, located on the first level of the Physical Education Building, provides a full-day educational program for children between the ages of two and five. The Center is accredited by the National Academy of Early Childhood Programs. Services are available to children whose parents are enrolled or employed at Essex County College. The Center is also open to the Essex County community on a space-available basis. The Center operates 52 weeks per year, Monday through Friday from 7:30 a.m. to 6:00 p.m. During the Fall and Spring Semesters, the Center also offers evening hours.











Student Records

The Family Educational Rights and privacy Act (FERPA) of 1974 affords students certain rights with respect to their education records. They are:

1. *The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.*

Students should submit to the Dean of Student Affairs, or other appropriate officials, written requests that identify the record(s) they wish to inspect. The College official will make the arrangement for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.



2. The right to request amendment of the student's education records that the student believes are inaccurate or misleading.

Students may ask the College to amend a record they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

FERPA was not intended to provide a process to be used to questions substantive judgments that are correctly recorded. The right of challenge is not intended to allow students to contest, for example, a grade in a course because they felt a higher grade should have been assigned. If the College decided not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is person employed by the College in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel); a person or company with whom the College has contracted (such as an attorney, auditor, collection agent, or official of the National Student Clearinghouse); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing their tasks.

A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill their professional responsibility. The college may disclose educational records in certain other circumstances:

- to appropriate parties to comply with a judicial order or a lawfully issued subpoena;
- to appropriate parties in a health or safety emergency;
- to officials of another school, upon request, in which a student seeks or intends to enroll;
- to college officials in connection with a student's request or receipt of financial aid, to determine the eligibility, amount, or conditions of the financial aid, or to enforce the terms and conditions of the aid;
- to certain officials of the U.S. Department of Education, the Comptroller General Office, or to state or local educational authorities, in connection with certain state or federally supported education programs;
- to accrediting organizations conducting certain studies for or on behalf of the college;
- to the alleged victim of a crime of violence when the crime was allegedly committed by the student; the College may disclose the results of an institutional disciplinary proceeding with respect to the crime.
- *The right to file a complaint with the U.S. Department of Education concerning alleged* failures by the College to comply with the requirement of FERPA.

For purposes of compliance with FERPA, the college considers all students independent.

The name and address of the Office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, S.W., Washington, DC, 20202-4605

Essex County College maintains academic and other records of all students enrolled in the College. Additionally, financial records are maintained on all students who receive financial assistance through the College.

Directory Information



Essex County College designates the following categories of student information as public "Directory Information." Such information may be disclosed by the institution at its discretion, subject to certain exceptions:

- student name,
- major field of study,
- participation in officially recognized activities and sports,
- weight and height of members of athletic teams,

- dates of attendance,
- photographs or electronic images,
- audio or video recordings,
- degrees, honors, and awards received including dean's list status,
- most recent previous school attended,
- date of degree conferment,
- degree level (UG),
- enrollment status (full-time or part-time)
- classification (freshman, sophomore, matriculated, non-matriculated, etc.).

NOTE: Primary address and/or email address will be shared with designated vendors providing the following external services to graduating students: Information about purchasing class rings, yearbooks, commencement photos. The College may disclose any of those items without prior written consent, unless notified in writing to the contrary by the end of the second week of the semester.

Currently enrolled students may restrict the release of Directory Information by notifying the Office of the Dean of Student Affairs in writing each semester during the first 10 days of class of a fall and spring semester, and the first 5 days of a summer term. The College will honor a request to withhold information but cannot assume responsibility to contact the student for subsequent permission to release them. Regardless of the effect upon the student, the institution assumes no liability as a consequence of honoring instructions that Directory Information be withheld. The College assumes that failure on the part of the student to request the withholding of Directory Information indicates individual approval for disclosure.

A student's notification to restrict the release of Directory Information will remain in effect until the student submits written notice to release the information.





STUDENT LIFE AND ACTIVITIES





ECC is committed to providing a well-rounded experience for our students through imaginative and interrelated projects. The Student Life and Activities Office (https://www.essex.edu/studentlife/) (SLAO) heightens and enhances the educational process of the student population by planning and coordinating social, cultural, intellectual, and creational programs.



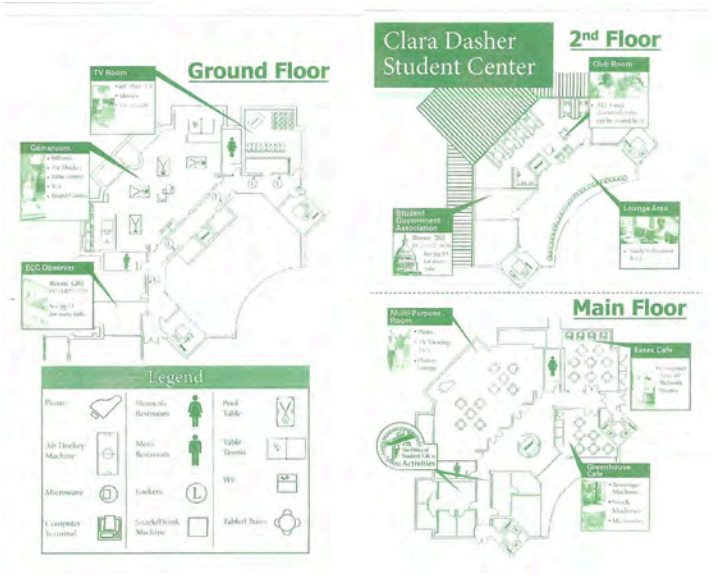
The SLAO publishes and distributes the LIFELINE (https://www.essex.edu/wp-content/uploads/2025/04/LIFELINE_HANDBOOK_04_07_2025.pdf) Student handbook and other informational and promotional publications. The SLAO also coordinates sales of discount tickets to area cultural and sporting events, maintains a directory of off-campus housing listings, handles judicial affairs, and operates the Clara E. Dasher Student Center. The SLAO is located in the Dasher Student Center at the main campus and in the Student Lounge at the West Essex branch campus.

Clara E. Dasher Student Center



The Clara E. Dasher Student Center provides students with an environment that promotes a sense of community and fosters intellectual, social and recreational development through a variety of programs and services Facilities include a game room, TV lounge, meeting rooms, study lounge, multi-purpose area, offices for the Student Government Association and the ECCO student's newspaper, and an area for student clubs and organizations.







Student Government Association

The Student Government Association (SGA) provides representation in the planning, execution, and evaluations affecting the ECC student body,

serves as a means whereby student opinions, views, suggestions and aspirations may be properly discussed and acted upon, and provides guidance and financial assistance to student clubs and organizations. The SGA Executive Board consists of matriculated students who have earned at least a 3.0 GPA. It functions under a constitution approved by the student body with officers elected each year. The SGA is located on the second level of the Clara E. Dasher Student Center.



Student Clubs and Organizations



ECC offers opportunities for focused interest, leadership development and civic responsibility through many clubs and organizations. Purposes and the activities of clubs and organizations are closely related to the mission and goals of the College. Clubs encompassing cultural, academic, and social issues are recognized and receive partial funding from the SGA. Procedures are outlined in the LIFELINE (https://www.essex.edu/wp-content/uploads/2025/04/LIFELINE_HANDBOOK_04_07_2025.pdf) Student Handbook and the Clubs/Organizations Procedure Manual.









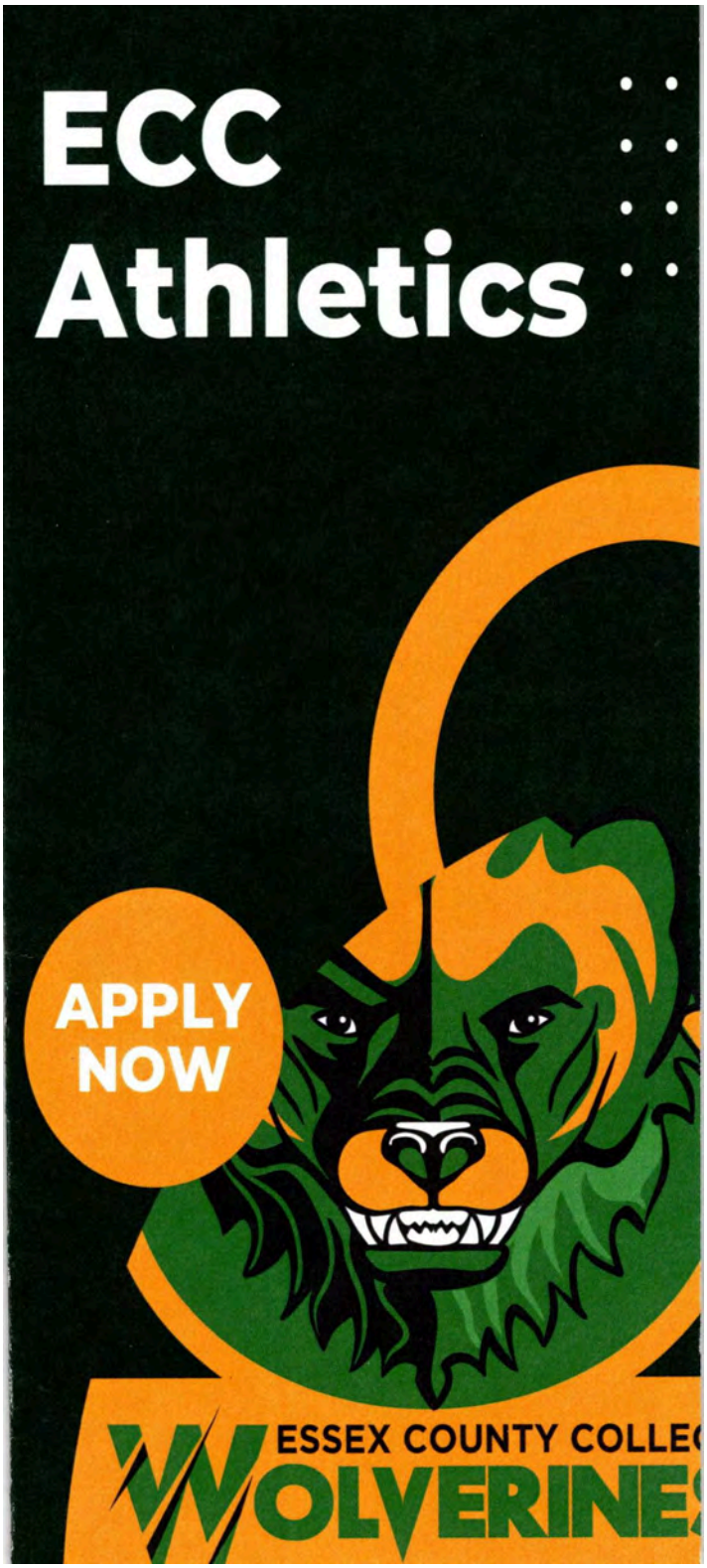


The College Code of Conduct Committee, comprised of students, faculty, and staff, reviews behavioral grievances brought by a member of the college community against a student and renders a recommendation of action to the Dean of the Student Affairs. Detailed information about the College Code of Student Conduct may be found in the LIFELINE (https://www.essex.edu/wp-content/uploads/2025/04/LIFELINE_HANDBOOK_04_07_2025.pdf) Student Handbook.

Student Conduct

ECC students are expected to conduct themselves in a manner that promotes and maintains an educational environment conducive to learning and collegiality. The College has established reasonable standards of behavior for students and reserves the right to take actions, including suspension and expulsion, against any student whose conduct deemed unacceptable.

Athletics





Essex County College offers a diverse range of intercollegiate athletic programs for both men and women. Sports include cross country, soccer, basketball, and indoor and outdoor track and field. Competing as the “Wolverines”, ECC teams participate in the Garden State Athletic Conference (GSAC) and Region XIX of the National Junior College Athletic Association (NJCAA). Over the years, Essex has produced numerous All-Americans across soccer, basketball and track and field. Historically, ECC has also had 38 student- athletes compete at the Olympic games. As shown below, the College has also earned numerous championship titles.



Men’s Soccer

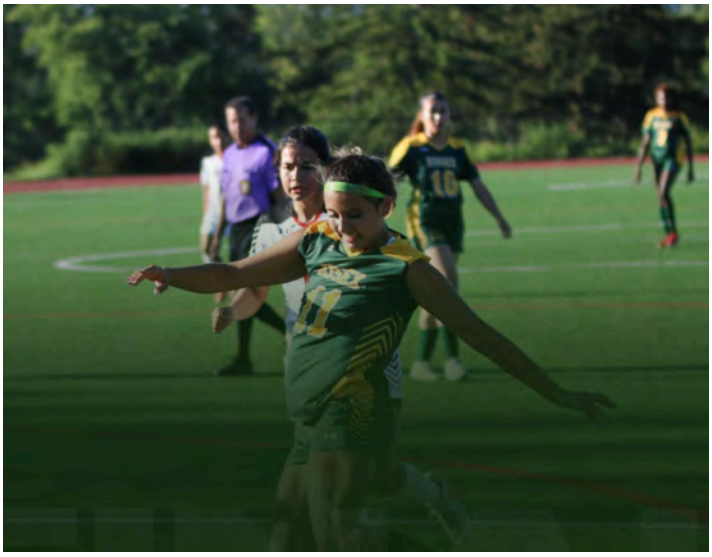
Year	Title
2024	Region XIX Runner Up
2019	Region 19 Division 1 Champions
2019	GSAC Champions
2019	NJCAA Participants Division 1
2018	NJCAA District Tournament Participant
2018	Region 19 Champions
2018	GSAC Champions
2018	Region 19 Division 1 Runner-up
2017	Region 19 Runner-up
2016	Region 19 Semi-Finalist

2015	Region 19 Semi-Finalist
2013	Region 19 Runner-up
2012	Region 19 Participants
2009	Region 19 Champion
2008	Region 19 Division 1 Runner-up
2005	Region 19 Division 1 Runner-up
1999	Region 19 District Champions
1993	NJCAA Division 1 Runner-up
1992	Region 19 Champions





2017	Region 19 Champions
2017	GSAC Champions
2016	Region 19 Participants
2014	Region XIX Division 1 Champions
2013	Region XIX Division 1 Champions
2012	Region XIX Division 1 Runner-up
2011	Region XIX Division 1 Runner-up
2003	Region XIX Division I Champions





Women's Soccer

Year	Title
2024	Region XIX Runner Up
2023	Region 19 Division 2 Champions
2019	Region 19 Runner-up
2018	NJCAA District E Semi-Finalist
2018	Region 19 Champions
2018	GSAC Champions
2017	NJCAA District Semi-Finalist





Men's Basketball

Year	Title
2019-2020	Regions 19 Champions
2019-2020	GSAC Champions
2017-2018	NJCAA Division 2 Participants
2017-2018	Region 19 Champions
2017-2018	GSAC Champions
2016-2017	NJCAA Semi-Finalist
2016-2017	GSAC Champions
2016-2017	Region 19 Champions
2015-2016	NJCAA Division 2 Participants
2015-2016	Region 19 Champions
2014-2015	NJCAA Division 2 Runner-up
2014-2015	Region 19 Champions
2012-2013	NJCAA Division 2 Participants
2012-2013	Region 19 Champions
2012-2013	GSAC Champions
2011-2012	Region 19 Runner-up
1998-1999	Blue Division 1 District Champions
1997-1998	Blue Division 1 GSAC Champions
1994-1995	Blue Division 1 District Champions
1993-1994	GSAC Co-Champions Division 1-2
1993-1994	Blue Division 1 GSAC Champions
1992-1993	GSAC Co-Champions Division 1-2
1983-1984	GSAC Champions North
1983-1984	Region 19 Division 1 Champions
1981-1982	GSAC Champions North
1979-1980	GSAC Champions North
1977-1978	Region 19 Champions
1977-1978	GSAC Champions North
1975-1976	GSAC Champions North
1973-1974	Region 19 Champions
1973-1974	GSAC Champions North
1970-1971	GSAC Champions North



Women's Basketball

Year	Title
2016-2017	NJCAA Tournament Participant
2016-2017	NJCAA District E Champions
2016-2017	Region 19 Champions
2016-2017	GSAC Champions

2014	Region 19 District O Champions
2013-2014	NJCAA District Runner-up
2013-2014	Region 19 Champions
2011-2012	Region 19 Participants
2005-2006	Region 19 Runner-up
2000-2001	Region 19 Runner-up
1994-1995	Blue Division 1 Champions
1993-1994	Blue Division 1 Champions
1984-1985	GSAC Co-Champions
1981-1982	GSAC Co-Champions
1980-1981	GSAC Co-Champions





Men's Cross Country

Year	Title
2019	Region 19 Runner-up
2017	Region 19 Champions
2016	Region 19 Runner-up
2013	Region 19 Champions
2012	Region 19 Champions
2011	Region 19 Champions
2010	Region 19 Champions
2007	Region 19 Champions
1989	GSAC Champions

Women's Cross Country

Year	Title
2021	GSAC Champions
2013	Region 19 Champions
2012	Region 19 Champions
2011	Region 19 Champions
2007	Region 19 Champions
1987	GSAC Champions

Men's Indoor Track and Field

Year	Title
2017	NJCAA Nationals 25th Place Finish
2016	NJCAA Nationals 26th Place Finish
2015	NJCAA Nationals 20th Place Finish
2014	NJCAA Nationals 10th Place Finish
2011	District Champions
2008	NYC Melrose Champions
2007	NYC Melrose Champions
2004	NYC Melrose Champions
1999	District Champions
1999	NYC Melrose Champions
1993	District Champions
1991	District Champions
1976-1977	NJCAA Champions
1975-1976	NJCAA Champions
1974-1975	NJCAA Champions
1971-1972	NJCAA Champions

Men's Outdoor Track and Field

Year	Title
2017	NJCAA Nationals 24th Place Finish
2016	NJCAA Nationals 26th Place Finish
2014	NJCAA Nationals 29th Place Finish
1999	Blue Division 1 Champions
1995	Blue Division 1 Champions
1994	Blue Division 1 GSAC Champions
1994	GSAC Co-Champions Division 1-2
1992	GSAC Co-Champions Division 1-2
1992	Region 15/19 Champions
1976-1977	NJCAA Champions
1971-1972	NJCAA Champions





Women's Indoor Track and Field

Year	Title
2017	NJCAA Nationals 12th Place Finish
2016	NJCAA Nationals 21st Place Finish
2015	NJCAA Nationals 10th Place Finish
2014	NJCAA Nationals 3rd Place Finish
2013	NJCAA Nationals 22nd Place Finish
2007	NJCAA Champions
2006	NJCAA Runner-up
2004	NJCAA Runner-up
2000	District Champions
2000	NJCAA Runner-up
1997	District Champions
1996	NJCAA Runner-up
1996	District Champions
1995	District Champions
1994	District Champions
1993	District Champions
1992	District Champions

Women's Outdoor Track and Field

Year	Title
2017	NJCAA Nationals 12th Place Finish
2016	NJCAA Nationals 18th Place Finish
2014	NJCAA Nationals 8th Place Finish
1999	District Champions
1998	Penn Relay Shuttle Hurdle Champions
1998	District Champions
1992	District Champions
1990	District Champions




E.C.C
THE WOLVE

ADMINISTRATION, FACULTY, AND STAFF





FACULTY

Essex County College has both full-time and adjunct faculty members expected to meet the same standards of academic preparation, course content, and dedication to students. In addition to a greater teaching load, full-time faculty have additional responsibilities, notably curriculum development, student advisement, and involvement in the life of the college. The following is a list of full-time faculty members, together with their credentials and their divisional or departmental assignment.



Abu-Hatab, Ezdehar

Assistant Professor, Division of Biology, Chemistry & Physics

BA - Rutgers University

MS - Montclair State University

Albuquerque, Germaine

Assistant Professor, Division of Business

BCom - University of Pune, India

MCom - University of Pune, India

MAS - Fairleigh Dickinson University



Alexandre, Jean-Wilner

Associate Professor, Division of Business

BS – Kean University

MA – Rutgers University

Ali, Ahmed

Assistant Professor, Division of Biology, Chemistry & Physics

BS - Benha University, Egypt

MS - Benha University, Egypt

PhD - University of Lethbridge, Alberta, Canada

Aouad, Emmanuel

Assistant Professor, Division of Biology, Chemistry & Physics

BS - University of Cape Coast

MA - State University of New York, College at Buffalo

PhD – State University of New York at Buffalo

Alcantara, Edwin

Lecturer, Division of Nursing & Health Sciences

AS - Bergen Community College

BS - William Paterson University

Archer, Colin

Instructor, Division of Nursing & Health Sciences

AAS - Essex County College

BS - Felician University

MS - Monmouth University

Asobayire, Martin

Associate Professor, Division of Biology, Chemistry & Physics

AS - Essex County College

BA - Rutgers University

MS - Montclair State University



Bacchus, Shazam

Assistant Professor, Division of Nursing & Health Sciences

BS - Chamberlain University

MS - Chamberlain University

DNP - University of St Augustine for Health Sciences

Bannon, Ron

Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BFA - New York University

MS - Teachers College, Columbia University



Battle, Kathlyn

Associate Professor/Counselor

BSW - Rutgers University

MSW - Rutgers University

EdD - New Jersey City University

Bhatt, Viral

Assistant Professor, Division of Humanities & Bilingual Studies

BA - Drew University

MA - Fairleigh Dickinson University

MPhil - City University of New York

PhD - City University of New York

Boakye, Augustine

Professor, Division of Business

BE - University of Cape Coast, Ghana

MA - Brunel University, UK

PhD - University of Dundee, UK

Bonassisa, Anthony

Instructor, Division of Biology, Chemistry & Physics

BS - Montclair State University

MS - Montclair State University

Bridgeforth, Mamie



Professor, Division of Social Sciences

AAS - Essex County College

BA - Rutgers University

MSW - Rutgers University

Bruan, Maria

Associate Professor, Division of Humanities & Bilingual Studies

BA - University of Santo Thomas, Philippines

MA - Institute of Hispanic Culture, Madrid, Spain

Calloway, India

Lecturer, Educational Opportunity Fund Program

BA - Colgate University

MA - Seton Hall University

Carter, Shanta

Instructor, Division of Nursing & Health Sciences

BS - Bloomfield College

MS - United States University

Castillo, Carlos

Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - Stevens Institute of Technology

MS - Stevens Institute of Technology

PhD - Stevens Institute of Technology

Catalan, Paula

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

AS - Essex County College

BS - Rutgers University

MS - New Jersey Institute of Technology

Celony, Bergenie

Instructor, Division of Nursing & Health Sciences

MS - Chamberlain University



Cha, Teryn

Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BE - Kookmin University, Korea

MS - New Jersey Institute of Technology

PhD - New Jersey Institute of Technology

Chapman, Jennifer

Instructor/Counselor

AA – Essex County College

AAS –Jersey College School of Nursing

BA – Bloomfield College

BN – Jersey College of Nursing

MS – Long Island University

Chestnut, Jose

Professor, Division of Biology, Chemistry & Physics

MD - University Autonoma of Santa Domingo, Dominican Republic

Constant, Gervida

Instructor, Division of Nursing & Health Sciences

AS - Raritan Valley College

BSN - Felician College

MS - Walden University

Danville, Gennevieve

Associate Professor, Division of Nursing & Health Sciences

BS - New Jersey City University

MS - Kean University

DNP - Rutgers University

Das, Amit

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - Ahsanullah University of Science & Technolgy, India

MS - Chemnitz University of Technology, Germany

Davis, Patrice

Professor, Division of Social Sciences

BA - Swarthmore College

JD - Harvard Law School

DeFreece, Eileen

Professor, Division of Humanities & Bilingual Studies

BA - Rutgers University

MA - Rutgers University, Literature

MA - Rutgers University, Creative Writing

PhD - Rutgers University



De la Torre, Carlos

Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - New Jersey Institute of Technology

MS - New Jersey Institute of Technology

DePasquale, Jhestarri

Assistant Professor, Division of Humanities & Bilingual Studies

AA - Ocean County College

BA - Thomas Edison State University

MA - Norwich University

MA - Drew University

De Pasquale, Nicole

Instructor, Division of Social Sciences

BS - Georgian Court University

MS - Rider University

Dickson, Breanna

Instructor, Division of Nursing & Health Sciences

BS - New Jersey City University

MS - William Paterson University

Dimopoulos, Alkis

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - New Jersey Institute of Technology

ME - Stevens Institute of Technology



DiPasquale, David

Instructor, Division of Humanities & Bilingual Studies

BA - Brooklyn College

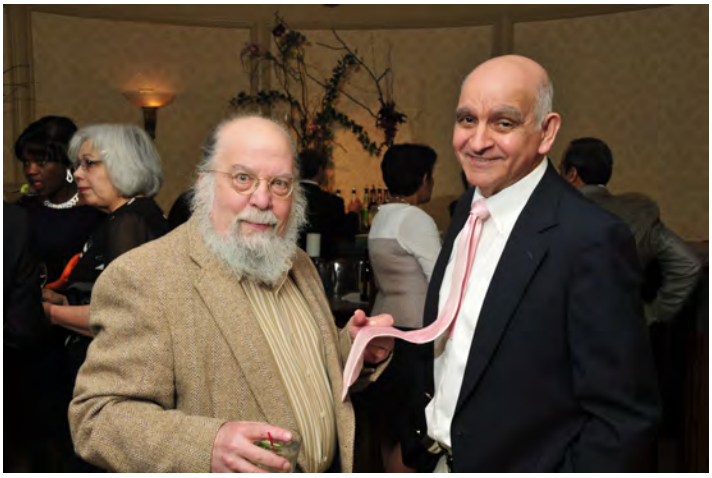
MA - Pratt Institute

Donofrio, Thomas

Assistant Professor, Division of Nursing & Health Sciences

BA - Lafayette College

MS - University of Medicine and Dentistry of New Jersey



Duroy, Frank

Professor, Division of Biology, Chemistry & Physics

BA - Fairleigh Dickinson University

MA - Montclair State University

EdD - Rutgers University

Effah, George

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - University of Science and Technology, Ghana

MS - London Southbank University, UK

Elborj, Jamal

Instructor, Division of Humanities & Bilingual Studies

BA - Moulay Ismael University, Meknes, Morocco

MA - Southern New Hampshire University



Emesslamy, Susan

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - New York University

MS - Royal Melbourne Institute of Technology, Australia

Eromosele, Victor

Lecturer B - Nursing & Health Sciences

AS - Essex County College

BS - UMDNJ

Figueiras, Ines

Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BA - Rutgers University

MS - New Jersey Institute of Technology

MS - Walden University

Francis, Donna

Lecturer B, Division of Nursing & Health Sciences

BS - Seton Hall University

MS - Walden University

Freedman, Gerald

Associate Professor, Division of Social Sciences

BS - East Stroudsburg State College

MA - Newark State College

Gasataya, Rachel

Instructor, Division of Humanities & Bilingual Studies

BA - William Paterson University

MM - New Jersey City University

Griffiths, Ann-Maria

Instructor, Division of Nursing & Health Sciences

BS - Adelphi University

MS - Capella University

Hammond, John

Assistant Professor, Division of Business

BA - University of Cape Coast, Ghana

MPA - Kean University

Harrison, Charles

Instructor, Division of Nursing & Health Sciences

AAS - Essex County College

BS - Worcester Polytechnic Institute

Hill, Nessie

Professor, Division of Humanities & Bilingual Studies

BS - Roosevelt University

MS - Roosevelt University

PhD - Union Institute and University

Hobson, Rhonda

Instructor, Division of Social Sciences

BS - Rutgers University

MS - Rutgers University

Jenkins, Mary

Instructor, Division of Social Sciences

BSW - Rutgers University

MSW - Rutgers University

Johnson, Cassandra

Instructor/Counselor

AA - Essex County College

BA - Thomas Edison State University

MSW - University of New England

Kabakibi, Yasser

Associate Professor, Division of Biology, Chemistry & Physics

BS - Montclair State University

MS - Montclair State University

Kaiser, Rebecca

Instructor, Division of Nursing & Health Sciences

BS - Wagner College

MS - Chamberlain College of Nursing

Kajura, Clare

Instructor, Division of Social Sciences

BEd – Makerere University

MS – Mercy College

DHA - Virginia University of Lynchburg



Kamunge, Eunice

Professor, Division of Biology, Chemistry & Physics

AS - Essex County College

BA - Rutgers University

MA - St. Peters College

MS - Seton Hall University

PhD – Seton Hall University

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Professor, Division of Social Sciences

BA - University of California

MA - University of Pennsylvania

PhD - University of Pennsylvania

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Assistant Professor, Division of Biology, Chemistry & Physics

BA - Rutgers University

PhD - Rutgers University

Kucerovy, Timothy

Instructor, Business Division

BS - Slippery Rock University

MS - Ohio University

Lambert, Coleen

Instructor, Division of Nursing & Health Sciences

BS - Felician University

MS - Grand Canyon University

Lawless, Kevin

Assistant Professor, Division of Nursing & Health Sciences

AAS - Essex County College

BS - Montclair State University

BS - Touro College

MA - Touro College

DPT - Touro College

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BA - Rutgers University

MA - Kean University

PhD - Seton Hall University

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BA - University of Panama

MA - New Jersey City University

EdD - Capella University

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Associate Professor, Division of Biology, Chemistry & Physics

BS - Moscow State University

MS - Moscow State University

MS - New York University

Mangru, Renita

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AAS - Essex county College

BA - Rutgers University

BS - Rutgers University



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BSc - Baghdad University, Iraq

MS - Kings College, London University, UK

PhD - Kings College, London University, UK

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Lecturer F, Educational Opportunity Fund Program

BA - Rutgers University

MA - Montclair State University



McCall, Mingyon

Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BA - New Jersey Institute of Technology

MA - New Jersey City University

MA - New Jersey City University

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Instructor, Division of Nursing & Health Sciences

MS - Walden University

Nash, Mikal

Assistant Professor, Division of Humanities & Bilingual Studies

BA - Rutgers University

MA - Fairleigh Dickinson University

Ngakam, Bertheleau

Lecturer A - Division of Mathematics, Engineering Technologies & Computer Sciences

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BS - Cornell University

MS - Rutgers University

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Instructor, Division of Nursing & Health Sciences

MS - Walden University

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Assistant Professor, Division of Humanities & Bilingual Studies

BA - State University of New York

MA - City University of New York

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BS - University of Ibadan, Nigeria

MS - University of Ibadan, Nigeria

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MS - Chicago State University

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PhD - Girne American University, Cyprus

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Assistant Professor, Division of Nursing & Health Sciences

BS - Thomas Edison State University

MS - Thomas Edison State University

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Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - Stony Brook University

PhD - The Graduate Center at the City University of New York

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Assistant Professor, Division of Nursing & Health Sciences

BS - Mariano Marcos State University, City of Batac, Llocos Norte, Philippines

MS - University of Phoenix

PhD - Rutgers University

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Associate Professor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - Seoul National University, Seoul, Korea

MS - Korea Advanced Institute of Science & Technology, Daejeon, Korea

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Parlar, Yusuf

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BS - Middle East Technical University, Turkey

MS - Polytechnic University of New York

PhD - New Jersey Institute of Technolgy

Patel, Daxay

Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

AAS - Essex County College

BS - New Jersey Institute of Technology

MS - Kean University

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Associate Professor, Division of Humanities & Bilingual Studies

AA - Union County College

BA - Rutgers University

MA - Rutgers University

EdM - Rutgers University

PhD - Rutgers University

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Instructor, Division of Social Sciences

BS - Howard University

JD - Seton Hall University

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Professor, Division of Business

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BArch — City College of New York

MArch — New Jersey Institute of Technology

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Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - Hampton University

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Instructor, Division of Mathematics, Engineering Technologies & Computer Sciences

BS - New Jersey Institute of Technology

MS - New Jersey Institute of Technology

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MS - Catholicate College, India

MS - New Jersey City University

PhD - Keiser University



Ramakrishnan, Sujatha

Associate Professor, Division of Biology, Chemistry & Physics

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MS - Purdue University

EdD - American College of Education

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Associate Professor, Division of Business

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AS - Essex County College

BS - Rutgers University

MS - Rutgers University

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MS - State University of New York

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BS - Felician University

MS - Felician University

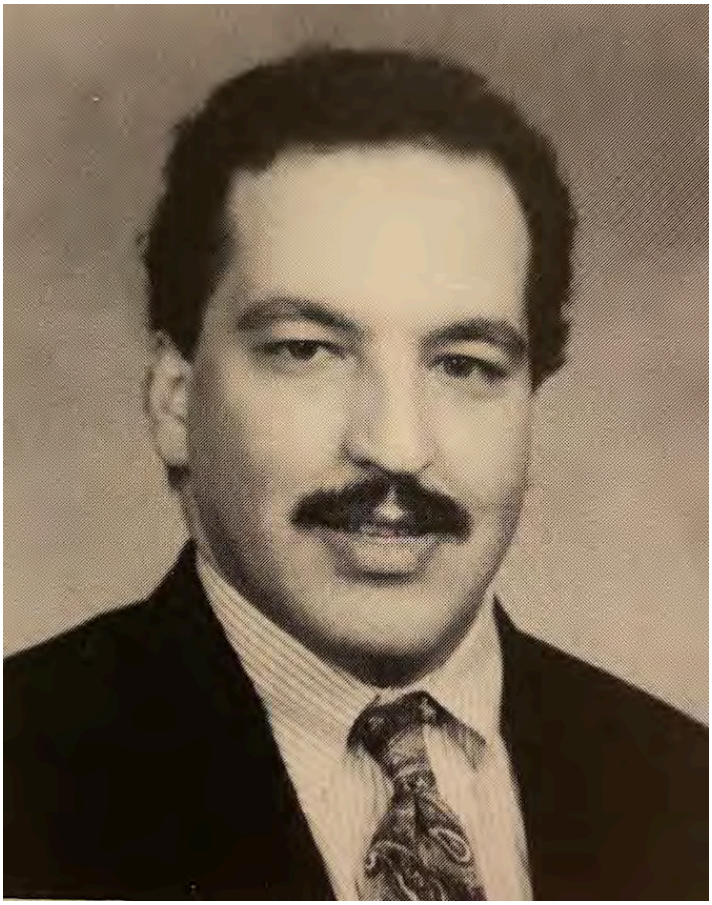
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MBA - Seton Hall University



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PhD- New York University



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BA - Rutgers University

MA - Brown University

PhD - Brown University

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AS - Union County College

BS - Kean University

MS - Kean University

MA - Princeton Theological Seminary



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BA - State University of New York at Cortland

BS Ed - State University of New York at Cortland

BS - Excelsior College, University of the State of New York

MS Ed - State University of New York at Cortland

MS - State University of New York at Cortland

MA - State University of New York at Buffalo

MAH - State University of New York at Buffalo

EdM - State University of New York at Buffalo

MALS - Rutgers University

MAT - Rutgers University/New Jersey Institute of Technology,

MA - Rutgers University/New Jersey Institute of Technology

MA - Montclair State University

PhD - Ecole Superieure Euro-Americaine, France

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MA - Touro College

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BA - Rutgers University

MA - Montclair State University

MA - Montclair State University

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MA - William Paterson University

DLitt - Drew University

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PhD – Fielding University



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MA-Montclair State University

EdD- Rowan University

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MS - Maharaja Sayajirao University, India

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MA - Ohio State University

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MS - Shandong University, China

PhD - Rutgers University

DS - Chinese Academy of Sciences, China



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MA – University of Connecticut



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MS – Rutgers University



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MEd - Columbia University Teachers College

HLD - Wilberforce University



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PhD - New York University





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BA - Rutgers University

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EdD - New York University

Wilson, Ned



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AB - Emory University

BD - Drew University

MS - Stevens Institute of Technology

PhD - Drew University



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MS - New York University

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President



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Gandhi, Ketan

Chief Financial officer/Senior Comptroller





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Hall, Ledawn

Director, Learning Center

Howard, Patty

Director, Financial Aid



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Parm, Ronald

Associate Director, Public Safety

Persaud, June

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Shapiro, Jeff

Director, Facilities Operations

Tomkins, David

Director, Athletics

Williams, Denise

Director, Purchasing

Wilson, Kenya

Director, Enrollment Services/Registrar

York, Lori

Academic Division Chair, Nursing & Health Sciences



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Coordinator - Academic Technology Resources

Albuquerque, Germaine

Kamunge, Eunice

Stolberg, Victor

Vieira, Elvira

Yee, Donald





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Accounting (ACC)

Division: Business Division

ACC 101 Prin of Accounting I Financial (4 Credits)
The principles of Financial Accounting are introduced by the study of the accounting cycle for service and merchandise companies. Emphasis is on analyzing transactions, summarizing them through the use of the general ledger and reporting the results through the preparation of financial statements for use by the internal and external decision makers such as stockholders, trade creditors, banks, unions and government agencies. The fundamentals of accounting for inventories, accounts receivable, fixed assets, long-term liabilities, internal control, and corporate entities are stressed.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 048) or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20 or MTH 086 with a minimum grade of C or AFM 083 with a minimum grade of C or Move Up Math 086 with a score of P or MTH 086 Summer Bridge with a score of P or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and ((Companion Essay with a score of 06 and Companion Reading Comprehensio with a score of 059) or (Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06 and Companion Reading Comprehensio with a score of 20) or Companion Essay with a score of 07 or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 085 with a minimum grade of C or AFE 083 with a minimum grade of C or Move Up English 085 with a score of P or ENG 085 Summer Bridge with a score of P or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ACC 102 Prin Accounting II Managerial (4 Credits)
The study of the fundamental managerial accounting concept and techniques, which aid in management decision-making, performance evaluation and in planning and controlling operations. The emphasis is on the use of accounting data as a management tool rather than on the techniques of data accumulation. The course deals with such topics as cost behavior patterns, budgeting, cost-volume-profit relationships, product costing methods, preparation of the Statement of Cash Flows, and financial statement analysis. Quantitative methods applicable to managerial accounting are studied.
Pre-requisites: ACC 101 with a minimum grade of C

ACC 201 Intermediate Accounting I (4 Credits)
This course provides an expanded treatment of the theory and accounting principles underlying the preparation of financial statements, and the proper uses that can be made of financial data. Current asset analysis and valuation methodology, current liabilities, and revenue determination procedures are studied in relation to FASB accounting requirements. A comprehensive review of fundamental accounting processes using microcomputer software is included.
Pre-requisites: ACC 102 with a minimum grade of C

ACC 202 Intermediate Accounting II (4 Credits)
This course is a continuation of ACC 201. Accounting for long-lived assets, long-term liabilities, investments in securities and funds, and stockholders' equity are emphasized. The more complex aspects of financial statement presentation and analysis are also covered.
Pre-requisites: ACC 201 with a minimum grade of C

ACC 211 Cost Accounting (4 Credits)
This course examines in depth cost analysis and product costing for both the profit and not-for-profit sectors of the economy. Accounting for labor, materials, and manufacturing overhead emphasizes the use of source documents to analyze and record cost data in both manual and computerized accounting systems. Methods of allocating indirect costs to products are introduced. Budgeting concepts are reviewed with emphasis on capital budget techniques. Reporting for segments and decentralized operations are also covered.
Pre-requisites: ACC 102 with a minimum grade of C

ACC 231 Federal Taxation (4 Credits)
This course introduces the fundamental accounting procedures for determining tax liabilities for individuals and single-owner businesses. The accurate completion of Form 1040 with the accompanying schedules in compliance with the Internal Revenue Code is emphasized using both manual and computerized systems. The calculation of payroll taxes and maintenance of tax records and other selected tax reports are also studied.
Pre-requisites: ACC 102 with a minimum grade of C

ACC 232 Computerized Accounting (4 Credits)
This course covers small business accounting using Peachtree software and QuickBooks software. Topics include creating a chart of accounts, recording customer and vendor transactions, processing payroll, and printing reports. In addition, setting up a new company is covered as well as advanced topics such as exporting Excel software and using QuickBooks audit trail. Emphasis is placed on how such systems safeguard the assets of the firm to insure the integrity of the reporting system. Special journal entries and subsidiary ledgers are covered. Significant out-of-class independent computer laboratory time is required of all students.
Pre-requisites: ACC 101 with a minimum grade of C

Anthropology (ANT)

Division: Social Sciences Division

ANT 101 Cultural Anthropology (3 Credits)
This course examines the behavior and customs of all human groups. It describes human universals, as well as how and why human societies differ, drawing on fieldwork performed in a wide variety of tribal, village, and urban societies. Topics covered include kinship and other social systems; the supernatural and sacred; language and nonverbal communication; beliefs and behavior regarding health and curing; myth, art, and music.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ANT 105 Physical Anthropology/Pre-Hist (3 Credits)
This course examines the origin and emergence of humanity, the early unwritten history of the human race, physical variations among humans, and prehistoric civilizations.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

Architecture (ARC)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

ARC 101 Architectural Design I (4 Credits)
This course is an introduction to architectural design with emphasis on basic design content, including the logical arrangement of elements in space. A series of projects are assigned and reviewed for format, presentation and completeness.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or MTH 092 with a minimum grade of C or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ARC 102 Architectural Design II (4 Credits)
This course is a continuation of ARC 101. Assigned projects include three-dimensional representations. Students learn how to construct perspectives and build architectural models.
Pre-requisites: ARC 101 with a minimum grade of C

ARC 111 History of Architecture I (3 Credits)
This is a course in the history of architecture, beginning with ancient Egyptian architecture and ending with the Industrial Revolution era architecture of the eighteenth century. Major emphasis is placed on historical periods such as Byzantine, Romanesque, Gothic, Renaissance and Baroque. Particular works of classical architects are also studied.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ARC 112 History of Architecture II (3 Credits)
This is a course on historical developments in architecture from the nineteenth century to the present post-modern era. Major emphasis is placed on architectural movements in Europe, namely the Beaux-Arts and Art Nouveau in France, the Arts and Crafts in England, the Bauhaus in Germany and also the international style of architecture in both hemispheres. Works of noted architects are given special review.
Pre-requisites: ARC 111 with a minimum grade of C

ARC 131 Construction Methods I (3 Credits)
This course introduces the concepts of building construction principles and processes including foundations, walls, floors and roof systems. Materials considered are wood, masonry, steel and concrete. Also discussed are site preparation and building code requirements.
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C

ARC 132 Construction Methods II (3 Credits)
This course is a continuation of ARC 131 and focuses on the details of buildings including windows, doors and specialty construction such as stairs. Also discussed are thermal and moisture protection, finishing and electrical and plumbing systems.
Pre-requisites: ARC 131 with a minimum grade of C

ARC 201 Architectural Design III (4 Credits)
This is the third course in the architectural design sequence. Projects involve researching and analyzing programmatic requirements of a design problem. Students generate multiple design solutions and present them using graphic methods appropriate to the solution.
Pre-requisites: ARC 102 with a minimum grade of C

ARC 202 Architectural Design IV (4 Credits)
This is a design drawing workshop where the student selects an architectural problem and develops the solution by investigating design, structure, costs and environment. The student then presents his/her solution through two and three-dimensional drawings.
Pre-requisites: ARC 201 with a minimum grade of C

ARC 290 Honors Capstone Project-Archit (3 Credits)

Art (ART)

Division: Humanities and Bilingual Studies Division

ART 100 Art Appreciation (3 Credits)
This course introduces and acquaints students with various aspects of art, including the artists themselves, the different mediums they created and worked in, and the techniques involved. Students will learn about the nature of art and its relevance to daily life.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 101 Art History I (3 Credits)
This course is a survey of art history from the prehistoric era to around 1400 CE. Students can expect an emphasis on stylistic analysis within historical, cultural, and global contexts.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999 or (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 102 Art History II (3 Credits)
This course is a survey of art history from around 1400 CE to the present. Students can expect an emphasis on stylistic analysis within historical, cultural, and global contexts.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999 or (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 107 Drawing I (3 Credits)
With a focus on the elements of line, form, color, texture, and space, students will work towards completing drawing-based projects within the realms of fine, commercial, and applied arts within traditional and digital modalities.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 111 Painting I (3 Credits)
With a focus on the elements of line, form, color, texture, and space, students will work towards completing painting-based projects within the realms of fine, commercial, and applied arts within traditional and digital modalities.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 140 Photography I (3 Credits)
This is an introductory studio course in the fundamentals of black & white and color photography within the realms of fine, commercial, and applied arts within traditional and digital modalities.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 171 Animation Design (3 Credits)
This course will introduce professional practices in digital animation design. An overview of techniques, ranging from storyboarding and character creation to digital editing and sound design, will be provided.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 200 African American Art (3 Credits)
This course will focus on African American artists and their art. Students can expect to explore the stylistic forms, expressions, concepts, and values within this area of focus.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 205 Two Dimensional Design (3 Credits)
With a focus on the elements of line, form, color, texture, and space, students will work towards completing two-dimensional design projects within the realms of fine, commercial, and applied arts within traditional and digital modalities.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

ART 206 Three Dimensional Design (3 Credits)
With a focus on the elements of line, form, color, texture, and space, students will work towards completing three-dimensional design projects within the realms of fine, commercial, and applied arts within traditional and digital modalities.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Biology (BIO)

Division: Biology, Chemistry and Physics Division

BIO 100 Foundations of Biology (4 Credits)
This course is a beginning laboratory science class for students who plan to continue into medical, biological or related sciences. BIO 100 covers selected biology topics and introduces examples of physical science vocabulary and theory related to biological study. The aim of BIO 100 is to provide a background for the student who has never studied biology, to succeed in more advanced biology courses such as BIO 103 – 104, BIO 121 – 122, and BIO 211. This course also prepares students for chemistry, pharmacology and nursing requirements. Topics include: systems, tissues, inorganic and organic body chemistry, cells, cell membranes and cell respiration. Laboratory includes measuring instruments, microscopy and dissection techniques. This course is open to Biology/Pre-Medicine and General Science majors only. This course reviews fundamental concepts in life sciences to enable students to succeed in more advanced courses, beginning with BIO 103. BIO 100 will not fulfill any part of the science requirement toward graduation for either science majors or non-science majors.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BIO 101 College Biology I (4 Credits)
This course is designed to develop, from a conceptual approach, meaningful understanding of some fundamental principles as they relate to the living world. Particular emphasis is placed on the unity and diversity of life forms and their relationship to each other and to their environment. This course can be taken to satisfy the science requirement of non-science majors, and can be taken independent of, or before, or after BIO 102. Materials for the course can be found athttp://eccbiology.blogspot.com. This course is open to non-science and General Science majors only. BIO 101 will not fulfill any biology requirement for Biology/Pre-Medicine majors.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BIO 102 College Biology II (4 Credits)
Using a conceptual approach, this course places emphasis on human biology and evolution. Basic principles concerning the structure and function of human body systems in both health and disease conditions are studies. This course can be taken to satisfy the science requirement of non-science majors and can be taken independent of, before, or after BIO 101. Materials for the course can be found at http://eccbiology.blogspot.com. This course is open to non-science and General Science majors only. BIO 102 will not fulfill any biology requirement for Biology/Pre-Medicine majors.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BIO 103 General Biology I (4 Credits)
This course explores the basic principles which govern the behavior of living matter on the molecular and cellular level. Topics covered include: characteristics of important biological macromolecules, cell metabolism and energetics, cell structure, cell division, and fundamentals of modern genetics.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BIO 104 General Biology II (4 Credits)
A continuation of BIO 103, this course covers evolution, organization of cells into tissues and organs, organ systems, comparative physiological studies among plants and among animals, structure and function relationships.
Pre-requisites: BIO 103 with a minimum grade of C

BIO 116 Intro to Anatomy & Physiology (4 Credits)
BIO 116 is an entry-level course pertaining to the organization of the human body for students interested in pursuing careers in biology and health-related professions. Students with little or no science background will gain a foundation in the basic concepts of anatomical terminology, biochemistry, cell biology, and tissue structure, as well as an introduction to selected organ systems. The laboratory enhances the lectures and includes measurement, microscopy, and dissection techniques. This course is a pre-requisite for BIO 121 – Anatomy & Physiology I.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BIO 121 Anatomy & Physiology I (4 Credits)
This course on human anatomy and physiology covers integration and regulation of physiological processes with emphasis on the structural and functional interrelationships. Lecture topics include: chemical and physical constituents of living material; cell structure and function; tissues, their arrangements and their contributions to systemic function; development and functions of the skeletal system; muscle anatomy and physiology; and the nervous system. The laboratory work serves to enhance the lectures through detailed discussions, hands-on examination of specimens, and problem solving.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

BIO 122 Anatomy and Physiology II (4 Credits)
This course builds on Anatomy and Physiology I. Lecture topics include: structure and function of the special sense organs, circulatory system, respiratory system, and digestive system, basic concepts of metabolism, excretory system, water and salt metabolism, and endocrine and reproductive systems. The laboratory experience serves to enhance the topics covered in lectures.
Pre-requisites: BIO 121 with a minimum grade of C

BIO 125 Anatomy and Phys of The Eye (3 Credits)
This course will build from a basic overview of human anatomy and physiology to a specific focus on the anatomy and physiology of the eye. Emphasis will be placed on embryological development of the eye, exploration of the normal structure and function of ocular tissue and their interrelationship with other systems and how the eye relates to contact lenses. Considerations will be given to anatomical abnormalities and pathophysiology of the visual system. Laboratory demonstrations will include: eye dissection, examination of pathological processes, visual testing and visual perception experimentation. This course is open only to students in the Vision Care Technology Program.

BIO 210 Scientific Research Methods (2 Credits)
This course provides students with an opportunity to learn the process of conducting research in sciences. Emphasis will be placed on scientific research- including the scientific method, research methods, sourcing information, literature review, formulation of a hypothesis, data collection, assessment oand interpretation of results based on the available data and writing a research paper. Students are required to present their work to an audience.
Pre-requisites: (BIO 104 with a minimum grade of C) and (MTH 119 with a minimum grade of C)

BIO 211 Microbiology (4 Credits)
Microbiology is the study of microorganisms, and as such, this course examines life at the microscopic level (including eukaryotic cells: protozoa and fungi; prokaryotic cells: bacteria, rickettsia and mycoplasma; viruses: viroids; and infectious agents: prions). Lecture and laboratory sessions consider techniques in conventional culturable methods and examination and identification of microorganisms. Topics to be covered include nutritional requirements, environmental constraints, biochemical activities, genetic make-up and expression. Additionally, the role that microorganisms play in human and animal hosts during health and disease will be explored. Also included are aspects in pathogenicity, virulence, immunology, natural defense and environmental control factors. Laboratory sessions consider techniques in aseptic technique and sterile transfer, instrumentation (e.g., microscopy and pipetting), culturing bacteria, application of critical analysis of experimental data and presentations.
Pre-requisites: ((BIO 103 with a minimum grade of C and BIO 104 with a minimum grade of C) or (BIO 121 with a minimum grade of C and BIO 122 with a minimum grade of C)) and (CHM 101 with a minimum grade of C or CHM 103 with a minimum grade of C)

BIO 220 Intro to Environmental Science (4 Credits)
An introduction to an interdisciplinary field that focuses on how different elements of the environment (the biological, chemical and the physical) interact and interrelate. Our study of environmental science will encompass various aspects of biology, chemistry, economics, hydrology, physics, law and other social sciences. Topical environmental issues like climate change, aquatic and terrestrial ecology, air and water pollution, world human population problems, and the unsustainable use of natural resources will be examined. Laboratory sessions include measurements of various environmental pollutants, fundamental lab exercises in ecology, analysis of environmental parameters, and descriptive and practical reinforcement of lecture material.

BIO 222 Kinesiology (4 Credits)
The principles of force and leverage are emphasized in this course. The kinematics and kinetics of human movement are also covered. The course will include aspects of the skeletal, muscular, and nervous systems as they apply to human movement. Goniometry, ROM, and lever systems are revisited in the laboratory. These above principles are discussed in the context of practical application by a Physical Therapist Assistant.

BIO 225 Plant Science (4 Credits)
This course introduces students to the fundamentals of plant growth and development, and the relationship of plants to their environment. Topics include plant evolution and species diversity, anatomy and physiology of plants, water and nutrient use and management. Laboratory and field sessions complement lecture and enable students to use the scientific method while growing various plants using selected farming methods.
Pre-requisites: BIO 104 with a minimum grade of C

BIO 228 Molecular Biology (4 Credits)
BIO 228 is a study of the fundamental principles that guide cellular and molecular organization and function. Topics include membranes and cell signaling, the cytoskeleton and cell motility, the cell cycle, and regulation of gene expression. Laboratory sessions include the measurement of toxic effects of various chemicals on membrane integrity, practical applications of biotechnology to everyday problems, and the use of recombinant DNA technology to perform an authentic cloning experiment.
Pre-requisites: BIO 103 with a minimum grade of C and BIO 104 with a minimum grade of C

BIO 230 Ecology and Evolution (4 Credits)
This course covers basic principles in evolution and ecology at an introductory level and introduces students to the fundamentals of how life on Earth functions. The evolution section is meant to provide an understanding of natural selection and micro-evolutionary mechanisms, including how to interpret phylogenetic trees and current theories on human and plant evolution. The ecology section covers population ecology, community ecology, ecosystems, climate, biogeochemical cycling, global climate change, greenhouse effects and conservation ecology. Other topics include plant evolution and species diversity, anatomy and physiology of plants, water and nutrient use and management.
Pre-requisites: BIO 103 with a minimum grade of C and BIO 104 with a minimum grade of C

BIO 237 Genetics with Laboratory (4 Credits)
This is an introductory course in Genetics for biology majors. The course follows a lecture/laboratory format to cover traditional topics in transmission genetics, gene mapping, molecular genetics, the organization of viral, prokaryotic and eukaryotic genes, regulation of gene expression, recombinant DNA technology, and population genetics. The laboratory places emphasis on techniques and instrumentation used in recombinant DNA technology, as well as other techniques that are used to investigate the structure, function, and transmission of inheritable information.
Pre-requisites: BIO 103 with a minimum grade of C and BIO 104 with a minimum grade of C

BIO 241 Pathophysiology (3 Credits)
This course will emphasize disease mechanisms, the various responses of the body to restore homeostasis, and the effect of these responses on normal function. Pathogenesis will be viewed at the molecular, cellular, tissue and systematic levels and be correlated with signs and symptoms. Diagnostic procedures and the rationale or treatment modalities will be covered for model diseases
Pre-requisites: BIO 121 with a minimum grade of C and BIO 122 with a minimum grade of C

BIO 251 Pharmacology for Health Prof (3 Credits)
This course is a beginning introduction to the study of pharmacology. The student will utilize the physical and social sciences as a framework for developing an understanding of drug action and usage. Selected classifications and families of drugs will be introduced on a weekly basis. The names, indications, mechanism, dosage range, side effects and adverse effects of individual drugs will be discussed. The format of the course will be a combination of lecture, group discussion and case presentation. This course is strongly recommended for nursing students.
Pre-requisites: BIO 121 with a minimum grade of C and BIO 122 with a minimum grade of C

BIO 290 Honors Bio. Research Seminar (4 Credits)
This laboratory course is designed for students in the Honors Program majoring in Biology/Pre-Medicine, Chemistry, Environmental Science or General Science. This course allows them to work on their Capstone Research projects in a lab setting. Lab safety, scientific method, equipment training and research methodology will be explored in conjunction with students' research projects. Research completed in the course will be the basis for the students' Honors Program presentations.
Pre-requisites: (BIO 103 with a minimum grade of B and BIO 104 with a minimum grade of B) or (BIO 121 with a minimum grade of B and BIO 122 with a minimum grade of B) or (CHM 103 with a minimum grade of B and CHM 104 with a minimum grade of B)

Business (BUS)

Division: Business Division

BUS 100 Personal Finance (3 Credits)
This course provides a practical introduction to the concepts of personal finance. It mainly discusses personal financial planning and establishes a path towards financial freedom that is less about accumulating wealth and more about building a future tailored to individual goals which can increase happiness and reduce stress. The intent is to help students set priorities that guide their financial decisions. Topics include planning and budgeting, financial instruments and institutions consumer credit, credit bureau reports and identity theft, money matters, tax management, auto and home loans, debt, foreclosure & bankruptcy, insurance, basic investment, and mutual funds.
Pre-requisites: ((Companion Essay with a score of 06 and Companion Reading Comprehensio with a score of 059) or Companion Essay with a score of 07 or Companion Essay with a score of 08 or ENG 085 with a minimum grade of C or AFE 083 with a minimum grade of C or Move Up English 085 with a score of P or Move Up English 085 with a score of P or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BUS 101 Business Organization & Mgmt (3 Credits)
This course offers a concise overview of the world of business. Emphasis is placed on the following topics: ownership, risk, production, finance and the financial system, marketing, human resources, and the effect of government on business.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BUS 105 Intro. to Hip Hop Business (3 Credits)
This course offers a concise overview of the world of business. Emphasis is placed on the following topics: ownership, risk, production, finance and the financial system, marketing, human resources, and the effect of government on business.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BUS 141 Business Mathematics (3 Credits)
In this course, emphasis is placed on the application of fundamental mathematic principles to business: ratio and proportion, percentage, discount, interest, graphs and measurements
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

BUS 201 Principles of Management (3 Credits)
This course offers an introduction to the major functions of management: planning, staffing, organizing, controlling, direction and financing. The technical tools of management are considered in relation to their social and psychological implications in management decision making.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 203 Intro. to Entrepreneurship (3 Credits)
This course offers a framework for understanding the process of how to start and manage new businesses and exposes students to challenges, risk factors and strategies for examining the business environment in which new businesses must operate. Major objectives of this course is to understand the process of due diligence, how to generate ideas for a new business, the impact that new businesses have on society, the importance of vision/mission and organizational values and the tools necessary to conduct an initial financial evaluation of new business.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 204 Intro to Org Behavior in Bus (3 Credits)
This course traces the foundation and development of behavioral science as applied to business, and analyses organizational and human needs. Topics emphasized include: organizational design and development, formal and informal work groups, communication and group processes, motivation theory, leadership, and the relationship between the work environment and the community and the urban setting. The course includes a review of selected behavioral research findings
Pre-requisites: BUS 201 with a minimum grade of C

BUS 207 Leadership & Supervision (3 Credits)
This course offers students the opportunity to learn about leadership and supervision in modern organizations. Students are introduced to a variety of behavioral and managerial leadership theories and findings including the Ohio Studies, participative leadership and charismatic leadership. Case studies and experiential exercises print and electronic media are used to enhance classroom discussion
Pre-requisites: BUS 201 with a minimum grade of C

BUS 211 Principles of Marketing (3 Credits)
A study of those activities which are paramount in affecting the sale and distribution of goods and services. Consideration is given to market research and analysis, the place of the consumer in our economic system and the functions of retailing and wholesaling.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 212 Principles of Retailing (3 Credits)
Retailing is a combination of activities involved in selling goods and services directly to the final consumer for personal or household use. This course will present an integrated approach to retail management. Many activities of retail establishments will be explored including but not limited to: retail strategy development, understanding the customer, retail information systems, market and location selection, merchandise buying and handling, financial operations management, store layout and design, laws and ethics, and retail tactics.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 213 Principles of Selling (3 Credits)
Students study the techniques of successful selling. Topics covered include the location and selection of prospects, the approach, and the sales presentation, meeting objectives, and closing the sale. These techniques are applied through student sales presentations and use of videotape evaluations.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 215 Advertising Principles (3 Credits)
Advertising and other sales promotional methods are studied from the perspective of communicating the market. Special emphasis is placed on the development of creativity in the student. Topics include advertising's place in the marketing mix, media selection, advertising research and production, and sales promotional strategies.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 221 Human Resources Management (3 Credits)
This course focuses on the background and operating concepts underlying the management of human resources in business and public organizations. It examines the critical issues in human resources including employment, wage and salary administration, training and development, employee and labor relations, and accident prevention. Emphasis is placed on the findings of the behavioral sciences as applied to personnel administration.
Pre-requisites: BUS 201 with a minimum grade of C

BUS 231 Global Business I (3 Credits)
This course is an introduction to the theory and practice of international business. Topics covered include global organization, principles of international trade, international management, marketing, finance, foreign exchange, balance of payments, trade deficits, free trade agreements, NAFTA, GATT, trade barriers, international investment, US International Trade Zones, European Union, and the global environment of business.
Pre-requisites: BUS 201 with a minimum grade of C

BUS 251 Business Law I (3 Credits)
This course provides an introduction to the principles, rules and scope of business law. Topics covered include sources of law, contracts, and the law of sales under the Uniform Commercial Code. Major antitrust, administrative, and environmental laws are reviewed. Current issues in consumer affairs and legal challenges are discussed.
Pre-requisites: BUS 101 with a minimum grade of C

BUS 252 Business Law II (3 Credits)
This course further explores legal topics governing business operations. They include, Agency, Negotiable Instruments, Real and Personal Property, legal aspects of business ownership, types of businesses, the Uniform Commercial Code is referenced, as are other related sources of law.
Pre-requisites: BUS 251 with a minimum grade of C

BUS 253 Legal Environment of Business (3 Credits)
This course focuses on the interrelationship of social policies, the legal system, and global business practices in society, with emphasis on the rapidly changing business and legal environments. Relationships among governmental, ethical, social, and business interests will also be examined. The course will provide students with a comprehensive legal foundation to enable them to understand the impact of law on business decisions.
Pre-requisites: BUS 101 with a minimum grade of C

Chemistry (CHM)

Division: Biology, Chemistry and Physics Division

CHM 100 Introduction to Chemistry (4 Credits)
This course covers the major concepts of general chemistry which will include the states and properties of matter and energy, atomic structure, the mole concept and stoichiometry, solutions, acid/base chemistry, and equilibrium. Laboratory sessions will be included. This course is designed to provide appropriate chemistry background for students in the Chemical and health fields
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CHM 101 College Chemistry I (4 Credits)
This course covers the major concepts of general chemistry which will include the states and properties of matter and energy, atomic structure, the mole concept and stoichiometry, solutions, acid/base chemistry, and equilibrium. Laboratory sessions will be included. This course is designed to provide appropriate chemistry background for nursing and health students.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CHM 102 College Chemistry II (4 Credits)
This course is an introduction to organic and biological chemistry for students preparing for careers in the health fields. The content includes hydrocarbons, alcohols, organic acids, carbohydrates, amines, lipids, amino acids and proteins, enzymes, biochemical energy transfer, metabolism, and nutrition. The course combines lecture and laboratory.
Pre-requisites: CHM 101 with a minimum grade of C

CHM 103 General Chemistry I (4 Credits)
This is a transfer course in chemistry for chemistry, biology, pre-med, and engineering students. Principles and concepts of stoichiometry, thermochemistry, ionic and molecular equilibria, and kinetics are covered. Also included is a brief introduction to organic nomenclature. Emphasis is on problem solving. Laboratory work is coordinated with lectures and numerous problem-solving sessions.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) and ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C)

CHM 104 General Chemistry II (4 Credits)
A continuation of CHM 103, atomic theory and bonding, elementary thermodynamics, electrochemistry and nuclear chemistry are discussed. Theory and practice of ionic equilibria in qualitative analysis are also covered. Laboratory introduces students to theory and practice of semi-micro qualitative analysis.
Pre-requisites: CHM 103 with a minimum grade of C

CHM 106 Chemistry for Engineering Tech (3 Credits)
This course is necessary for those who intend to pursue a career in the engineering Technology. Students will gain knowledge and understanding of the qualitative and quantitative analysis including the principles and concepts of the quantum theory, electron configuration & periodicity, molecular geometry & chemical bonding theory, stoichiometry, thermochemistry, ionic and molecular equilibria, kinetics, Solutions & their behavior, & electrochemistry. By observing the actual reactions in the laboratory, students will develop their analytical technique skills in coordination with the lectures and numerous critical thinking problem--solving sessions.

CHM 203 Organic Chemistry I (4 Credits)
The fundamental synthesis and reaction so f various organic molecules and the role these molecules play in our everyday lives. The theory behind the reactions is also included along with topics such as resonance and mechanisms. The lab includes experiments in polymers, flavorings, dyes, perfumes, analgesics, and food colors where the methods employed in the synthesis and purifications of the product are emphasized.
Pre-requisites: CHM 104 with a minimum grade of C

CHM 204 Organic Chemistry II (4 Credits)
A continuation of CHM 203. The current views of the mechanisms of organic reactions are emphasized. Students in the laboratory continue the theory and practice of some techniques employed in the synthesis, purification, and identification of organic compounds.
Pre-requisites: CHM 203 with a minimum grade of C

CHM 299 Research Study in Chemistry (3 Credits)
This laboratory course is designed for students majoring in Chemistry, and allows them to work on a research project in a lab setting. Lab safety, scientific method, equipment training, and research publication methods will be emphasized in conjunction with the students' participation in research projects. Students will also be required to present their work at the weekly Division seminar.
Pre-requisites: CHM 104 with a minimum grade of B and MTH 121 with a minimum grade of B

Cinema (CIN)

Division: Humanities and Bilingual Studies Division

CIN 101 Introduction to Film (3 Credits)
This course serves as an introduction to the study of film. Students will develop a greater understanding and appreciation of the medium by covering its history, various movements, and some of its most influential names.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

CIN 103 African American Cinema (3 Credits)
This course serves as a study of African American films. Students will develop a greater understanding and appreciation of this topic by covering its history, various movements, and some of its most influential names.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Civil Construction Engr. Tech (CET)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

CET 111 Construction Methd & Materials (3 Credits)
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CET 211 Surveying (4 Credits)
This is an introductory course that includes the use, care and adjustment of modern digital surveying instruments, the measurement of distance and difference in elevation, angles, directions, lines and grades. Other topics covered include the theory of measurement and errors, traversing and area computation. Field exercises are included to complement lecture topics.

CET 212 Surveying II (3 Credits)
This is a continuation of CET 211 and covers the elements of horizontal, vertical and compound curves, cross-sectioning and earthwork computations. Other topics covered include the essentials of boundary surveys, coordinates, control surveys, construction surveys and state plane coordinates. Field exercises and computer applications are included to compliment lecture topics.
Pre-requisites: CET 211 with a minimum grade of C

CET 214 Evid & Proc for Boundary Loc (3 Credits)
This course addresses the concept of evidence relating to boundary locations as discoverable on the ground and through deeds or other written records, and the procedures followed by the land surveyor when conflicts occur between those items of evidence by relating laws and cases.
Pre-requisites: CET 211 with a minimum grade of C

CET 221 Hydraulics and Drainage (3 Credits)
This course is an introduction to the fluid properties of water and the concepts of surface water hydrology. Topics covered include flow through pipes and channels and relationships between rainfall and runoff. Class time is divided between the study of theory and the application of this theory in the design of storm drainage systems. Laboratory exercises are included to complement lecture topics.
Pre-requisites: CET 211 with a minimum grade of C and MTH 113 with a minimum grade of C

CET 225 Soil Mechanics (3 Credits)
This is an introductory course in soil properties and testing techniques. Topics covered include soil classification, index properties, bearing capacity, retaining walls, soil compaction and pile driving. Emphasis is placed on practical field applications, including inspection and testing. Laboratory exercises are included to compliment lecture topics.
Pre-requisites: ENR 110 with a minimum grade of C

CET 231 Structures (3 Credits)
In this course, students perform calculations and write specifications for the correct size and physical characteristics of structural components of the simpler forms of structural systems. Design of steel and wood framing members, including bearing plates, base plates and riveted, bolted and welded connections is included. Also included is the study of reinforced concrete elements such as rectangular beams, T-beams and one and two-way slabs.
Pre-requisites: ENR 220 with a minimum grade of C

CET 251 CET Seminar (2 Credits)
This is a survey course involving a variety of topics relevant to civil engineering, construction and land surveying. Through group discussion, research and oral presentations, students gain an appreciation of the skills and techniques needed for success as a professional in their chosen field.

College Success Seminar (CSS)

Division: Business Division

CSS 101 College Success Seminar (3 Credits)
This course prepares students for college life by offering critical information and providing an ongoing support system, as needed, throughout the first semester. It emphasizes self-assessment, self-management, and the development of life skills, goal-directed behavior, and effective study habits.

Communications (CMS)

Division: Humanities and Bilingual Studies Division

CMS 110 Fundamentals of TV Production (3 Credits)
This course serves as an introduction to broadcasting. Topics covered include basic production, audio systems equipment, camera techniques, lighting and video switching, master control, editing/rendering, and studio/field operations.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

CMS 113 Screenwriting (3 Credits)
Students will be introduced to the study and development of the screenwriting process with emphasis on craft, the exploration of voice, and the acquisition of constructive critiquing skills.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

CMS 121 Fundamentals of Filmmaking (3 Credits)
This course serves as an introduction to filmmaking. Topics covered include producing techniques, writing, cinematography, directing, and editing/rendering.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

CMS 136 Audio Production (3 Credits)
This course is designed to teach the fundamentals of audio production. Students will learn basic audio recording and editing procedures and gain a theoretical understanding of the role of the audio engineer in a global context.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Computer & Information Science (CIS)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

CIS 107 Computer Literacy (3 Credits)
An introduction to Personal Computers, this course is specifically designed for students who have had little or no experience using the personal computer. The topics covered are designed to prepare the student for further study of computer-related courses and the more immediate word processing assignments in college courses. The class utilizes hands-on lab experiences to ensure that these important computer concepts are thoroughly understood. Included in this course is an overview of the microcomputer applications, Microsoft Windows, Microsoft Word and accessing information on the Internet. Note: CIS 107 can be used as a free elective in all programs/majors except Computer Science/Computer Information Systems.
Pre-requisites: ((Companion Essay with a score of 06 and Companion Reading Comprehensio with a score of 059) or (Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06 and Companion Reading Comprehensio with a score of 20) or Companion Essay with a score of 07 or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 085 with a minimum grade of C or AFE 083 with a minimum grade of C or Move Up English 085 with a score of P or ENG 085 Summer Bridge with a score of P or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CIS 131 Micro Computers in Business (3 Credits)
An introduction to personal computers, this course is specifically designed for students who have had some or little experience using the personal computer. The topics covered are designed to prepare the student for further study of computer-related courses and the more immediate word processing assignments in college courses. The class utilizes hands-on lab experiences to ensure that these important computer concepts are thoroughly understood. Included in this course is an overview of the microcomputer applications software package, Microsoft Office. The focus of the course will include an introduction to Windows, Internet Browsers, Microsoft Word, Excel, PowerPoint, Outlook, and Access. [Note: CIS 131 can be used as a free elective.]
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CIS 135 Micro Computers Spreadsheets (3 Credits)
An introduction to Microsoft Excel, this course is specifically designed for students who have had experience with MS Word. This course will provide hands-on instruction in the use of one of the powerful spreadsheet analysis applications, Microsoft Excel. Basic spreadsheet design and creation, formulas, charts and data management are included. Step-by-step instruction using realistic case studies emphasizes the important features of the software. (Advanced features, case studies and macro creation using Visual Basic are included in CIS 235).
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CIS 136 Desktop Publ for IBM Computers (3 Credits)
This course provides hands-on instruction to develop students' understanding of desktop publishing using Microsoft Office and the Internet. Topics covered include basic concepts, layout and good form, research, creating a presentation, using templates, and working with text, fonts, clip-art, drawings, and photographs. Students are required to design a variety of presentations as well as printed works indicative of their competence and typical of those found in business and industry as part of their portfolio.
Pre-requisites: CIS 107 with a minimum grade of C

CIS 137 Micro Computer Data Bases (3 Credits)
This course introduces students to the windows concepts, entering and updating records in a database, performing reporting and query functions with multiple databases, and the differences between Excel and Access. Students will be exposed to step-by- step instruction using MS Access to create and maintain databases. Students will be able to plan, create and manipulate databases for typical business needs.
Pre-requisites: CIS 107 with a minimum grade of C

CIS 139 Introduction to Multimedia (3 Credits)
This course provides an introduction to many of the individual components of interactive, computer–assisted communications. Because multimedia technology is a tool, the applications are practically endless and multimedia may mean different things to different people. It may be a communications tool to some and an artistic medium to others. It can also be a teaching tool or a way to complete a business transaction. This course assists students in planning and developing multimedia presentations in their field of interest.
Pre-requisites: CIS 107 with a minimum grade of C

CIS 152 Internet Concepts (3 Credits)
This course provides a basic introduction to the world-wide computer communications network, the Internet, including the World-Wide Web. Students gain an understanding of the history and background as well as the hardware and media that comprise the Internet. This is a research-oriented course in which Internet Protocol, net etiquette, e-mail, accessing Internet services, File Transfer Protocol, and searching the databases are explored. Students are provided hands-on introduction to the Hypertext Markup Language (HTML) used to create World-Wide web sites in the Internet. Students also create their own web site and begin to use the Hypertext Markup Language (HTML) to create, edit, and maintain their site.
Pre-requisites: CIS 107 with a minimum grade of C or CIS 131 with a minimum grade of C or CIS 135 with a minimum grade of C or CIS 136 with a minimum grade of C or CIS 137 with a minimum grade of C or CIS 139 with a minimum grade of C

CIS 153 Adv. Internet Concepts/Applic. (3 Credits)
This course is an extension of the basic introduction to Hypertext Markup Language (HTML), the Internet language covered in CIS 152. Students learn to design and improve World-Wide Web sites. The course also covers more complex tables, manipulation of frames, Common Gate Interface (CGI), Cascading Style Sheets (CSS), and a brief introduction to JavaScript within the confines of HTML tags. Incorporating multimedia (audio and video) files are also covered. CSS and JavaScript are discussed on a basic level with the goal of introducing students to tools that enhance HTML and add dynamic content to web sites. Upon the completion of this course, students will be prepared to take the introductory course in JavaScript.
Pre-requisites: CIS 152 with a minimum grade of C

CIS 212 Systems Analysis and Design (3 Credits)
This course gives an overview of the system development life cycle covering information gathering and reporting activities from the analysis phase through the maintenance and support phase. The course introduces the classical and structural tools/techniques for describing processes, data flows, data structures, file and database design, input/output design and program specifications.
Pre-requisites: ((((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999) and (CIS 107 with a minimum grade of C or CIS 111 with a minimum grade of C or CIS 114 with a minimum grade of C or CIS 131 with a minimum grade of C or CIS 135 with a minimum grade of C or CIS 136 with a minimum grade of C or CIS 137 with a minimum grade of C or CIS 139 with a minimum grade of C or CIS 152 with a minimum grade of C or CIS 153 with a minimum grade of C or CIS 235 with a minimum grade of C or CIS 237 with a minimum grade of C)

CIS 215 Data Communications (3 Credits)
This course is designed to develop an understanding of current data communications technology as it applies to information systems. Topics covered include basic concepts and terminology as it relates to data communications and networks, with particular emphasis on local area networks. Students are required to design PC network hardware configurations based upon selected case studies.
Pre-requisites: CIS 212 with a minimum grade of C

CIS 235 Advanced MicroComp Spreadsheet (3 Credits)
This course is a continuation of CIS 135, which introduced students to the spreadsheet analysis application, Excel for Windows. Continuing the step-by- step instruction using case studies, advanced Excel features and OLE (Object Linking and Embedding), hyperlink to the Internet and Visual Basic function will be covered. Special attention is paid to creating macro modules using Visual Basic. An advanced research project is required.
Pre-requisites: CIS 135 with a minimum grade of C

CIS 237 Advanced Microcomp Database (3 Credits)
This course is a continuation of CIS 137, which introduced students to databases in MS Access. Continuing the step-by-step instruction using case studies, this course covers advanced Access features including sophisticated queries, reports based on databases, queries and reports that can support the business decision-making processes, data access pages which provide internet access to databases, exporting data from the databases to an HTML file that is accessed over the Internet (www) or intranet (local), and integrating the database with other programs (e.g., word processing, spreadsheet, etc.). An advanced research project is required
Pre-requisites: CIS 137 with a minimum grade of C

Computer Science (CSC)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

CSC 100 Fundamental of Computer Scienc (3 Credits)
This course introduces the elementary concepts of computer science and is specifically designed for students planning to major in the discipline. The course emphasizes the various aspects of computing such as problem solving, algorithm design, and program construction. Students also explore the application of computer science to various real-world problems. An object-oriented programming language is used to develop the student's problem solving and programming skills. Note: Successful completion of programming projects requires students to use a computer laboratory outside of the class period.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CSC 104 Network Fundamentals (3 Credits)
This course is an introduction to microcomputer hardware and network operating system components. It includes examination of microprocessors, ports, databases, video displays, basic network operating systems, and network topologies. The course emphasizes the introductory topics that are necessary for a student who plans a career in network technology.

CSC 106 Roadmap to Computing Engineers (3 Credits)
This course is an introduction to programming and problem-solving skills for engineering technology majors using high level programming languages. Topics include basic strategies for problem solving, constructs that control the flow execution of a program and the use of high-level data tyypes such as lists, strings, and dictionaries in problem representation as well as algorithm design, programming languages and abstraction, with applications. The course will also present an overview of selected "big idea" topics in computing.
Pre-requisites: MTH 100 with a minimum grade of C or MTH 113 with a minimum grade of C or MTH 114 with a minimum grade of C or MTH 119 with a minimum grade of C or MTH 120 with a minimum grade of C or MTH 213 with a minimum grade of C

CSC 112 Computer Prog. for Engr. Tech. (3 Credits)
This course is an introduction to computer-oriented problem solving and programming and their applications in engineering. It provides the essential foundation for a program of study in object-oriented programming and computer-oriented mathematics. It covers the general areas of data analysis (graphics, sorting, and statistics), curve fitting (regression and interpolation), and equation solving. Students learn programming and the use of general-purpose application software tools such as spreadsheets, database, and mathematical software. Students are required to complete a series of laboratory assignments illustrating applications of computer-oriented problem solving.
Pre-requisites: MTH 113 with a minimum grade of C or MTH 119 with a minimum grade of C

CSC 113 Intro Linux/UNIX Operating Sys (4 Credits)
Students will be introduced to Linux/UNIX as an open-source computing environment. They will learn how to install and configure Linux/UNIX as both a server operating system and as a desktop operating system. On the server side they will learn how to set up and configure basic network services. On the desktop side they will learn to set up and configure a graphical environment and will learn how to install and configure office-suite applications. Students will become familiar with the UNIX file system structure, editors and shell programming. Students will learn networking in UNIX as well as basic system administration, and be able to contrast and compare UNIX with Linux.

CSC 114 Computer Networks I (4 Credits)
This course introduces the design and analysis of computer communication networks. The topics covered during the first half of the semester are the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. The topics covered during the second half of the semester are architecture, components, and operations of routers and switches in a small network. Student learn how to configure a router and switch for basic functionality.
Pre-requisites: CSC 104 with a minimum grade of C

CSC 116 Intro to Comp/Network Security (4 Credits)
The course provides a foundation in network security fundamentals for those responsible for protecting network services, devices, traffic and data. The topics include the current risks and threats to an organization's data together with a structured way of addressing the safeguarding of these critical assets. Additionally, the course provides the broad-based knowledge necessary to prepare students for further study in other specialized security fields and prepare the to take the Security+ certification.
Pre-requisites: CSC 104 with a minimum grade of C

CSC 121 Computer Science I (3 Credits)
This course serves as an introduction to the concepts and methodologies fundamental to computer science. Emphasis is placed upon object-oriented design and analysis with a thorough discussion of the concepts and principles associated with object-oriented programming. A high level object-oriented language is utilized for programming assignments and to illustrate conceptual material. It is recommended that a student be enrolled concurrently in either MTH 113 or MTH 119 to derive the most benefit from the course.

CSC 122 Computer Science II (3 Credits)
This course explores further the concepts introduced in CSC 121, applying them to more complex problems. Areas covered include class construction, class instantiation, file/stream processing, list processing, string processing, dynamic storage allocation, and internal search/sort methods.
Pre-requisites: CSC 121 with a minimum grade of C

CSC 137 Intro. to Programming in Java (3 Credits)
This course provides students with the working knowledge required to program Java applications. Students will learn how the Java language supports object-oriented programming, and how object-oriented designs can be implemented in Java. Through lectures, discussions and programming projects, students will develop both conceptual and practical knowledge enabling them to build Java applications from analysis and design to implementation.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CSC 151 Intro Develop Web Applications (3 Credits)
This course discusses the concepts and skills required to plan, design and build web applications. The topics include Web document structure, HTML5 tags, Cascading Style Sheets (CSS) and JavaScript with a focus on user interaction enabled by programming the web browsers.

CSC 214 Computer Networks II (4 Credits)
This course introduces how to configure router and switches for advanced functionality and the selection criteria of network devices and WAN technologies to meet network requirements. The topics covered during the first half of the semester are the architecture, components, and operations of routers and switches in a large and complex network. The topics covered during the second half of the semester are WAN technologies and network services required by converged application in a complex network.
Pre-requisites: CSC 114 with a minimum grade of C

CSC 221 Computer Sys and Architecture (3 Credits)
This course provides a general introduction to the structure of computer systems and covers Assembly language for a specific computer. Topics discussed include machine components and cycles, assemblers, addressing techniques, macros, subroutines, program linkage, and input/output. A specific Assembly language is developed and implemented. Students must be prepared for extensive individual work in the computer laboratory.
Pre-requisites: CSC 122 with a minimum grade of C

CSC 223 Ethics and Computer Technology (3 Credits)
This course introduces the philosophical tools, social expectations, professional standards and legal requirements for analyzing ethical issues raised by computing technology. This background will be used to explore, using case studies, some of the ethical issues related to privacy, intellectual property, ownership, crime, data collection, data security, hacking, automation, freedom of information and intellectual property.
Pre-requisites: (ENG 101 with a minimum grade of C) and (CSC 121 with a minimum grade of C or CSC 137 with a minimum grade of C)

CSC 225 Data Structures (3 Credits)
This course is designed to present the fundamentals of data structures from object-oriented perspective. The course introduces students to the design and implementation of abstract data types using an object-oriented programming language. The course includes an introduction to algorithm analysis, recursion, and internal and external sorting/searching methods. The fundamental concepts of inheritance and virtual functions are also examined. Students are required to complete a series of programming projects that demonstrate their understanding of lecture topics.
Pre-requisites: CSC 122 with a minimum grade of C

CSC 226 NetworkDefense&CounterMeasures (4 Credits)
This course introduces advanced security technologies and practices to defend and protect network systems. The topics include the essential security practices of hardening network systems through the use of firewalls and Intrusion Detection systems. Tools and techniques including hacker tools, methods, scripts and automated hacking malware employed in today's cyber environment are examined to analyze traffic and intrusion. The processes and procedures used by hackers, along with corresponding countermeasures that can be employed to protect against such attacks are investigated.
Pre-requisites: CSC 114 with a minimum grade of C

CSC 228 Operating Systems (4 Credits)
This course examines the concepts, designs, and operations of modern real-time, general-purpose operating systems. The course covers fundamental operating system technology as well as contemporary design principles such as real-time systems, multiprocessor scheduling, memory management, file management, and security and network processing. Students are required to complete a selected series of programming projects that illustrate operating system design principles.
Pre-requisites: CSC 225 with a minimum grade of C

CSC 230 Computer & Internet Forensics (4 Credits)
This course examines forensics from a computer science perspective: fundamentals of computer forensics and electronic discovery. Topics covered include technical and formal methodologies for conducting security incident investigations; file systems and storage analysis, data hiding techniques, network forensics, and projects involving design and use of digital forensic tools.
Pre-requisites: CSC 114 with a minimum grade of C

CSC 231 Database Design (4 Credits)
This course introduces the concepts and techniques associated with the manipulation of mass storage based files. Topics explored include various file processing environments, access methods, typical data structures, and file design and implementation. Students must be prepared for extensive individual work in the computer laboratory.
Pre-requisites: CSC 122 with a minimum grade of C

CSC 232 Advanced Database Management (4 Credits)
This course provides students with the essential concepts, principles, and techniques of modern database systems. This course covers the principles for the design and techniques of database modeling, and database system architecture, query optimization, query processing, and transactions and user/program interfaces. Building systems that have a relational database as a backend and the Web as a frontend, data mining and data warehousing will be introduced as class projects.
Pre-requisites: CSC 231 with a minimum grade of C

CSC 235 Adv Object Oriented Prog (4 Credits)
This course covers the object-oriented paradigm associated with programming in a network environment. The course focuses on topics that relate to developing object-oriented applications for the Internet, Intranets, and World Wide Web. The Java programming language is used to illustrate software development for network environments. Topics covered include applet construction, animation, class construction, exception handling, graphics, HTML interfacing, and graphical user interface design. Students are required to develop and implement a network application.
Pre-requisites: CSC 225 with a minimum grade of C

CSC 237 Enterprise Java Programming (4 Credits)
This course continues effective hands on instruction in the Java object-oriented language that was begun in CSC 137. Topics may include object-oriented design solutions, exception handling, manipulating files and databases, and graphical user interfaces, multimedia based application and network application. Students will build Java Platform, Enterprise Edition (Java EE) applications that use Enterprise JavaBeans (EJB) and the Java Persistence API (JPA), a layered architectural framework.
Pre-requisites: CSC 137 with a minimum grade of C

CSC 250 Infor. Tech. Capstone Project (3 Credits)
The student will develop a proposal for a capstone project and then will complete the project as an independent study with faculty mentor oversight. Students will use and integrate concepts and skills learned in other courses in the Software Development Technology and/or Cyber Security and Network Technology curricula. Upon completion of the project, the student will make a written report and an oral presentation.

CSC 251 Web Application Development (4 Credits)
This course covers Internet applications and concepts from client/server programming to 3-tier architectures. HTML, JavaScript, the Document Object Model, basic HTTP, XML, DTD's and Cascading Style Sheets are introduced as tools for illustrating methods for exchanging, structuring and presenting information. A database (such as DB2), SQL, and a server-side language (such as JSP) are used to implement 3-tier applications.
Pre-requisites: CSC 137 with a minimum grade of C

CSC 253 Intro. System & Cloud Admin. (4 Credits)
This course will introduce the tasks and techniques required to perform as a system administrator of Linux systems and introduce the building blocks of most cloud computing solutions. Topics include booting, process control, the file system, managing users and resources, backups, configuration management, networking, the network file system, email servers, security, hardware devices, interoperability, and daemons. An overview of cloud concepts including delivery models, provisioning, service management, monitoring, and best practices are introduced.
Pre-requisites: CSC 113 with a minimum grade of C

CSC 255 Mobile Application Development (4 Credits)
This course introduces students to the specific skills needed to develop native applications for mobile devices. Students learn how to design and develop mobile applications that run in an Android or iOS environment. The topics include the essential application programming interfaces (APIs) and tools that enable the development, back-end integration, security, and management of cross-platform mobile applications. A significant project is integrated into the course.
Pre-requisites: CSC 137 with a minimum grade of C

CSC 260 Information Tech. Internship (3 Credits)
This course offers internship opportunities to students. Placements in a variety of private, non-profit, and public agencies are designed to encourage both pre-professional training and the integration of field and classroom experiences. An internship requires that students engage in supervised academic study through participation in an applied setting.

Cooperative Education (CEE)

Division: Business Division

CEE 298 Cooperative Edu. Experience I (1-6 Credits)
This course is designed to give students practical employment experience in their majors or related fields of study. Students typically work for a 12- to 15-week period under supervision in the workplace and are guided through their experiences by faculty advisors. Participants in this course also receive classroom training in the Career Development Seminar I – Preparing for the Workplace, which covers career assessment and planning, resume writing, interviewing, and job search techniques.

CEE 299 Cooperative Edu. Experience II (1-6 Credits)
Students participating in a second cooperative education experience receive continued or additional employment experience in positions related to their majors or career goals. Participants in this course receive classroom training in the Career Development Seminar II – Succeeding in the Workplace, which teaches business communication, teamwork, leadership, and other skills necessary for job success.

Criminal Justice (CJI)

Division: Social Sciences Division

CJI 101 Intro to Criminal Justice (3 Credits)
This introductory course on the principles and problems of the criminal justice system analyzes the role of the criminal justice officer in the community, the rights of the individual citizen, and the laws under which we live. The course examines in depth the organization and administration of the courts, corrections, and law enforcement agencies. The course includes analysis of the opportunities and obligations of the criminal justice officials, and those in law enforcement, correctional services, and courts. Special topics such as terrorism and cybercrime are also explored. Using various multimedia platforms, the course explores criminal justice issues, examines the issues that influence offenders, and identifies explanations for delinquent and criminal behavior. Students are required to complete a field assignment involving in-court observations.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CJI 102 Police Role in the Community (3 Credits)
The course includes analysis of the social, economic, population, and political factors that affect the relationship between police and the community. The course examines community/police partnership collaborations and a problem-solving approach to policing. The course will also explore special topics such as community policing, the use of deadly force, terrorism, policing the drug problem, and civil liability.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 103 Probation and Parole (3 Credits)
This course presents probation as a judicial process and parole as an executive function. A historical review of trends in probation and parole such as the community-based programs in work release, half-way house contract program planning, therapeutic community, and treatment team concepts in probation and parole are examined. Modern trends, such as the justice model, determinate sentencing, restorative justice, “broken windows” supervision, and intensive supervision in the adult and juvenile system are also examined. The course includes discussion of the community resources that can be brought to bear on the correctional task and the concept of shock probation.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 111 Police Administration & Org (3 Credits)
This course examines the organizational framework, authority structure, and major functions of representative police agencies. It also covers the administrative problems of allocating responsibility and support functions and of coordinating many large and small area commands. The course includes discussion of recruitment, career advancement, and selection of leadership.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 112 Police Management (3 Credits)
Principal areas of emphasis include the duties and responsibilities of the police supervisor, personnel [problems, and handling of disciplinary problems, complaints, and grievances. The principles of efficient leadership, the televance of motivation and communication, and techniques of teaching are presented.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 120 Prison Sub Cult & Life Style (3 Credits)
This course focuses on the theoretical policy issues and dilemma of the American correctional system in handling citizens who have been imprisoned. It examines the origin and nature of the inmate social systems, inmate social roles, and the inmate socialization process. It explores, partly from the inmate's own perspective, modern concepts of behavior modification, punishment, community alternatives to imprisonment, and probable trends in the practice of corrections both nationally and internationally.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 121 Introduction to Corrections (3 Credits)
This introductory course examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions, and parole. It will also examine the principles, theories, phenomena and problems of the crime, society, and the criminal justice system from the perspective of criminology and the criminal justice system in general. The course emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response. This multi-discipline approach requires the student to engage in critical thinking on both a practical and theoretical basis.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 123 Correctional Administration (3 Credits)
This course examines the principles of organization and management as applied to correctional institutions. It covers the theoretical and practical aspects of correctional management. Factors such as organization, decision making, values, human relations, and power are considered.
Pre-requisites: CJI 101 with a minimum grade of C and CJI 121 with a minimum grade of C

CJI 136 Criminology (3 Credits)
This course examines the very causative explanations of the nature of crime and criminal behavior and society's reaction to criminal and correctional institutions. Major theories of criminal behavior and current issues of crime prevention and control are also covered. The course explores criminal justice issues, examining the explanations for delinquent and criminal behavior, using various multimedia platforms. Special topics such as the motivations of terrorists, serial killers, pedophiles, and assassins are also explored.
Pre-requisites: CJI 101 with a minimum grade of C or SOC 101 with a minimum grade of C or PSY 101 with a minimum grade of C

CJI 201 Patrol Administration (3 Credits)
This course examines in detail the primary police functions and their objectives. It analyzes administrative planning of patrol activities, requirements for their effective execution, and the allocation of patrol strength to meet specific needs and emergencies.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 202 Crime and Delinquency (3 Credits)
This course surveys the nature and extent of crime and delinquency and examines the major approaches to causation, apprehension, control, and treatment. The course explores sociological, psychological, and multidisciplinary explanations for delinquent and criminal behavior using various multimedia platforms. The course also examines special topics such as gangs, youth violence, child abuse investigation, juvenile sex offenders, and juvenile waiver to adult court. Students may be required to complete a field assignment involving in-court observations.
Pre-requisites: CJI 101 with a minimum grade of C or SOC 101 with a minimum grade of C or SOC 108 with a minimum grade of C or PSY 101 with a minimum grade of C

CJI 203 Prin. Criminal Investigation (3 Credits)
This course explores the fundamentals of investigation, crime scene search and recording, collection and preservation of evidence, scientific aid, interviews and interrogation, follow-up, and case preparation. This course is designed to provide students with the basic theoretical and philosophical understanding of the investigatory process. Analysis of problems encountered in interviewing, interrogating, evidence collection, and admissibility will be examined. Application of investigation theories to the administration of justice will also be developed.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 204 Evidence (3 Credits)
This course surveys the basic rules of evidence important to law enforcement personnel and criminal justice students. It includes a study of the applicable amendments to the Constitution, landmark Supreme Court decisions, the Federal Rules of Evidence, hearsay, and recent changes in the rules of evidence at the federal and state levels. Students are required to complete a field assignment involving in-court observations.
Pre-requisites: CJI 101 with a minimum grade of C or PLS 101 with a minimum grade of C

CJI 205 Introduction to Criminal Law (3 Credits)
This course expands on concepts introduced in CJI 101, Introduction to Criminal Justice. It traces the definition of crime, and the origins of criminal law in the United States. Topics of discussion include basic legal terminology, classification of crimes, specific criminal offenses, and the New Jersey courts. This course also amplifies and further develops Criminal Procedure, topics initially covered in CJI 101, Introduction to Criminal Justice. The course explores conflicting models of justice, due process.
Pre-requisites: CJI 101 with a minimum grade of C or BUS 101 with a minimum grade of C or BUS 251 with a minimum grade of C

CJI 210 Forensic Science (3 Credits)
This is an introductory course on the application of physical, chemical, behavioral, medical, and biological sciences to physical evidence used to explain or solve civil and/or criminal law cases. This course explores the collection, examination, evaluation, and interpretation of physical evidence. Emphasis is placed on lecture and demonstration.
Pre-requisites: CJI 101 with a minimum grade of C

CJI 211 Counseling-Addicted Offender (3 Credits)
This course provides and introduction to the knowledge, skills, attitudes, case management and counseling techniques required for the counseling and treatment of the addicted offender. The course includes a review of the special needs of this population and the focus programs and facilities set up to treat them in addiction and criminal justice settings. This course is a joint offering of the Criminal Justice and Human Services program of the Social Science Division. This course is approved for 36 educational hours toward New Jersey's Certified Alcohol and Drug Counselor (CADC) certification or recertification.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

CJI 250 Current Issues in Crim Justice (3 Credits)
This course examines the current critical issues in the criminal justice system. It includes comparison and analysis of pending cases before the federal and state courts. Students learn about previous decisions and other topics of a social nature that can impact on the administration of the criminal justice system.
Pre-requisites: CJI 101 with a minimum grade of C

Data Science (DSC)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

DSC 141 Data Science I - Fundamentals (2 Credits)
In this course, students will be able to gain basic knowledge in the field of data science and analytics. This covers an introduction to data science and data analytics, including data acquisition, cleaning and transformation, visualization, and distribution. State of the art software tools and techniques for performing data science tasks will be explored. Students will be able to work on real-world projects. They will use algorithmic techniques and varied math skills to implement solutions in a programming language in order to get the best possible predictions.
Pre-requisites: CSC 121 with a minimum grade of C and MTH 101 with a minimum grade of C

DSC 241 Data Sci II - Machine Learning (2 Credits)
This course serves as a continuation of Data Science I - Fundamentals (DSC 141). Students will be able to gain knowledge of advanced topics and tools in the field of data science. They will be trained to make better predictions using machine learning. Topics include the use of decision trees, clustering, neural networks, and natural language processing. Students will use their fundamental skills in data science, including a programming language plus statistics and probability for problem solving by combining these two in generating better outcomes in the predictive value of data.
Pre-requisites: CSC 122 with a minimum grade of C and DSC 141 with a minimum grade of C and MTH 122 with a minimum grade of C and MTH 239 with a minimum grade of C

DSC 242 Intro to Artificial Intel (3 Credits)
Artificial Intelligence is the subset of data science that models processing resembling the human brain. It uses intelligent and smart systems to off er automation of business processes, efficiency, and productivity. This course introduces concepts, approaches, and techniques of Artificial Intelligence, and focuses on materials that are fundamental and have a broad scope of applications. Topics include problem solving, search, knowledge and reasoning, logical agents, first-order logic and inference, uncertain knowledge and reasoning, quantifying uncertainty, probabilistic reasoning, perception, pictorial knowledge representation, and search in frequency and spatial domains. Additional topics include machine learning, neural computation, evolutionary computation, and robotics.
Pre-requisites: CSC 225 with a minimum grade of C and MTH 141 with a minimum grade of C and MTH 239 with a minimum grade of C

DSC 243 Data Visualization (3 Credits)
Data visualization is the graphical representation of information and data using tools such as charts and graphs to provide a pictorial representation of data trends, outliers, and patterns. In the world of Big Data, visual data tools and technologies are essential to analyze massive amounts of information and make data-driven decisions.
In this course, students will gain knowledge in computer graphics, designing, developing, and applying techniques for both information and volume visualization. Software tools such as Tableau will be used to represent and interpret information in various visual forms, and volumetric visualization algorithms such as marching cubes and ray casting will be used for big data visualization of 3D datasets in scientific domains. Students will work on projects to help them gain knowledge about theoretical design principles and their application using real-world data.
Pre-requisites: DSC 241 with a minimum grade of C and CSC 231 with a minimum grade of C

Drama (DRA)

Division: Humanities and Bilingual Studies Division

DRA 100 Theater Appreciation (3 Credits)
This course is an entryway into the study of the theater, its history and its impact upon audiences and the societies they lived and continue to live in. Students will not only cover various plays, but also the lives of the playwrights who penned them as well as the directors and actors who brought them to life. A general understanding and appreciation towards the production of plays will also be touched upon.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

DRA 101 Fundamentals of Acting I (3 Credits)
Students will be introduced to the beginner's level of the theory and practice of acting. They will go through lessons and exercises on impression, characterization, and improvisation.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

DRA 102 Fundamentals of Acting II (3 Credits)
Students will be introduced to the intermediate level of the theory and practice of acting. They will go through lessons and exercises on impression, characterization, and improvisation.
Pre-requisites: DRA 101 with a minimum grade of C

DRA 105 Directing and Staging (3 Credits)
This course will introduce students to the craft of directing for the theater. They will learn about the process that goes into selecting and analyzing a script and again instruction on how a director brings the written word into a visual performance.
Pre-requisites: DRA 101 with a minimum grade of C

DRA 106 Playwriting (3 Credits)
This course is an introduction to writing for the theater through practice and discussion. The major components of playwriting, including action, dialogue, and character, will be studied.
Pre-requisites: DRA 101 with a minimum grade of C

Early Care (ECE)

Division: Social Sciences Division

ECE 101 Early Care and Education I (4 Credits)
This course introduces the paraprofessional in early childhood education to the Child Development Associate (CDA) credentialing process and provides comprehensive instruction in early childhood education. The first three CDA competency goals and functional areas are discussed. Students begin to develop a professional resource file. Students who enroll in this course must have (within the past five years) at least 480 hours of experience working with children from infancy through children five years old in a group setting. Strategies learned in this course will be practiced in the student's childcare center.

ECE 102 Early Care and Education II (4 Credits)
This course builds on the knowledge and skills of developed in ECE 101. It focuses on practical skills needed to successfully complete the Child Development Associate (CDA). The last three competency goals and functional areas are discussed. Students complete the professional resource file. Students enroll in this course must have (within the past five years) at least 480 hours of experience working with children from infancy through children five years old in a group setting. Strategies learned in the course will be practiced in the student's childcare center.
Pre-requisites: ECE 101 with a minimum grade of C

ECE 103 Early Care & Edu. Field Exper. (3 Credits)
This course allows the paraprofessional to develop and demonstrate professional standards and practical skills in an early childhood setting. It provides students the opportunity to put theory into practice. Students are required to document working hours towards the requisite 480 hours of experience in one of the following childcare settings: center-based preschool, center-based infant/toddler facility, or a family childcare facility.
Pre-requisites: ECE 101 with a minimum grade of C

Economics (ECO)

Division: Business Division

ECO 101 Principles of Economics I (3 Credits)
This course provides a comprehensive introduction to the Principles of Macroeconomics that includes (i) Scarcity, Choice and opportunity Cost; (ii) Demand & Supply, Market Systems and Circular Flow Analysis; (iii) GDP, Growth and Instability; (iv) Macroeconomic Model and Fiscal Policy; (v) Money, Banking and Monetary Policy; (vi) International Economics and Current Economic Problem Analysis.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ECO 102 Principles of Economics II (3 Credits)
This course provides a comprehensive introduction to the Principles of Microeconomics that includes (i) the Basic Problems of Economics (Scarcity, Choice, Opportunity costs); (ii) Market Analysis (Demand & Supply), Elasticities and Consumer Behavior; (iii) Production, Cost and Market Structures (Pure Competition, Monopolistic Competition, Oligopoly and Pure Monopoly); (iv) US Economy and Public Sector Analysis; and (v) Resource Markets together with other relevant economic issues and policies.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ECO 487 Economics Transfer Elective (3 Credits)

Education (EDU)

Division: Social Sciences Division

EDU 101 Introduction to Education (3 Credits)
This course introduces students interested in a career in education to some of the concepts, practices, and procedures of contemporary American education. The organization and operation of American schools, their financial and legal support, their place and role in the community, as well as some of the historical and philosophical foundations upon which American education is predicated, are examined. Teaching as a profession is examined.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

EDU 103 Phil & History of Education (3 Credits)
This course provides an in-depth examination of major philosophies of education and their relation to teaching practice, methods, curriculum, and educational administration. Philosophies examined will include idealism, perennialism, pragmatism, existentialism, Marxism, romanticism, phenomenology, hermeneutics, and post-structuralism. Emphasis is on practical significance of educational theories. Note: In addition to those mentioned above, the following philosophies of education may also be examined: radical perspectivism, W E B Dubois' philosophy of education, and eastern theosophical schools of thought (e.g., Buddhist, Hindu, and Confucian).
Pre-requisites: EDU 101 with a minimum grade of C

EDU 104 Infant Toddler Mental Health (3 Credits)
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

EDU 201 Education in Urban Environment (3 Credits)
This course examines the educational and social forces affecting the learning process of the inner city student. Issues considered include multiculturalism and the educational system, the effect of social institutions on the educational process, and the role of the teacher in the urban school.
Pre-requisites: EDU 101 with a minimum grade of C

EDU 203 Children with Special Needs (3 Credits)
This course is designed for those who plan to work with children who have special needs due to physical or mental differences or debilitating life situations. Emphasis is on meeting the needs of a child in an institutional setting, especially in agencies and schools.
Pre-requisites: EDU 101 with a minimum grade of C

EDU 205 Early Childhood Education (3 Credits)
This is an introductory course in early childhood education. It includes discussion of curriculum for young children, focusing on the importance of appropriate goals, teaching methods, and teaching tools. Topics covered include early care and education, practical scheduling, routines, and classroom management.
Pre-requisites: EDU 101 with a minimum grade of C

EDU 233 Education Seminar I (3 Credits)
The Education Seminar I course is designed to provide students with opportunities to obtain the knowledge, testing strategies, information, and resources necessary to successfully pass the Praxis Core Exam. The course will focus on reading comprehension, math, and writing. The course is designed to support prospective teachers in successfully passing the Praxis Core Exam. This will be accomplished by pretesting students and based on their individual strengths and/or challenges, lesson plans, and tutoring and support will be provided.
Pre-requisites: EDU 101 with a minimum grade of C

EDU 234 Education Fieldwork I (3 Credits)
Students are placed in a voluntary internship for a minimum of ten hours per week. The site may be a daycare center, public or private school, or a special agency serving children. Students will teach and perform other duties under the supervision of site staff and Essex County College faculty. Evaluation is conducted throughout the semester cooperatively be the faculty member and the professionals at the educational site.
Pre-requisites: EDU 101 with a minimum grade of C

EDU 240 Foundations of Autism Spectrum (3 Credits)
The Autism Spectrum Foundations course provides a comprehensive introduction to autism spectrum disorder (ASD) and offers students a deep understanding of the core concepts, characteristics, and challenges associated with the condition Through a blend of theoretical frameworks, practical insights, and experiential learning: students will explore how autism manifests, its impact on individuals across the lifespan, and evidence-based strategies for supporting individuals with ASD in various settings.
Pre-requisites: ENG 099 with a minimum grade of C

EDU 241 Applied Behavioral Analysis (3 Credits)
This course provides an overview of the principles and techniques of Applied Behavior Analysis (ABA), a scientific approach to understanding and changing behavior. Students will learn the basic concepts of behavior analysis and how to apply these principles to various real-world settings, such as education, clinical therapy, and organizational behavior management.
Pre-requisites: ENG 099 with a minimum grade of C

Electronics (ELC)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

ELC 115 Electric Circuits I (3 Credits)
This introductory course in circuit analysis defines the electrical quantities, current, and voltage, and examines their relationship in various components and circuits. Circuits comprised of resistance, capacitance, and inductance which are energized by both DC and AC sources are considered. The theory includes Ohm's Law, Kirchhoffs Laws, series and parallel circuits, and several network theorems. In the laboratory the student performs electrical measurements which confirm his/her grasp of the theory. A circuit simulation computer software package is introduced and used as an analytical tool.
Co-requisites: MTH 113

ELC 116 Electric Circuits II (3 Credits)
This course is an expansion of Electrical Circuits on Circuit Theory introduced in ELC 115. It includes Ohm's and Kirchhoff's Laws for analysis of series and parallel AC circuits. Series-parallel, ladder and bridge networks are analyzed using AC signals. Resonance and frequency response are included. The basic theory and operation of diodes and transistors, including dc biasing are studied. In the laboratory, the student performs electrical measurements which confirm their grasp of the theory. A circuit simulation computer software package is introduced and used as an analytical tool.
Pre-requisites: ELC 115 with a minimum grade of C

ELC 120 Fundamentals of Analog ELC (3 Credits)
This course introduces students to the active components used in electronics circuits. It covers the physics, the characteristics, and some applications of semiconductor diodes and transistors. The emphasis is on transistor biasing circuits. These devices and their applications are also studied through laboratory experiments.
Pre-requisites: ELC 115 with a minimum grade of C

ELC 211 Electromechanical Devices (3 Credits)
This course treats in detail the subject of electrical power including its generation, distribution, and utilization. It presents the theory, construction, maintenance, and characteristics of AC and DC motors, generators, and transformers. The associated laboratory is an integral part of the course.
Pre-requisites: ELC 115 with a minimum grade of C

ELC 218 Pulse and Digital Circuits (3 Credits)
This course is an introduction to computer electronics. It includes Boolean algebra, fundamentals of logic, logic circuits, and digital logic systems. Laboratory work is closely allied with theory and includes computer simulation.
Pre-requisites: MTH 113 with a minimum grade of C or MTH 120 with a minimum grade of C

ELC 221 Electronics II : Amplifiers (3 Credits)
This course extends ELC 120 to include AC analysis of transistor circuits. Electronic amplification is examined in considerable detail. Field effect transistors (FET) and integrated circuits (IC) are introduced. Laboratory work, complementing the theoretical work, is emphasized.
Pre-requisites: ELC 120 with a minimum grade of C

ELC 222 Intro to Communication Systems (3 Credits)
This is the final course in the electronics sequence. Topics covered include modulation and demodulation for AM, FM, PM, and TV. Transmitters, receivers, and transmission characteristics are studied. Concepts of information theory, waveform analysis, and noise are introduced
Pre-requisites: ELC 120 with a minimum grade of C

ELC 224 Linear Electronic Systems (3 Credits)
This course introduces the basic theory and mathematical tools for analyzing Linear Electronic Systems. Areas covered include feedback concepts, frequency-response, transfer functions, and Bode diagrams. Laboratory experiments are performed to support the theory.
Pre-requisites: ELC 115 with a minimum grade of C

ELC 228 Intro to Microprocessors (3 Credits)
This is an introductory course in microprocessor applications for students who already have basic knowledge of digital circuit's principles. Computer hardware organization is analyzed, and machine-language programs are written and run. Hardware and software aspects of a popular eight-bit microprocessor are studied in detail. Theoretical ideas are reinforced by building and testing realistic experimental systems in the laboratory.
Pre-requisites: ELC 218 with a minimum grade of C

ELC 230 Circuits & Systems for Engr. (3 Credits)
This is a calculus-based course in electric circuit theory and analysis for Engineering AS degree program students interested in pursuing computer or electrical engineering. It includes DC and AC principles with an emphasis on Kirchhoff's Laws, network theorems for resistive, capacitive, and inductive networks, mesh and nodal analysis, and sinusoidal steady-state analysis. Also, power, resonance, and ideal transformers are studied. The theory is reinforced with instructor-run demos. Assignments include the use of circuit analysis computer software.
Pre-requisites: PHY 104 with a minimum grade of C and MTH 122 with a minimum grade of C

ELC 250 Electric Design (3 Credits)
This is a survey course involving a variety of topics relevant to electrical/electronic engineering. Through group discussion, research and oral presentations, students gain an appreciation of the skills and techniques needed for success as a professional in their chosen field.
Pre-requisites: ELC 115 with a minimum grade of C

Engineering Technology (ENR)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

ENR 100 Fund. of Engineering Design (2 Credits)
This course is a 2-credit course that reviews the basic concepts of engineering and introduces some tools used for design and implementation of devices and systems. the course has a lecture and lab component. In the lecture portion, the students will be introduced to the basic principles of engineering design process, reserch, and engineering ethics. In the lab portion, the students will be using the basic instruments, pencil and paper at the beginning. Then, using a parametric solid modeling software (Inventor or SolidWorks), the students prepare 3D design objects, generate simulations and blueprints/design documents according to the ANSI standards used in industry. These designs are then produced using 3D printing equipment. All activities offered through this course are designed to help students pick up transferable skills that they can take to any engineering major they choose to pursue with special emphasis on oral and written communication skills. The overall objective is to provide background and access engineering studies and help students to succeed and move forward on an engineering education path.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and ((Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998))) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ENR 103 Engr. Graphics & Intro. to CAD (2 Credits)
This course covers the fundamentals of engineering graphics including the drawing of orthographic, isometric, and auxiliary projections. Other topics include scaling, sectioning, dimensioning, and drawing documentation. This course uses the latest release of computer-aided design (CAD) software commonly used in industry to introduce students to CAD interface, structure, and commands.
Pre-requisites: ENR 100 with a minimum grade of C

ENR 105 Applied Computer Aided Design (2 Credits)
This first course in Computer-Aided Design (CAD) uses the latest release of AutoCAD software. Students are introduced to the terminology, use, and capabilities of CAD. Through hands-on instruction, students learn to complete projects using the latest hardware and software. After starting with the beginning draw and edit commands, the course proceeds to cover tolerance dimensioning, printing, the creation of symbols libraries, isometric rending, threedimensional wire-frame modeling, and blocks with attributes.
Pre-requisites: ENR 103 with a minimum grade of C and MTH 100 with a minimum grade of C

ENR 106 Intermediate Comp-Aided Design (2 Credits)
This course uses the latest release of CAD software commonly used in workplaces. Through hands-on instruction, students learn to complete a series of CAD projects. Topics covered include drawings in different disciplines, three-dimensional wire, surface, and solid modeling, geometric dimensioning and tolerancing, shading, and rendering.
Pre-requisites: ENR 103 with a minimum grade of C

ENR 110 Statics for Technology (3 Credits)
This is a basic course in statics for technology students involving the fundamental principles of the mechanics of rigid bodies. Topics included are vectors, forces, moments, center of gravity, free-body diagrams, equilibrium, simple trusses, friction and moment of inertia.
Pre-requisites: MTH 113 with a minimum grade of C and PHY 101 with a minimum grade of C

ENR 112 Dynamics for Technology (3 Credits)
This course features a non-calculus approach, using Physics principles in small elementary steps, with a consistent method of problem solving. Topics covered include kinematics, Kinetics, work, energy, power, impulse, and momentum.

ENR 205 Advanced Autocad (3 Credits)
This third course in Computer Aided Design (CAD) uses the latest release of AutoDesk software products in mechanical, architectural and civil engineering design. Students perform a number of hands-on projects using Inventor (parametric 3D-solid modeling), AutoCAD Architect (3D architectural design), and Civil 3D software. These projects cover general 3D design and detailing problems related to the above-mentioned disciplines.
Pre-requisites: ENR 105 with a minimum grade of C

ENR 211 Engineer Mechanics I - Statics (3 Credits)
This is a course in calculus-based statics. Topics covered include elementary vector algebra, scalar and vector products as applied to two and three-dimensional force systems, equilibrium, friction, second moments, and virtual work. Extensive use is made of the free body diagram approach and vector analysis.
Pre-requisites: MTH 121 with a minimum grade of C and PHY 103 with a minimum grade of C

ENR 212 Engineer Mechanics II-Dynamics (3 Credits)
This is a course in kinematics and kinetics using vector analysis. Topics covered include curvilinear motion with respect to fixed and rotating axes of particles and rigid bodies, work, energy, impulse, and momentum.
Pre-requisites: ENR 211 with a minimum grade of C

ENR 220 Mechanics of Materials (3 Credits)
This course for technology students covers stresses and deformation in structural members due to axial, tensile and compressive loads, torsional loads on shafts and bending and shear loads on beams. Also included is the study of the basic design of structural members based on the analysis of stress and the deformation.
Pre-requisites: ENR 110 with a minimum grade of C

ENR 221 Strength of Materials (3 Credits)
This calculus based course for Engineering students covers stresses and deformation in structural members due to axial, tensile and compressive loads, torsional loads on shafts and bending and shear loads on beams. Also included is the study of the basic design of structural members based on the analysis of stress, the deformation, and an understanding of the mechanical behavior of materials under various load conditions.
Pre-requisites: ENR 211 with a minimum grade of C and MTH 122 with a minimum grade of C

ENR 250 Computer-Aided Design Project (2 Credits)
In this course, students apply the skills they learned from previous CAD courses to individually design a comprehensive project in their fields using specialized CAD software commonly used in workplaces. For example, manufacturing and mechanical students design parts using a parametric solid modeling package; architectural students make architectural designs using an animation and rendering package; and civil construction/surveying students complete projects in construction, road design, and surveying using civil and mapping packages. Students are provided internship opportunities with industry.
Pre-requisites: ENR 205 with a minimum grade of C

ENR 290 Honors CapstoneProj.- Engr. (3 Credits)

English (ENG)

Division: Humanities and Bilingual Studies Division

ENG 099 Composition Skills Support (1.5 Credits)
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200) or Elig for ESL051063/ENG 101099 with a score of 916 or Elig for ENG 101/099 with a score of 918
Co-requisites: ENG 101

ENG 101 College Composition I (3 Credits)
Writing of the persuasive multi-paragraph composition is taught, with concentration on the elements of theme, structure, and style. Principles of rhetoric are recognized and discussed through logical analysis of non-fiction essays. The course culminates in the crafting of a research-based paper, utilizing multiple sources, and adhering to MLA Style.
Pre-requisites: (Companion Essay with a score of 08 or (Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 and Reading (Next-Gen) with a score of 200) or (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or ESL 063 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999 or Elig for ESL051063/ENG 101099 with a score of 916 or Elig for ENG 101/099 with a score of 918

ENG 102 College Composition II (3 Credits)
Writing of the literary analytical multi-paragraph composition is taught, with concentration on the elements of theme, structure, and style. Principles of rhetoric are recognized and discussed through logical analysis of short stories, poems, plays, and other forms of fiction. The course culminates in the crafting of a research-based literary analysis paper, utilizing multiple sources, and adhering to MLA Style.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

ENG 105 Technical Writing (3 Credits)
This course is an introduction to technical and professional writing. It is designed to help students from a variety of majors to master the composition skills needed for careers in business and industry. Students will learn the principles and conventions of technical writing and practice those conventions in a variety of assignments that would typically be encountered in the workplace.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

ENG 109 Effective Speech (3 Credits)
The basic elements of public speaking are covered in this course. Students will learn how to prepare and give several types of speeches with emphasis upon content, organization, and delivery.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ENG 151 Mass Comm & Popular Culture (3 Credits)
This course surveys and examines mass communications, concentrating on radio, television, film, and other electronic and print media forms. The expression of popular culture through the mass media is analyzed and evaluated.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

ENG 169 Creative Writing (3 Credits)
Students will be introduced to the study and development of the creative writing process with emphasis on craft, the exploration of voice, and the acquisition of constructive critiquing skills.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

ENG 205 World Literature I (3 Credits)
Various works of literature (a combination of fiction, non-fiction, poetry, and plays) from around the world, beginning with the cradles of civilization and ending with the start of the 17th century CE, are covered.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 208 Survey of Shakespearean Lit. (3 Credits)
Selected works of William Shakespeare, from his plays to his sonnets, will be studied. Emphasis will be placed upon the playwright's use of language, his ability to develop complex characters, and how the major themes of the works resonate even in today's world.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 215 World Literature II (3 Credits)
Various works of literature (a combination of fiction, non-fiction, poetry, and plays) from around the world, beginning with the 17th century CE and going up to our modem era, are covered.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 221 American Literature I (3 Credits)
Starting with the oral traditions of indigenous peoples, this course will bring students through the literature and literary movements of the colonial period, the early republic, and conclude with the end of the antebellum era.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 222 American Literature II (3 Credits)
Starting with the Civil War, and continuing through the Reconstruction Era, this course will bring students into the 20th century and the modern era, covering the literature and literary movements of an everchanging nation and its peoples.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 225 Literature & Film (3 Credits)
Focusing on the two different artforms, this course will cover, via a critical and analytical lens, the process of how literature is adapted into film. Students can expect to study how filmmakers pick and choose the literary works they transform into an entirely different medium, including how to visualize the written word and how the source material might change.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 232 African & Caribbean Literature (3 Credits)
The literary traditions of the peoples of Africa and the Caribbean are covered in this course. Emphasis will be placed on the socio-cultural and political forces that shaped this literature as well as the modes of its presentation.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 237 Survey of African American Lit (3 Credits)
Beginning with the oral traditions, and later written works of African Americans, this course covers the colonial period, slavery, Reconstruction, the Harlem Renaissance, and the modern era, exploring the deeply rich historical and aesthetic development of this literature.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 238 Major Black American Writers (3 Credits)
The literary works of those considered pillars of their craft, such as Zora Neale Hurston, Langston Hughes, Richard Wright, James Baldwin, and Toni Morrison, are examined. Emphasis is placed upon the historical context in which their works were written as well as their resonating impact on today's world.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 242 Modern Latin American Lit. (3 Credits)
The diverse literary traditions of the peoples of Latin America (including Mexico, Central and South America, and the Caribbean) are covered in this course. Emphasis will be placed on the socio-cultural and political forces that shaped this literature as well as the modes of its presentation.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 250 Survey of Drama (3 Credits)
A variety of dramatic works, from the classical era to the contemporary, will be explored. Through close analysis and study of major representative texts, students will understand how dramatic literature, in subject, style, and technique, has both reflected and shaped social, historical, and cultural awareness in an everchanging world.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 254 Survey of Poetry (3 Credits)
A variety of poems, from the classical era to the contemporary, will be explored. Through close analysis and study of major representative texts, students will understand how poetry, in subject, style, and technique, has both reflected and shaped social, historical, and cultural awareness in an everchanging world.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 256 Survey of the Novel (3 Credits)
A variety of novels, from the form's modern beginnings in the 18th century to the present, will be explored. Through close analysis and study of major representative texts, students will understand how the novel, in subject, style, and technique, has both reflected and shaped social, historical, and cultural awareness in an ever changing world.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 263 Survey of Women's Literature (3 Credits)
Various works of literature by women (a combination of fiction, nonfiction, poetry, and plays) from the ancient world through the 20th century CE, are covered.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 264 Contemporary Women's Lit. (3 Credits)
Various works of literature by women (a combination of fiction, nonfiction, poetry, and plays) from the modern era, are covered. Special emphasis will be placed upon feminist voices and underrepresented women of color.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 270 Children's Literature (3 Credits)
As a survey of both classic and contemporary children's literature, students will explore a variety of genres such as myths, poems, fables, fairytales, picture books, and novels. There will be a certain amount of focus placed upon the lives of the authors and illustrators who penned and visualized these works.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 275 Science Fiction & Fantasy Lit. (3 Credits)
Works from the genres and subgenres of speculative fiction will be examined through a literary lens with a focus on their unique styles of storytelling and resonating themes. The lives of the authors and their publications' impacts upon society will also be touched upon.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

ENG 290 Survey of Modern Biography (3 Credits)
The critical reading and analysis of modern biographies, autobiographies, and memoirs will be introduced. Students will develop an awareness of the methods and techniques which go into the writing and study of life writing as they come to realize the literary significance of the genre.
Pre-requisites: ENG 102 with a minimum grade of C or ENG 105 with a minimum grade of C

English as a Second Language (ESL)

Division: Humanities and Bilingual Studies Division

ESL 031 ESL Intensive Exp Amer Culture (3 Credits)
Pre-requisites: English as a Second Language with a score of ES073 or ESL Essay with a score of 3 or Elig. for ESL 031-033 with a score of 914
Co-requisites: ESL 032 and ESL 033

ESL 032 Intensive Exp List. Comp/Speak (6 Credits)
Pre-requisites: English as a Second Language with a score of ES073 or ESL Essay with a score of 3 or Elig. for ESL 031-033 with a score of 914
Co-requisites: ESL 031 and ESL 033

ESL 033 Intensive Exp. Rdg. & Writing (6 Credits)
Pre-requisites: English as a Second Language with a score of ES073 or ESL Essay with a score of 3 or Elig. for ESL 031-033 with a score of 914
Co-requisites: ESL 031 and ESL 032

ESL 041 ESL Basic Academic Grammar (4.5 Credits)
Pre-requisites: English as a Second Language with a score of ES095 or ESL Essay with a score of 4 or (ESL 031 with a minimum grade of C and ESL 032 with a minimum grade of C and ESL 033 with a minimum grade of C) or (ESL 073 with a minimum grade of C and ESL 074 with a minimum grade of C and ESL 075 with a minimum grade of C and ESL 076 with a minimum grade of C and ESL 077 with a minimum grade of C) or Elig. for ESL 041-053 with a score of 915
Co-requisites: ESL 043

ESL 043 ESL Reading, Writing & Comm. I (6 Credits)
Pre-requisites: English as a Second Language with a score of ES095 or ESL Essay with a score of 4 or (ESL 031 with a minimum grade of C and ESL 032 with a minimum grade of C and ESL 033 with a minimum grade of C) or (ESL 073 with a minimum grade of C and ESL 074 with a minimum grade of C and ESL 075 with a minimum grade of C and ESL 076 with a minimum grade of C and ESL 077 with a minimum grade of C) or Elig. for ESL 041-053 with a score of 915
Co-requisites: ESL 041

ESL 051 Form and Function of English (3 Credits)
Pre-requisites: English as a Second Language with a score of ES095 or (ESL 041 with a minimum grade of C and ESL 043 with a minimum grade of C) or (ESL 080 with a minimum grade of C and ESL 095 with a minimum grade of C) or Elig for ESL051063/ENG 101099 with a score of 916

ESL 053 ESL Reading, Writing & Comm II (6 Credits)
Pre-requisites: English as a Second Language with a score of ES103 or ESL Essay with a score of 5 or (ESL 041 with a minimum grade of C and ESL 043 with a minimum grade of C) or (ESL 080 with a minimum grade of C and ESL 095 with a minimum grade of C) or Elig for ESL051063/ENG 101099 with a score of 916

ESL 061 Adv Academic Grammar for Writ. (3 Credits)
Pre-requisites: ESL 051 with a minimum grade of C or ESL 100 with a minimum grade of C

ESL 062 Active Listening and Speaking (3 Credits)
Pre-requisites: English as a Second Language with a score of ES095 or (ESL 080 with a minimum grade of C and ESL 095 with a minimum grade of C) or (ESL 103 with a minimum grade of C and ESL 104 with a minimum grade of C)

ESL 063 ESL Rdg., Writing & Comm. III (6 Credits)
Pre-requisites: English as a Second Language with a score of ES105 or ESL Essay with a score of 6 or ESL 053 with a minimum grade of C or (ESL 103 with a minimum grade of C and ESL 104 with a minimum grade of C)

ESL 070 Practical Beginning ESL (3 Credits)

Environmental Science (ENS)

Division: Biology, Chemistry and Physics Division

ENS 201 Principles of Sustainability (3 Credits)
This course is designed to provide an introduction to and fundamental knowledge of sustainability concepts for entry-level students, as well as for under- and/or unemployed adults who are in job transition from non-environmental sectors seeking grounding in the field of sustainability. Topics covered include basic sustainability principles and practices relative to population issues, climate change, renewable energy, consumption, ecosystem threats, transportation, green design and construction, biodiversity, food, and environmental justice.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ENS 225 Intro. to Green Fac.Management (4 Credits)
This course is a survey of the best current practices in Green Facilities Management. The student will learn how to operate an environmentally healthy facility. The student will explore why green business is good business as well as the practical strategies to green in specific areas. The course highlights many of the useful green ideas that facilities can readily implement. Practical, economical tactics in the areas of water, cleaning, lighting, transportation, sustainable design, landscaping, recycling, energy conservation, solar power, and financing will be presented. The course addresses carbon reduction, monitoring, and reporting. Lab exercises and field trips will supplement the theory presented.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ENS 226 Residential Energy Management (3 Credits)
This is an entry level course. It emphasizes a systems approach to residential energy management, focusing on the whole house approach. Students will learn the differences between energy efficiency and energy conservation. Building Performance Institute standards will be introduced. Energy auditing equipment, combustion safety testing, utility bill analysis, and fuel conversions are topics covered in this course. Emphasis will be placed on the job opportunities in the residential energy efficiency/energy management industry.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

ENS 227 Intro.Green Comm. Indus. Bld. (3 Credits)
The course focuses on these principles: an efficient building is economically and environmentally prudent; there is fiscal value inherent in energy management, and resource consumption that also keeps the environment intact. The course provides an in- depth exploration of environmental, social, and political values from different perspectives. Scientific and technical considerations are balanced by behavioral and social aspects when issues of efficiency, conservation, and resource management are addressed. This course lays a strong foundation for students who are interested in entering the emerging field of energy management. Several career paths are discussed in the course.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

Finance (FIN)

Division: Business Division

FIN 101 Introduction to Finance (3 Credits)
This serves as a foundation course in business finance. It provides a conceptual framework for the financial decision-making process and introduces tools and techniques of finance, including financial mathematics, capital budgeting, sources of funds, and financial analysis. Topics include acquisition and use of short-term and long-term capital; financial markets, institutions and instruments; financial control; time value of money; cash, operations and long-range budgeting; and cost of capital.
Pre-requisites: ECO 101 with a minimum grade of C

FIN 201 Money and Banking (3 Credits)
This course mainly discusses the role of financial institutions, the banking system, the Federal Reserve System, and the nature and effectiveness of monetary policy tools. It systematically discusses (i) money and its functions, (ii) financial markets, (iii) financial institutions, (iv) central banking and the conduct of monetary policy, (v) international finance and monetary policy, and (vi) monetary theory.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999) and FIN 101 with a minimum grade of C

FIN 207 Principles of Investments (3 Credits)
This course mainly discusses portfolio management, including the management of investments in stocks, bonds, and other financial instruments. It further examines individual financial instruments in depth and the investment strategies of shifting the relative amounts held by the investor during changing economic conditions.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999) and FIN 101 with a minimum grade of C

FIN 209 International Finance (3 Credits)
This course manly discusses how Multinational Corporations (MNCs) systematically capitalize on international opportunities to maximize profits. It further examines how the financial managers of the MNCs assess the international environment, recognize opportunities, implement strategies, assess exposure to risk, and manage the risk. Other specific areas emphasized in this course include International Financial Environment, Exchange Rate Behavior, Exchange Rate Risk Management, and Long Term/Short Term Assets & Liability Management.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999) and FIN 101 with a minimum grade of C

FIN 211 Fin.Sem./Exp.& Directed Study (3 Credits)
The purpose of this course is to provide experiential learning possibility to the finance students who have completed their course requirement to earn an AS in Finance. Students will be challenged to apply the theories learnt from the other finance courses into practice. Student will be either assigned to a financial related institution as an intern of will be required to complete a capstone project on a financial related field.
Pre-requisites: FIN 101 with a minimum grade of C

First Year Experience (FYE)

Division: Business Division

FYE 097 First Year Experience (2 Credits)
This course prepares students for college life by offering critical information and providing an ongoing support system, as needed, throughout the first semester. It emphasizes self-assessment, self-management, and the development of life skills, goal-directed behavior, and effective study habits.

Foundations of Personal Dev. (FPD)

Division: Remedial

FPD 080 Foundations of Personal Dev I (1.5 Credits)
This is a counseling course designed to assist pre-college students in their personal adjustment to the college environment. The course addresses the development of a positive self-concept, effective interpersonal communication skills, and working knowledge of college systems. The course is limited to Special Programs students.

FPD 081 Foundations of Personal Dev II (1.5 Credits)
This is a counseling course designed to assist the pre-college student in viewing college education as a component in the career development process. Topics covered include realistic establishment of career/educational goals, pursuit of vocational goals, time management, and personal interaction. The course is limited to Special Programs students.

French (FRN)

Division: Humanities and Bilingual Studies Division

FRN 101 Elementary French I (3 Credits)
This is the first half of a year's course for students with little or no background in the French language. Listening comprehension, speaking, reading, and writing are developed within the limits of basic vocabulary, idioms, and grammar.

FRN 102 Elementary French II (3 Credits)
This course is a continuation of FRN 101. The student's knowledge of vocabulary and grammar expands to include multiple tenses and use of the verbs. The four language skills listening comprehension, speaking, reading and writing continue to be developed.
Pre-requisites: FRN 101 with a minimum grade of C

FRN 201 Intermediate French I (3 Credits)
French 201 is a continuation of French 101 and 102. This course is designed to strengthen the four language skills through listening, oral, and written exercises. This intermediate level of French will review grammar points covered in the introductory stages, but focus more heavily on conversational skills by working on dialogues and oral presentations. Cultural variations and significance will be explored through selected readings from the text, short newspaper articles, and films.
Pre-requisites: FRN 101 with a minimum grade of C and FRN 102 with a minimum grade of C

FRN 202 Intermediate French II (3 Credits)
French 202 is a continuation of FRN 201. This course aims to further develop and enhance the four language skills and create a greater sense of cultural awareness and appreciation. This will be accomplished through films, course lectures, and articles. Classes will be conducted, for the most part, in French; students will be encouraged to address each other and the professor in French. Class readings will engage students in contemporary concerns in the French and Francophone world; student will be expected to analyze their own views based on the readings. The language's practical side will be further emphasized by discussing how to give directions and handle daily situations. In addition to developing conversational skills, students will also begin to write short analytical papers.
Pre-requisites: FRN 101 with a minimum grade of C and FRN 102 with a minimum grade of C and FRN 201 with a minimum grade of C

Geology (GEO)

Division: Biology, Chemistry and Physics Division

GEO 101 Rocks, Minerals and Fossils (4 Credits)
A study of physical geology. Lecture topics include minerals, rock types, volcanism, weathering, earthquakes, mass wasting, water and deformation. The laboratory experience includes both lab and field work and serves to enhance the topics covered in lecture.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

GEO 102 Surface Proc.&Natural Disaster (4 Credits)
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

Health (HLT)

Division: Social Sciences Division

HLT 101 Healthful Living (3 Credits)
This course is offered to aid the student in achieving and maintaining optimum health and to understand the principles on which it is founded. Among the topics covered are mental and emotional health, drugs, nutrition, sexuality, cardiovascular and other diseases, aging and other health topics.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

Health Information Technology (HIT)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

HIT 101 Intro Hlt Care&Pub Hlt in U.S. (3 Credits)
This course will introduce the basic principles of Health Information Technology systems. Major topics include methods of health care and service delivery, public health policy, professional roles, legal and regulatory issues, and electronic payment systems.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HIT 102 Cust Srv Ethics&Compliance HIT (3 Credits)
This course introduces the basic principles of customer service and discusses ethics and compliance issues related to storage of sensitive and confidential health records. Major topics of the course include information concepts, medical terminology and HIPPA regulations.
Pre-requisites: HIT 101 with a minimum grade of C

HIT 103 Intr Electronic Health Records (3 Credits)
This course introduces the basic principles of typical Electronic Health Records (EHRs) applications. The course focuses on formatting content of patient record, advantages and disadvantages of EHR systems, and methods to maintain security and confidentiality of electronic health records.
Pre-requisites: HIT 101 with a minimum grade of C

HIT 105 Fund WkFlow Proc,Anal&Redesign (3 Credits)
The course will focus on the fundamental concepts of health workflow process analysis, redesign, validation and change management. Major topics include the six aims for healthcare improvement, the Capability Maturity Model (CMM), and clinical analysis of workflow in redesigned systems.
Pre-requisites: HIT 101 with a minimum grade of C

HIT 106 Intro to Project Management (3 Credits)
This course provides an understanding of project management tools and techniques that result in the ability to create and follow a project management plan. The course develops the skills necessary to communicate effectively across the full range of roles that will be encountered in healthcare and public health settings. Major topics include ensuring project quality, coordinating project communications and identifying, assessing, and preparing a plan to manage project risks. Students will also learn how to develop resources matrices, loading charts, graphs, and budget activities using project management principles.
Pre-requisites: HIT 101 with a minimum grade of C

HIT 201 Intro Hlt Info. Mngmt. Systems (3 Credits)
This course will continue the discussion of health management information systems and survey of the history and milestones in health informatics. The course will focus on hardware components, major types of software used in information systems, network configurations, and emerging trends in information technology that support health care information systems.
Pre-requisites: HIT 106 with a minimum grade of C

HIT 226 Health Info. Tech. Internship (3 Credits)
The student will be assigned to the Health Information Service Department of a health care institution that will provide the student with practical experiences. The expectation is that the student will focus on many related functions necessary to effectively manage work flow and maintain electronic data. The internship will afford students the opportunity to work extensively with a primary group of practitioners and experience the day-to-day operations of the HIT department.
Pre-requisites: HIT 101 with a minimum grade of C and HIT 102 with a minimum grade of C and HIT 103 with a minimum grade of C and HIT 105 with a minimum grade of C and HIT 106 with a minimum grade of C and HIT 201 with a minimum grade of C

Health Science (HSC)

Division: Nursing and Health Sciences Division

HSC 101 Introduction to Nutrition (3 Credits)
This is a basic course of nutrition, intended to provide each student the foundation for understanding the science of nutrition, and the application of nutrition principles in daily dietary practice. An investigation of the relationship between diet and nutrition to the pathological and physiologic process of the body, as well as the benefit of food to emotional health, are the center of focus. The concepts of digestion, absorption, transport, and elimination are reviewed. Energy obtained from food, which supports ongoing activities of body tissue, and the mechanisms used to maintain energy, water and electrolyte balance are studied.
Pre-requisites: BIO 104 with a minimum grade of C or BIO 122 with a minimum grade of C

HSC 102 Nutrition Thru. the Life Cycle (3 Credits)
The study of Nutrition through the Life Cycle will enable the student to focus on nutrition during the periods of rapid growth and body changes from pregnancy and lactation to the older adult. Nutrition requirements and meal planning for the mother, infant, toddlers, preschool, school-aged child, adolescent, young middle and older are explored. Physical growth and psychosocial development for each stage are examined using Erick Erickson's theory of human development. Select eating problems and other nutrition-related conditions are examined.
Pre-requisites: BIO 104 with a minimum grade of C or BIO 122 with a minimum grade of C

HSC 109 Medical Terminology (3 Credits)
A survey of medical science designed to foster mastery of medical terminology to ensure its accurate and appropriate use in the allied health fields is presented in this course. Medical vocabulary is emphasized and a general discussion of human anatomy and physiology is provided. Disease, diagnosis and treatment procedures are also covered.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HSC 151 Massage Theory & Prac. I (4 Credits)
This course is designed to be an introduction to the study of the field of massage therapy. Students will be presented with the history of massage, the definition of massage and the theory of how and why it works. The course will also present the benefits of massage, basics of massage equipment, health, hygiene, and sanitation associated with massage, and the indications and contraindications of massage. Clinical emphasis of this course will focus on basic massage training using the Swedish Massage method, and will include hands-on demonstration and practice of traditional Swedish Massage techniques, learning to complete a full-body massage in the 30 minute and 60 minute time frame, as well as an introduction to On-Site Chair Massage and pregnancy massage.

HSC 152 Massage Theory & Prac. II (3 Credits)
A continuing education in the study of massage therapy. This course intends to begin to extend the student's knowledge of massage beyond the classical Swedish movement of Per Henrik Ling into more advanced medical massage techniques. Students will take an intense study of Myology as they are simultaneously introduced to My fascial Release and Neuromuscular/Trigger Point therapies. They will learn the history, theory, and practical use of these methods as adjuncts to their already acquired skills in Swedish massage.
Pre-requisites: HSC 151 with a minimum grade of C

HSC 153 Massage Theory & Prac. III (4 Credits)
A continuing education in the study of massage therapy. This course intends to extend further the student's knowledge of massage therapy. Students will be introduced to sports massage and reflexology. They will learn the history, theory, and practical use of these methods as adjuncts to their already acquired skills in Swedish massage. Students will be exposed to the Essex County Colleges sports teams, providing treatment for the various intercollegiate athletes (track, soccer, and basketball). Students will also provide reflexology services to outside clients through the program's on-campus clinic.
Pre-requisites: HSC 152 with a minimum grade of C

HSC 155 Prof. Deve. in Massage Ther. I (2 Credits)
This course is designed to orient the student to the role of Professional Massage Therapy within the health care environment and general community. Topics covered will include ethics, boundaries, creating a professional and safe environment, sex, touch, intimacy, and regulations at the state and national levels. The goal of this course is to develop a comprehensive understanding of professional behavior and career development in the field of massage therapy in order to comply with state and national regulations, to best serve all clients, and to find fulfillment in the field of massage therapy.
Pre-requisites: ((((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 048) or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20 or MTH 086 with a minimum grade of C or AFM 083 with a minimum grade of C or Move Up Math 086 with a score of P or MTH 086 Summer Bridge with a score of P or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999)

HSC 156 Prof. Dev. Mass. Therapy II (3 Credits)
This course is designed to further the student's understanding of Professional Massage Therapy within the health care environment and general community. The emphasis of this course will be placed on developing internal and external business and healthcare practices. Topics covered will include the business plan, ethics, creating a professional and safe environment, documentation, report writing, SOAP charting, the role of the massage therapist as an integrated member of the healthcare team, and regulations at the state and national levels.
Pre-requisites: HSC 155 with a minimum grade of C

HSC 160 Massage Ther. Practicum I (2 Credits)
During the semester, the student will work in the student clinic at Essex County College applying basic skills in hands-on work with members of the College community. The students and instructor meet as needed to discuss the experience and remedy any difficulties encountered. The instructor will be present during all clinic sessions for supervision and further instruction in techniques. Students will be randomly evaluated by the instructor and may receive evaluations from the clients who receive their services.
Pre-requisites: HSC 151 with a minimum grade of C

HSC 161 Massage Ther. Practicum II (3 Credits)
During the semester, the student works in the student clinic at Essex County College applying basic skills, while incorporating advanced techniques learned throughout the program: Swedish, Myofascial Release, Neuromuscular/Trigger Point, Reflexology, and Sports. As a carry-over from the HSC 160 experience, students will have the opportunity to work with members of the College community, the surrounding community, and credit will be given for independent supervised work within the students own community. The students and instructor meet as needed to discuss the experience and remedy any difficulties encountered. Students will be randomly evaluated by the instructor and may receive evaluations from the clients who receive their services.
Pre-requisites: HSC 151 with a minimum grade of C and HSC 160 with a minimum grade of C

HSC 165 Self-Care for the Massage Ther (1 Credit)
This course designed to orient the student to techniques and activities to prevent repetitive strain injuries, promote a balanced lifestyle, and improve overall wellness. Many self-care techniques will be presented including joint and muscle-specific exercises, breathing techniques for stress relief, and visualization/affirmations for career success. Body mechanics and body awareness activities will be emphasized through the introduction of Tai Chi, yoga, and nutrition. The course will study the relationship of posture and body mechanics to pain and injury for the therapist.
Pre-requisites: ((((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 048) or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20 or MTH 086 with a minimum grade of C or AFM 083 with a minimum grade of C or Move Up Math 086 with a score of P or MTH 086 Summer Bridge with a score of P or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999)

History (HST)

Division: Humanities and Bilingual Studies Division

HST 101 World Civilization I (3 Credits)
This course will focus on the premodern developments of world civilization, beginning with the Paleolithic Era and ending at around 1500 CE. Emphasis will be placed on the major persons and events which shaped the societies and cultures of the ancient and post-classical periods of history.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 102 World Civilization II (3 Credits)
This course will focus on the modern developments of world civilization, beginning at around 1500 CE and ending with the present day. Emphasis will be placed on the major persons and events which have shaped the societies and cultures of the modern world.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 111 United States History I (3 Credits)
This course examines the history of the United States from its origins in the pre-Columbian era to the Reconstruction Era. Students can expect to study the history of the indigenous peoples, the colonial period, the American Revolution and its aftermath, as well as the early national period, slavery, and the Civil War.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 112 United States History II (3 Credits)
This course examines the history of the United States from the end of the Reconstruction Era to the present day. Students can expect to study the emergence of the country as a world power, the international conflicts it found itself involved in, the various waves of immigration, as well as both the Civil Rights and Women's Rights movements.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 121 African American History I (3 Credits)
This course examines the history of Black peoples from their advent in the New World to the Civil War. Emphasis will be placed on African heritage and its contributions to the development of African American culture, along with the slave trade, the early struggles for emancipation, and the impact of the Civil War.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 122 African American History II (3 Credits)
This course examines the African American experience from Reconstruction and the Jim Crow South to the Civil Rights Movement and the present day. Emphasis will be placed on the societal developments, intellectual leaders, and everyday people who continue the struggle towards representation and equality.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 131 Latin American History I (3 Credits)
This course examines the history of Latin America, starting with the pre-Columbian era. From there, students can expect to cover the establishment of the Spanish and Portuguese Empires before ending with the wars of independence in the 1830s.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 132 Latin American History II (3 Credits)
This course examines the history of Latin America, starting with the aftermath of the wars of independence in the 1830s as the new nation states shaped their identities, and ending in the present day. Students can expect to cover the role that neocolonialism has played in this part of the world.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 134 Survey of African History I (3 Credits)
This course examines the development and growth of the peoples of Africa from prehistoric times to the 19th century CE. Emphasis will be placed upon the geographic divisions of the continent, its ancient empires, the structure, nature, and significance of tribal and ethnic life, as well as the role colonialism/imperialism played.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 135 Survey of African History II (3 Credits)
This course examines the history of Africa from the 19th century CE to the present day. Emphasis will be placed on the socioeconomic, political, and ideological reactions of African peoples to colonial rulers, in addition to an in-depth analysis of national movements of independence and the effects of neo-colonialism
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 136 Asian History I (3 Credits)
This course examines the history of the peoples of eastern and southern Asia from ancient times through the early modern period. Emphasis will be placed upon the regions' various religious and philosophical movements and imperial dynasties which arose through these regions as well as the role colonialism played.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or (ESL 105 with a minimum grade of C and ESL 106 with a minimum grade of C) or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 137 Asian History II (3 Credits)
This course examines the history of the peoples of eastern and southern Asia from the late modern period onwards. Emphasis will be placed upon the regions' various transformations due to the introduction and influence of the Western world.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or (ESL 105 with a minimum grade of C and ESL 106 with a minimum grade of C) or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 161 Modern European History I (3 Credits)
This course examines the history of Europe from around the Peace of Westphalia in 1648 to the end of the Napoleonic Wars in the 19th century. Students can expect to study eras such as the Enlightenment and the Industrial Revolution.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 162 Modern European History II (3 Credits)
This course examines the history of Europe from around 1815 to the present day. Students can expect to study the socioeconomic, geopolitical, and ideological agreements, conflicts, and wars which have shaped the present-day nation states and their populations.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HST 204 Women in American History (3 Credits)
This course will focus on the lives of significant women throughout American history. Emphasis will be placed on women's changing roles as well as the diversity of their experiences on a racial, ethnic, and class basis.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

HST 205 Islam & The Black Experience (3 Credits)
This course examines the history of Islam as both a community of faith for Muslims and as a horizon of Black consciousness via a broad African-diasporic lens. Starting with the earliest presence of Muslims in Africa around the 7th century CE, students will explore the expansion of the religion across the continent and beyond as it pertains to the aforementioned relationship between Islam and the global Black community. Emphasis will be placed upon the interconnection of race, religion, and culture.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

HST 206 Hist. of American Immigration (3 Credits)
This course will examine the history of voluntary and involuntary immigration to the United States from the colonial period to the present day. Students can expect to cover key turning points within this scope of history, focusing on important legislation, economic factors, and political debates which have shaped the immigrant experience in the U.S. In addition, students will also learn how that experience has been shaped by questions centered on race, fitness for citizenship, gender, sexuality, nativism, class, and labor. Emphasis will be placed upon providing a meaningful context for better understanding contemporary policies and issues via the exploration of the origins of "legal" vs. "illegal" immigration, the exclusion and inclusion of various groups, the complexities of racial construction, and how immigrants have been perceived and have perceived themselves, namely the ways in which particular communities have been stigmatized, demonized, and valorized.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

HST 208 Genocide & The Holocaust (3 Credits)
This course will focus on the Holocaust and other genocides over the last six hundred years such as the Armenian, Cambodian, and Rwandan. Emphasis will be placed on the political, social, and ideological issues leading up to these moments, as well as the consequences of these crimes against humanity.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Homeland Security (HLS)

Division: Social Sciences Division

HLS 101 Intro. to Homeland Security (3 Credits)
This course is an overview to all of the important components of homeland security. The course will examine the agencies associated with homeland security and their inter-related duties, a description of the state, national, and international laws impacting homeland security, and an examination of historical events that led up to the present day critical threats that America now faces.

HLS 103 Intel Analysis/Sec. Management (3 Credits)
This course focuses on the importance of intelligence analysis and its interrelated relationship to the security management of terrorist attacks and other threats. Students will explore threats to and vulnerabilities of our national defense and private sectors posed by terrorists, man-made disasters and natural disasters.

HLS 104 Transportation & Border Sec. (3 Credits)
Provides an in-depth view of modern border and transportation security. Specific topics include security for seaports, ships, aircraft, trains trucks, pipelines, buses, etc. along with system and industry changes since 9-11. Discussions continue with the technology needed to detect terrorists and their weapons, as well as discussions on the legal, economic, political, and cultural aspects of the problem.

Hotel/Motel Management (HMM)

Division: Business Division

HMM 103 Intro. to Hospitality Mgmt. (3 Credits)
This course provides an introduction to the field of hospitality and to the career opportunities and specific skills required for various positions in the hospitality industry.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

HMM 226 Supervisory Development (3 Credits)
This course is designed to build students' knowledge and skills in administration with respect to the hospitality industry. Importance is given to methods of motivating people, delegating duties, handling grievances, discipline, and training of subordinates.
Pre-requisites: HMM 103 with a minimum grade of C

HMM 256 Hotel/Motel Management (3 Credits)
This course is designed to familiarize students with laws pertaining to the operation of hotels and motels. The laws include those on accommodations and discrimination, liability for premises, liability of products sold and supplied, property of guest, checks and credit cards, liens and eviction, employer-employee relationships, and related criminal and civil responsibilities.
Pre-requisites: HMM 103 with a minimum grade of C

HMM 261 Hotel/Motel Housing Management (3 Credits)
This course identifies, defines, and describes the fundamentals of housekeeping and laundry management in the hotel-motel industry. It covers proper record keeping, organizing, functions, and responsibilities. Practical skills are developed. The course covers the essentials of proper management including proper planning and implementation, efficiency, and meeting standards with regard to purchasing, hygiene, staffing, and scheduling.
Pre-requisites: HMM 103 with a minimum grade of C

HMM 263 Front Office Procedures (3 Credits)
This course analyzes jobs in the hotel-motel front office including that of cashiering, switchboard operating, auditing and posting machine operations, registering, credit, and checking out of guests.
Pre-requisites: HMM 103 with a minimum grade of C

HMM 264 Food & Beverage Management (3 Credits)
This course examines standards of quality, grades, methods of purchasing, receiving, issuing, storage, inventory, and service of food commodities. Basic principles of beverage management and merchandising as related to the hospitality industry are studied. The course includes detailed examination of wines and spirits, their origins, manufacturing process, and service.
Pre-requisites: HMM 103 with a minimum grade of C

Licensed Practical Nurse (LPN)

Division: Nursing and Health Sciences Division

LPN 101 Fund. of Practical Nursing (8 Credits)
This course focuses on the development of the role of the Practical Nurse in relation to other professionals within the current health care delivery system. Legal and ethical obligations of the profession are introduced. This course also introduces the student to focus on the nursing concepts of human relationship and caring, bridging the gap of theory and technical skills using the nursing process to guide through critical thinking application with emphasis on the adult population. The framework of Maslow's hierarchy of basic human needs and Erikson's psychosocial theory of development to apply to the principles of client hygiene, assessment, safety, comfort, mobility, infection control, elimination, and nutrition will be discussed. Emphasis is on safe care of the adult client whose ability to meet basic human needs has been compromised. Theoretical nursing concepts are applied and clinical skills reinforced in the laboratory, acute care, and long-term setting. Concepts that influence nursing practice, such as cultural diversity, spirituality, interpersonal communication skills, and client teaching/learning will be included. The student will begin to develop proficiency in the calculation of drug dosage in medication administration and the use of medical terminology.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

LPN 102 Adult Health I (8 Credits)
This course explores the role of the Practical Nurse in assisting adult clients experiencing health alterations to meet their basic human needs. Erikson's psychosocial theory is applied in the developmental assessment of clients from young adulthood, middle age, and older adult. Theory is specific to the health care needs of clients with cardiovascular, respiratory, integumentary, and endocrine deficits. Concepts in gerontological nursing, as well as nutrition, diet therapy, and microbiology, are integrated throughout the course. The student will be expected to apply theoretical knowledge and proficient clinical skills in interactions with the adult clients. Clinical experience will be in structured health care settings to include medical-surgical units in hospitals, skilled nursing units in the nursing home, and rehabilitation settings. This course will include assessing, planning, implementing, and evaluating nursing care for patients adapting to commonly occurring health problems.
Pre-requisites: LPN 101 with a minimum grade of C and BIO 121 with a minimum grade of C and (ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

LPN 103 Adult Hlt. II/Mental Health (9 Credits)
This course expands upon Adult Health I and continues with the role of the Practical Nurse in assisting adult clients with medical-surgical and mental health disorders. Current medical and non-traditional therapies will be discussed. Emphasis is placed on the recognition of the client's inability to meet basic needs, selection of appropriate nursing interventions, and evaluation of outcomes of care, documentation, and communication with the members of the health care team. The student will demonstrate the use of critical thinking in the adaptation of therapeutic communication, and current strategies in adult mental health care and the specific legal and ethical guidelines associated with this area are discussed. Clinical experiences will focus on nurse-client communication in in-patient medical- surgical and/or community mental health settings. The nursing process will be used to guide students in all application of the learning environment.
Pre-requisites: LPN 102 with a minimum grade of C and BIO 122 with a minimum grade of C

LPN 104 MaternalChildHlt/Pediatric Hlt (8 Credits)
This course focuses upon the role of the Practical Nurse in caring for clients and families experiencing childbirth, newborn, and pediatric child care needs. The primary emphasis is on basic human needs during pregnancy, labor and delivery, postpartum period, and the pediatric client. Erikson's psychosocial theory of development is applied in the assessment of clients from infancy through adolescence. The responses of the child-bearing client, children, and their family to illness and hospitalization are discussed. Students are expected to apply theoretical knowledge and proficient clinical skills in interactions with child-bearing, newborn, and pediatric clients. Interpersonal communication skills, legal and ethical considerations, cultural beliefs and practices, and a family-centered approach are integrated throughout. Clinical experiences will focus on nurse-client communication in in-patient and ambulatory settings. The nursing process will be used to guide students in all application of the learning environment.
Pre-requisites: LPN 103 with a minimum grade of C and PSY 101 with a minimum grade of C

LPN 105 RoleTransition/NCLEX-PN Review (2 Credits)
This course focuses on the preparation of the student for the NCLEX_PN licensure exam and the assumption of a beginning Practical Nursing role including legal and ethical responsibilities, delegating tasks to assisted personnel, and participation in continuing education and nursing organizations. Development of personal and professional management and leadership skills are discussed. Employment skills, such as resume writing, job selection, and interview strategies, are included. Emphasis is on assessment of needs in relation to test-taking and nursing content knowledge. A comprehensive examination will be given to determine student status.
Pre-requisites: LPN 103 with a minimum grade of C and PSY 101 with a minimum grade of C

Logistics (LOG)

Division: Business Division

LOG 101 Fundamentals Supply Chain Mngt (1 Credit)
This course offers a basic framework for understanding Supply Chain Management. The main objectives of this course is to make learners think about how supply chain management affects an organization, its supply chain partners, and to show how the all employees can improve the work performance within the realm of Supply Chain Management. The following components will be covered in this course: Demand Planning, Supply Management and Procurement, Warehousing Operations, Inventory Management, Manufacturing and Service Operations, Transportation Operations, Customer Service Operations and SCM Principles.

LOG 102 Customer Serv. Operations (1 Credit)
This course explores internal and external customers and how to deliver value to both. Upon completion of this course, students will be able to describe the management of customer relationships including the importance of communication, perceptions, understanding the product & service and knowing quality as it pertains to customer service. Associated careers are Customer Service Manager, Call Center Supervisor, Customer Support Agent, Service Recovery Specialist, Service Quality Assurance Manager, and Compliance Specialist.

LOG 103 Transportation Operations (1 Credit)
This certification course explains in detail the different types of transportation modes (i.e., air, water, rail, and pipeline) used throughout the supply, as well as reasons for selecting each mode. The track looks at cost effect driven modes, delivery requirements, and other special requirements (refrigerated or hazardous materials) as inputs to key transportation decisions.

LOG 104 Warehouse Operations (1 Credit)
Warehouse associates, as well as associates in other supply chain domains, should have a good understanding of the processes, software, and terminology in today's distribution operations. This course trains students on the basics of warehousing, so they may quickly acclimate themselves and be effective contributors in warehouse and distribution operations. Some careers associated with Warehousing Operations include Warehouse Manager; Shipping and Receiving Supervisor or Clerk; Order Picker and Packer; Materials Handler; and Safety and Compliance Specialist. Key elements of the track include 1) the role of warehousing in the supply chain, 2) facility configuration, 3) storage and handling techniques, 4) performance metrics, 5) customer service considerations, and 6) safety concerns across various types of distribution facilities.

Manufacturing Engineering Tech (MET)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

MET 201 Manufacturing Process & Mtrls (3 Credits)
This course deals with the principles, methodology, and economics of manufacturing processes with respect to materials, production operations, and quality control. The topics also include tooling, automation, maintenance, industrial organization and management, marketing, and statistics applied to manufacturing problems. Laboratory work is included.
Pre-requisites: PHY 101 with a minimum grade of C

MET 202 Modern Manuf. Systems/Robotics (3 Credits)
This course introduces the concept of computer integrated manufacturing systems through the use of a flexible manufacturing center comprised of a number of work cells. It covers communication between the individual process controllers and a factory control system. Robot operation and programming is introduced. The course also covers the mechanical aspects of material manipulation, various feedback mechanisms, and the integration of robots with other machines in the workcell. The student applies the design concept and techniques to develop a machine tool operation system. Field trips to assembly plants are included.
Pre-requisites: MET 201 with a minimum grade of C

MET 203 Engineering Materials and Proc (3 Credits)
This course introduces the student to a combination of lecture and laboratory experiences related to engineering material and processes. Engineering materials considered include, but are not limited to, metals, ceramics, and polymers. Processes and how they affect properties, include but are not limited to, the information of a part from a molten/particle state, forming, material removal, head treatment, and additive manufacturing. Laboratory exercises involve, but are not limited to, basic machine tools, measurements, microstructure identification, and computer controlled equipment.
Co-requisites: PHY 102

MET 210 Kinematics (3 Credits)
Students learn about moving elements used in the design and analysis of basic mechanisms in machines. Topics covered in the course include velocity and acceleration analysis on a plane, design and analysis of four-bar linkages, and cams, gears, and other mechanisms using graphical and analytical methods. Laboratory work is included.
Pre-requisites: ENR 110 with a minimum grade of C

MET 211 Machines and Controls (3 Credits)
Students learn about DC and AC motors and generators and the transmission mechanisms used to drive mechanical power. The course covers transducers for position and velocity. Programmable Logic Control (PLC) Systems are introduced. The laboratory work involves the use of computer-integrated manufacturing (CIM) workcell equipment, which includes computer numerical control (CNC) machinery, robotics control systems, and vision control systems.
Pre-requisites: PHY 101 with a minimum grade of C and ELC 115 with a minimum grade of C

MET 215 Fluid Mechanics (3 Credits)
This course covers the basic concepts and applications of fluid systems, including essentials of fluid properties, fluid statics, Bernoulli's Theorem, fluid measurements, and losses through flow in pipes. The laboratory work will deal with models and operational systems as well as exercises involving the underlying principles of hydraulic and pneumatic mechanisms.
Pre-requisites: PHY 101 with a minimum grade of C

MET 221 Programmable Logic Controllers (3 Credits)
In this course, students apply the skills they learned from previous PLC courses to individually design a comprehensive project in the application of PLC's in a real life situation. A detailed report will be presented by each student.
Pre-requisites: MET 211 with a minimum grade of C

MET 225 Computer Numerical Control (3 Credits)
This course introduces computer numerical control (CNC) programming in an applied fashion using lathe, milling, and other machines in the laboratory. The course emphasizes mastery of G and M codes and focuses on the integration of computer aided design (CAD), computer aided manufacturing (CAM), and CNC. The latest release of CAM software packages and modern CNC machines are available and used by the students to complete several hands-on projects.

MET 250 Mechanical Engr. Tech. Project (2 Credits)
This course is taught in a lecture and demonstration format within the confines of a specialized laboratory. The student completes a comprehensive project which includes the various aspects of Mechanical/Manufacturing Engineering Technology. The project must encompass a wide range of topics such as design, CAD, production planning, material handling, machining, quality control and inspection.

Mathematics (MTH)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

MTH 086 Introductory Algebra (4.5 Credits)
This beginning mathematics course is designed to take students from concrete arithmetic ideas to the more abstract algebraic forms of these ideas. Throughout the course, emphasis is placed on the development of arithmetic and algebraic skill and the application of these skills and concepts to the solution of practical problems. Topics covered include simplifying arithmetic and algebraic expressions, signed numbers, fractions, decimals, percents, radicals, estimations and geometric applications.
Pre-requisites: Decl Test Accept MTH086/ENG085 with a score of 901 or Elig. for Mth 086 with a score of 912 or
Co-requisites: MTH 086T

MTH 086T Tutorial (1 Credit)
Co-requisites: MTH 086

MTH 090S Foundational Algebraic Skills (1.5 Credits)
This foundational algebra course, designed for majors that require MTH 100, includes essential topics from both MTH 086 and MTH 092. Throughout the course, emphasis is placed on the reinforcement of arithmetic concepts and the development of algebraic skill. Topics covered include simplifying arithmetic and algebraic expressions, performing operations on signed numbers, fractions and percents, translating verbal expressions into algebraic expressions, solving first-degree equations and proportions with applications, solving geometric applications and using scientific notation.
Pre-requisites: MTH 086 with a minimum grade of C or

MTH 091S Basic Skills-Statistics & Prob (1.5 Credits)
In this course, algebraic concepts introduced in MTH 086, such as simplifying variable expressions and solving first-degree equations in one variable, are fully developed. In addition, the algebra curriculum is extended to include simplifying square roots, solving linear inequalities, and solving literal equations, Linear equations and their graphs as well as various problem-solving applications are also covered.
Pre-requisites: (Companion Arithmetic with a score of 69 and Companion Elementary Algebra with a score of 48 or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20) or Essex Math Placement with a score of 10 or MTH 086 with a minimum grade of C
Co-requisites: MTH 101

MTH 092 Elementary Algebra (4.5 Credits)
In this course, algebraic concepts introduced in MTH 086, such as simplifying variable expressions and solving first-degree equations in one variable, are fully developed. In addition, the algebra curriculum is extended to include operations on polynomials, rational expressions, and exponential expressions as well as solving quadratic equations, rational equations, and literal equations. Linear equations and their graphs as well as various problem solving applications are also covered. Calculators cannot be used in this course.
Pre-requisites: ((Essex Math Placement with a score of 10) or (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 048) or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20 or MTH 086 with a minimum grade of C or AFM 083 with a minimum grade of C or Move Up Math 086 with a score of P or MTH 086 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999 or Elig. for Mth 092 with a score of 911 or Elig for ENG 101/099 MTH 092 with a score of 919
Co-requisites: MTH 092T

MTH 092T Tutorial (1 Credit)
Co-requisites: MTH 092

MTH 093S Basic Skills for Modern Mathem (1.5 Credits)
In this course, the algebraic concepts that are introduced in MTH 086 are developed further. The topics include evaluating square roots, simplifying algebraic expressions, translating English phrases into algebraic expressions, solving linear equations and their applications, as well as graphing linear equations in the rectangular coordinate system.
Pre-requisites: Essex Math Placement with a score of 10 or (Companion Arithmetic with a score of 69 and Companion Elementary Algebra with a score of 48 or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20)
Co-requisites: MTH 103

MTH 095 Computational & Algebraic Skil (6 Credits)
This beginning mathematics course, designed for STEM majors, combines the concepts learned in MTH 086 and MTH 092. Throughout the course, emphasis is placed on the development of arithmetic and algebraic skill and the application of these skills and concepts to the solution of practical problems. Topics covered include simplifying arithmetic and algebraic expressions, signed numbers, fractions, decimals, percents, proportions, ratios, radicals, estimations, translation of literal expressions into algebraic expressions, U.S. measurements, geometric applications, linear equations and their graphs and solving first-degree equations, literal equations and quadratic equations. In addition, the algebra curriculum includes factoring polynomials and operations on polynomials and exponential expressions.

MTH 100 Intro. to College Mathematics (4 Credits)
This course covers topics including special products, factoring, and other operations on polynomials, rational and radical expressions, integral and rational exponents, and scientific notation. In addition, analytic and graphical methods of solving linear equations, linear systems, literal equations, and elementary polynomial equations are covered. Students are also introduced to the analytic geometry of functions, including lines, circles, and parabolas. Diverse applications are emphasized throughout the course.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or Essex Math Placement with a score of 12 or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

MTH 101 Statistics and Probability I (4 Credits)
This course provides introduction to the basic ideas and methods of collecting, representing and analyzing data to report findings using elementary techniques from statistics and probability. Topics include the following: frequency distributions; histograms and frequency polygons; measures of central tendency and variability; conditional probability; percentiles; Z-scores; normal and binomial distributions, confidence intervals; hypothesis testing; regression and correlation.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Essex Math Placement with a score of 10 or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or (Companion Arithmetic with a score of 69 and Companion Elementary Algebra with a score of 48 or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

MTH 103 Fund Concepts Modern Math I (4 Credits)
This survey course covers fundamental concepts in Mathematics. An emphasis is placed on illustrating the impact of mathematics as a historical cultural force. Topics are chosen from logic, set theory, mathematical systems, number theory, algebra, geometry, and probability and statistics. Diverse applications are emphasized throughout the course.
Pre-requisites: Essex Math Placement with a score of 10) or (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or (Companion Arithmetic with a score of 69 and Companion Elementary Algebra with a score of 46) or Arithmetic (Next-Gen) with a score of 260 or Bilingual Computation with a score of 20 or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994 or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

MTH 113 College Algebra with Trig (4 Credits)
This course covers topics from algebra and trigonometry at a level and emphasis appropriate for applied technology majors who will continue on with at least one semester of applied calculus. Topics are chosen from the following: functions and their graphs, angles and triangles, systems of linear equations with determinants, trigonometric functions, equations and identities, exponential and logarithmic functions, and a general treatment of conic sections.
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C

MTH 114 Unified Calculus I (3 Credits)
This course provides an introduction to one variable differential and integral calculus, emphasizing methods and applications. Topics include limits, continuity, the derivative, differentiation formulas for algebraic functions, anti-differentiation, the Fundamental Theorem of Calculus, and an introduction to the techniques of integration.
Pre-requisites: MTH 113 with a minimum grade of C or MTH 120 with a minimum grade of C

MTH 116 Medical Math Calculations (1 Credit)
This course reviews basic mathematical calculations and conversions and emphasizes how these techniques are used in the administration of medications.
Pre-requisites: (((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999)

MTH 118 Precalculus (4 Credits)
Topics covered include polynomial, piecewise, rational, exponential, logarithmic, and trigonometric functions, their graphs, and applications involving such functions; polar coordinates; conic sections; and a brief introduction to sequences. This course is designed for students who are pursuing the 2+2 ECC – Rutgers-Newark Biology/Pre-Medicine major and, as such, plan to take only MTH 121 in the calculus sequence. This is not an appropriate course for students who plan to take more than one course in the calculus sequence.
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C or Elig. for Pre Calculus with a score of 913

MTH 119 Pre-Calculus I (4 Credits)
Topics covered include absolute value inequalities and polynomial inequalities; relations and functions; polynomials and rational functions and their graphs; logarithmic and exponential functions; determinants and matrices. A graphing calculator may be required. This course is designed for students who plan to take MTH 121. (Note: Both MTH 119 & MTH 120 are required prerequisites of MTH 121.)
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C or Elig. for Pre Calculus with a score of 913

MTH 120 Pre-Calculus II (4 Credits)
This course, along with MTH 119, prepares students for a rigorous treatment of calculus. Topics covered include trigonometric functions; graphing trig functions; inverse trig functions; trigonometric identities; trig equations; vectors; analytic geometry; polar coordinates; sequences and series. A graphing calculator may be required.
Pre-requisites: MTH 119 with a minimum grade of C

MTH 121 Calc with Analytic Geom I (4 Credits)
This is the first course covering a rigorous sequence in early transcendental calculus. Topics covered include the theory and application of limits, continuity, differentiation, anti-differentiation and the Fundamental Theorem of Calculus. Methods and applications include related rates, implicit differentiation, indeterminate forms, Newton's method, the Mean Value theorems, and volumes.
Pre-requisites: MTH 118 with a minimum grade of C or MTH 120 with a minimum grade of C or Elig. for Calculus I with a score of 910

MTH 122 Calc with Analytic Geom II (4 Credits)
This course is a continuation of MTH 121. Topics covered include techniques of integration with applications of surface area and arc length, parametric equations, polar coordinates, conic sections, and infinite sequences and series.
Pre-requisites: MTH 121 with a minimum grade of C

MTH 127 Basic Calculus (4 Credits)
This course is an intuitive approach to differential and integral calculus of a single variable, with an introduction to multivariable differential calculus, emphasizing applications in business, economics, and the social sciences.
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C

MTH 136 Discrete Mathematics (3 Credits)
This is a course in finite mathematical structures relevant to computer science and computer information systems. Topics include sets, relations, functions, graphs, trees, methods of proof including mathematical induction, Boolean algebras and their use in circuit design, elementary combinatorics, coding theory and formal languages.
Pre-requisites: MTH 113 with a minimum grade of C or MTH 119 with a minimum grade of C

MTH 141 Mathematical Statistics (3 Credits)
This is a course in the mathematical theory of statistics. Topics offered include counting techniques and mathematical probability, random variables and probability distributions, applications to sampling theory, hypothesis testing, and correlation and regression.
Pre-requisites: MTH 114 with a minimum grade of C or MTH 121 with a minimum grade of C

MTH 213 Unified Calculus II (3 Credits)
This course is a continuation of MTH 114. Topics include volumes of solids of revolution; derivatives and integrals of transcendental functions; further techniques and applications of integration; polar coordinates; an introduction to multivariable calculus; and first-order differential equations.
Pre-requisites: MTH 114 with a minimum grade of C or MTH 121 with a minimum grade of C

MTH 221 Calc with Analytic Geom III (4 Credits)
This course is a continuation of MTH 122, covering the theory and applications of vector differential and integral Calculus. Topics include parametric curves, general vector fields, partial derivatives, vector differential operators, non-rectangular coordinate systems, multiple integrals, the change of variables theorems, and the vector integral theorems of Green, Gauss and Stokes.
Pre-requisites: MTH 122 with a minimum grade of C

MTH 222 Differential Equations (4 Credits)
This course covers methods for solving ordinary differential equations together with physical and geometric applications and places particular emphasis on linear equations with constant coefficients. Topics include 1st-order equations, the nth-order linear equation, series solutions, Laplace Transforms, linear systems and numerical methods.
Pre-requisites: MTH 221 with a minimum grade of C

MTH 239 Introduction to Linear Algebra (3 Credits)
This course is an introduction to the theory and applications of linear operators on finite dimensional vector spaces. Topics include linear systems, matrix algebra, Euclidean and general vector spaces, subspaces, change of basis and similarity, the eigenvalue problem, projections, orthogonality and least squares, inner product spaces and quadratic forms.
Pre-requisites: MTH 121 with a minimum grade of C

MTH 250 Mathematics Capstone (3 Credits)
Pre-requisites: MTH 121 with a minimum grade of B and MTH 122 with a minimum grade of B and MTH 221 with a minimum grade of B and MTH 222 with a minimum grade of B and MTH 239 with a minimum grade of B and PHY 103 with a minimum grade of B and PHY 104 with a minimum grade of B

Music (MUS)

Division: Humanities and Bilingual Studies Division

MUS 100 Music Appreciation (3 Credits)
This course introduces and acquaints the student with various aspects of music, including outstanding composers, the different types of music they created, how the music is performed, great performers and conductors, and the techniques involved in these fields. Emphasis will be placed upon the development of skills needed to become an intelligent listener.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

MUS 105 Musicianship I (2 Credits)
This course covers music theory, including basic music tools (i.e., major scales and intervals). It is designed for the music major. It is the first course in the Musicianship Series.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 115

MUS 106 Musicianship II (2 Credits)
This is a continuation of MUS 105. Students will expand upon their instruction in music theory. It is designed for the music major. It is the second course in the Musicianship Series.
Pre-requisites: MUS 105 with a minimum grade of C
Co-requisites: MUS 116

MUS 109 Jazz Appreciation (3 Credits)
A comprehensive study of jazz, from its origins to the present day. Study will be centered on influential composers, instrumentalists, vocalists, and arrangers. This course will also include an introduction to and study of musical elements, such as instrumentation, lyrics, form, rhythm, and harmony.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

MUS 110 Music of the World (3 Credits)
This course will cover the global history of music from its origins to the present day. Emphasis will be placed upon the perspective of stylistic and cultural contexts, emphasizing the development of listening, score reading, stylistic analysis, critical thinking, and communication skills.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

MUS 115 Ear Training/Sight Singing I (2 Credits)
This course will help students develop music reading and related aural skills through practice and application of sight-reading techniques and ear training procedures. It is designed for the music major.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 105

MUS 116 Ear Training/Sight Singing II (2 Credits)
This is a continuation of MUS-115 designed to further develop music reading and related aural skills through practice and application of sight-reading techniques and ear training procedures. It is designed for the music major.
Pre-requisites: MUS 115 with a minimum grade of C
Co-requisites: MUS 106

MUS 117 African American Music (3 Credits)
A detailed study of the unique and essential elements that characterize Black music in both vocal and instrumental styles, giving emphasis to its historical development and role as a major force in shaping America's musical tastes.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

MUS 121 Voice Class I (1 Credit)
This course is designed to train and develop the individual voice and ear for solo work as well as for ensemble singing. Areas of study include breathing, tone production, diction, general musicianship, and interpretation. It is designed for the music major. It is the first course in the Voice Class Series.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 131

MUS 122 Voice Class II (1 Credit)
This course is designed to train and develop the individual voice and ear for solo work as well as for ensemble singing. Areas of study include breathing, tone production, diction, general musicianship, and interpretation. It is designed for the music major. It is the second course in the Voice Class Series.
Pre-requisites: MUS 121 with a minimum grade of C
Co-requisites: MUS 132

MUS 131 Keyboard Class I (2 Credits)
This course is designed for the beginning piano student. It will cover basic piano skills, including reading and playing simple songs utilizing two hands. It is designed for the music major. It is the first course in the keyboard Class Series.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 121 and MUS 153

MUS 132 Keyboard Class II (2 Credits)
This is a continuation of MUS-131. Students will expand upon their knowledge of basic piano skills, including reading and playing simple songs utilizing two hands. It is designed for the music major. It is the second course in the Keyboard Class Series.
Pre-requisites: MUS 131 with a minimum grade of C
Co-requisites: MUS 122 and MUS 154

MUS 141 College Choir I (2 Credits)
This course is designed to train and develop a vocal ensemble of mixed voices dedicated to the study, rehearsal, and performance of a variety of choral literature. It is designed for the music major. It is the first course in the College Choir Series.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 121

MUS 142 College Choir II (2 Credits)
This course is designed to train and develop a vocal ensemble of mixed voices dedicated to the study, rehearsal, and performance of a variety of choral literature. It is designed for the music major. It is the second course in the College Choir Series.
Pre-requisites: MUS 141 with a minimum grade of C
Co-requisites: MUS 122

MUS 153 Instrumental Workshop I (1 Credit)
This course offers practical experience in solo and ensemble instrumental performance. It is designed for the music major. It is the first course in the Instrumental Workshop Series.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)
Co-requisites: MUS 131

MUS 154 Instrumental Workshop II (1 Credit)
This course offers practical experience in solo and ensemble instrumental performance. It is designed for the music major. It is the second course in the instrumental Workshop Series.
Pre-requisites: MUS 153 with a minimum grade of C
Co-requisites: MUS 132

MUS 170 Intro. to Music Technology (3 Credits)
This course introduces students to the technology available that can aid in the creation, refinement, and preservation of music. Broad topics covered will include the scientific properties of audio and acoustics, digital audio workstation (DAW) software, MIDI, audio editing and mixing, the fundamentals of recording, file types, and music notation software.
Pre-requisites: MUS 105 with a minimum grade of C and MUS 115 with a minimum grade of C

MUS 205 Musicianship III (2 Credits)
This is an intermediate course in music theory. It is designed for the music major. It is the third course in the Musicianship Series.
Pre-requisites: MUS 106 with a minimum grade of C

MUS 206 Musicianship IV (2 Credits)
This is a continuation of MUS-205. Students will expand upon their instruction in music theory. It is designed for the music major. It is the fourth and final course in the Musicianship Series.
Pre-requisites: MUS 205 with a minimum grade of C

MUS 221 Voice Class III (1 Credit)
This course is designed to train and develop the individual voice and ear for solo work as well as for ensemble singing. Areas of study include breathing, tone production, diction, general musicianship, and interpretation. It is designed for the music major. It is the third course in the Voice Class Series.
Pre-requisites: MUS 122 with a minimum grade of C
Co-requisites: MUS 231

MUS 222 Voice Class IV (1 Credit)
This course is designed to train and develop the individual voice and ear for solo work as well as for ensemble singing. Areas of study include breathing, tone production, diction, general musicianship, and interpretation. It is designed for the music major. It is the fourth and final course in the Voice Class Series.
Pre-requisites: MUS 221 with a minimum grade of C
Co-requisites: MUS 232

MUS 231 Keyboard Class III (2 Credits)
This is an intermediate course for piano students. It will cover a higher level of piano proficiency, including reading and playing more complex compositions of major composers. It is designed for the music major. It is the third course in the Keyboard Class Series.
Pre-requisites: MUS 132 with a minimum grade of C
Co-requisites: MUS 221 and MUS 253

MUS 232 Keyboard Class IV (2 Credits)
This is a continuation of MUS-231. Students will expand upon their instruction at a higher level of piano proficiency, including reading and playing more complex compositions of major composers. it is designed for the music major. It is the fourth and final course in the Keyboard Class Series.
Pre-requisites: MUS 231 with a minimum grade of C
Co-requisites: MUS 222 and MUS 254

MUS 241 College Choir III (2 Credits)
This course is designed to train and develop a vocal ensemble of mixed voices dedicated to the study, rehearsal, and performance of a variety of choral literature. It is designed for the music major. It is the third course in the College Choir Series.
Pre-requisites: MUS 142 with a minimum grade of C
Co-requisites: MUS 221

MUS 242 College Choir IV (2 Credits)
This course is designed to train and develop a vocal ensemble of mixed voices dedicated to the study, rehearsal, and performance of a variety of choral literature. It is designed for the music major. It is the fourth and final course in the College Choir Series.
Pre-requisites: MUS 241 with a minimum grade of C
Co-requisites: MUS 222

MUS 253 Instrumental Workshop III (1 Credit)
This course offers practical experience in solo and ensemble instrumental performance. It is designed for the music major. It is the third course in the Instrumental Workshop Series.
Pre-requisites: MUS 154 with a minimum grade of C
Co-requisites: MUS 231

MUS 254 Instrumental Workshop IV (1 Credit)
This course offers practical experience in solo and ensemble instrumental performance. It is designed for the music major. It is the fourth and final course in the Instrumental Workshop Series.
Pre-requisites: MUS 253 with a minimum grade of C
Co-requisites: MUS 232

MUS 261B Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261C Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261D Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261G Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261K Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261P Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261S Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261V Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 261W Applied Performance Area I (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262B Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262C Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262D Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262G Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262K Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262P Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262S Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262V Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 262W Applied Performance Area II (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263B Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263C Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263D Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263G Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263K Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263P Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263S Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263V Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 263W Applied Performance Area III (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264B Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264C Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264D Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264G Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264K Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264P Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264S Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264V Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 264W Applied Performance Area IV (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265B Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265C Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265D Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265G Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265K Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265P Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265S Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265V Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 265W Applied Performance Area V (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266B Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266C Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266D Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266G Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266K Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266P Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266S Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266V Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 266W Applied Performance Area VI (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267B Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267C Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267D Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267G Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267K Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267P Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267S Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267V Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 267W Applied Performance Area VII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268B Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268C Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268D Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268G Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268K Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268P Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268S Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268V Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 268W Applied Performance Area VIII (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269B Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269C Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269D Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269G Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269K Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269P Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269S Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269V Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

MUS 269W Applied Performance Area IX (1-2 Credits)
Private music instruction course in a student's chosen performance area of voice or instrument

New Media Technology (NMT)

Division: Humanities and Bilingual Studies Division

NMT 101 Interactive Multimedia Design (4 Credits)
This course is an introduction to New Media Technology design. Students will be able to develop a foundation in the utilization of diverse technologies such as animation, interactive two-dimensional and three-dimensional design, audio and video editing, and virtual/augmented reality. Emphasis will be placed upon being able to make use of various industry standard applications and platforms.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

NMT 201 Advanced Interactive Design (4 Credits)
This course will allow students to further develop their skills in designing digital animated and interactive design content. Students will be able to work with industry standard applications and platforms in fields such as two-dimensional and three-dimensional design, including, but not limited to: gaming, social media, virtual/augmented reality, and 3D printing.
Pre-requisites: ART 171 with a minimum grade of C or NMT 101 with a minimum grade of C

NMT 202 Game Design and Applications (3 Credits)
This course introduces the student to the principles of game design, including imagining the game, defining the way it will work, describing the elements of the game and transmitting the information to the team which will build the game. The student will learn to create interactive games for different platforms. Storyboarding, character development, interactivity and introductory scripting will be covered.
Pre-requisites: ART 171 with a minimum grade of C or NMT 201 with a minimum grade of C

NJIT Exchange (EXE)

Division: Essex

EXE 001 Exchange Course at NJIT (1 Credit)

EXE 002 Exchange course at NJIT (2 Credits)

EXE 003 Exchange Course at NJIT (3 Credits)

EXE 004 Exchange Course at NJIT (4 Credits)

EXE 005 Exchange Course at NJIT (5 Credits)

EXE 006 Exchange Course at NJIT (6 Credits)

NJIT Exchange (EXI)

Division: Essex

EXI 001 Exchange Course at NJIT (1 Credit)

EXI 002 Exchange Course at NJIT (2 Credits)

EXI 003 Exchange Course at NJIT (3 Credits)

EXI 004 Exchange course at NJIT (4 Credits)

NJIT Exchange (EXJ)

Division: Essex

EXJ 003 Exchange Course at NJIT (3 Credits)

NJIT Exchange (EXN)

Division: Essex

EXN 003 Exchange Course at NJIT (3 Credits)

NJIT Exchange (EXT)

Division: Essex

EXT 001 Exchange Course at NJIT (1 Credit)

EXT 002 Exchange Course at NJIT (2 Credits)

EXT 003 Exchange Course at NJIT (3 Credits)

Nursing (NRS)

Division: Nursing and Health Sciences Division

NRS 104 Fundamentals of Nursing (6 Credits)
In this course, students gain the foundational concepts for all subsequent nursing courses. Students are introduced to basic knowledge, skills and attitudes for safe implementation in the provision of patient centered care across the lifespan. Older adult populations with normal aging and common health issues will be the focus. Laboratory and clinical activities support current evidence when applied in a long-term care setting.
Pre-requisites: (ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999) and BIO 121 with a minimum grade of C and (CHM 101 with a minimum grade of C or CHM 103 with a minimum grade of C) and PSY 101 with a minimum grade of C
Co-requisites: BIO 122 and ENG 102

NRS 106 LPN MOBILITY I (2 Credits)
This is the first course of the LPN Articulation Option. It includes the essential concepts that an LPN needs to bridge the gap in the role of LPN to RN. It is designed to provide a foundation for all subsequent nursing courses. Students review basic concepts of the nursing profession, the role of the provider of care, and the basic physiologic and higher level needs of man. Classroom activities are designed to help students assess and diagnose basic needs, and assist in meeting those needs in elderly adults who are healthy or who experience simple health alterations. Students are tested in the classroom to determine their proficiency. The goal of this course is to prepare the LPN for a smooth transition into professional nursing.
Pre-requisites: (ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999) and PSY 101 with a minimum grade of C and BIO 121 with a minimum grade of C and (CHM 101 with a minimum grade of C or CHM 103 with a minimum grade of C) and BIO 122 with a minimum grade of C and (ENG 102 with a minimum grade of C or TRANSFERRED ENG 102 with a score of 998)

NRS 111 LPN MOBILITY II (6 Credits)
This is the second course in the LPN Articulation Option following NRS 106. Students care for clients who have commonly occurring health alterations generally affecting middle adult populations. Laboratory and clinical activities create a construct which assists the LPN to advance in the role of provider of care. Assessment and nursing diagnoses are expanded with a focus on planning and intervention to meet the physiologic, safety, and psychosocial needs of clients. Credit is given for previous knowledge. Upon successful completion of this course, an additional 6 credits will be given to students who complete NRS 106 and NRS 111.
Pre-requisites: NRS 106 with a minimum grade of C

NRS 114 Common Health Alterations (8 Credits)
In this course, students provide safe, culturally sensitive care to patients across the lifespan who have commonly occurring health alterations with predictable outcomes. Laboratory and clinical activities create an environment to assist students to apply current best evidence in a variety of health care settings including mental health and psychiatric settings. Students interact with the multidisciplinary health team to achieve safe quality patient outcomes in individual and group settings. The focus of the course will develop critical thinking and enhance clinical judgment when providing safe quality care to 1-2 patients.
Pre-requisites: NRS 104 with a minimum grade of C and BIO 122 with a minimum grade of C
Co-requisites: BIO 211 and BIO 251

NRS 206 Complex Health Alterations (8 Credits)
In this course, students provide safe, culturally sensitive care to patients across the lifespan including childbearing and childrearing families, and who experience commonly occurring complex health alterations. This course enables students to further refine their expertise through the utilization of current best evidence, and sound clinical judgment to deliver safe care in collaboration with other members of the health care team. Laboratory and clinical activities focus on the development of a comprehensive teaching plan and quality improvement activities. Students will practice management and prioritization skills while providing safe quality care for multiple patients within the context of family or significant group.
Pre-requisites: (NRS 114 with a minimum grade of C or NRS 106 with a minimum grade of C) and NRS 111 with a minimum grade of C

NRS 216 Management of Care (8 Credits)
In this course, students provide safe, culturally sensitive care to multiple patients with emergent, critical and chronic complex health problems in a variety of health care settings. Laboratory activities will focus on simulated unfolding scenarios to validate student clinical judgment, previously learned psychomotor skills and role transition from student to professional nurse. Clinical activities provide students with the opportunity to strengthen clinical judgment, set priorities for patients with unpredictable outcomes and practice greater independence in collaboration with the multidisciplinary team. Management and delegation skills will be the main focus of all clinical activities.
Pre-requisites: NRS 206 with a minimum grade of C and BIO 211 with a minimum grade of C and BIO 251 with a minimum grade of C

NRS 217 Prof.IssuesLeadershipSynthesis (2 Credits)
This is a course where students integrate all nursing concepts. The focus is on analysis, synthesis and application of current professional trends and issues that impact nursing practice. The role of members in the profession is explored and operationalized. Laboratory consists of simulation activities that further enhance student's critical thinking, clinical decision making skills and the successful achievement of an NCLEX-style test.
Pre-requisites: NRS 206 with a minimum grade of C

Paralegal Studies (PLS)

Division: Social Sciences Division

PLS 101 Intro. to Law for Paralegals (3 Credits)
This course provides an introduction to the legal profession in general, the specific role of paralegals, and their relationship to other legal professionals. Students explore the American legal system and are introduced to federal and state courts. The course examines in detail the Code of Professional Ethics and other related standards of proper conduct.
Pre-requisites: ((((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999)

PLS 102 Legal Research and Writing (3 Credits)
This course serves as an introduction to the specific research and writing functions and skills necessary to perform as a legal assistant. Students learn to analyze legal problems using locators and other general references in the law library. Students brief cases, write legal memoranda, and use the Shepard's Citators. The course also introduces students to the use of computer-assisted legal research including the use of WESTLAW, Lexis-Nexis, reporter systems, and statutory materials. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

PLS 105 Torts (3 Credits)
This course covers the principles of tort law, its application in commonly faced situations in law practice, and the role of the paralegal in the preparation of a tort claim. Emphasis is placed on negligence and the defenses to negligence. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

PLS 107 Contracts (3 Credits)
This course provides an introduction to the basic elements of contract law and contract formation and discharge, including offer, acceptance, consideration, capacity, intent, discharge, and remedies. Students will learn to draft simple clauses and contracts. The course also examines the roles of the paralegal, the code of professional ethics, and other related standards of proper conduct.
Pre-requisites: TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999)

PLS 202 Adv. Legal Research & Writing (3 Credits)
Legal research is the process of identifying and retrieving information necessary to support legal decision-making. In its broadest sense, legal research includes each step of a course of action that begins with analyzing facts of a problem and concludes with communicating and applying the results of the investigation. As compared to legal research, legal writing places a heavy reliance on authority. In most legal writing, the writer must back up assertions and statements with citations to authority. This is accomplished by a unique and complicated citation system. The standard methods for American legal citation are defined by two competing rulebooks: the ALWD Citation Manual: A Professional System of Citation and The Bluebook: A Uniform System of Citation. PLS 202 is designed to improve and refine legal research and writing skills through a series of assignments which require in-depth legal research and analysis. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: PLS 102 with a minimum grade of C

PLS 203 Wills & Estate Administration (3 Credits)
Students are introduced to the basic provisions of the law of wills and estates. They learn to draft wills and other appropriate instruments. The laws of intestate succession and the law of trusts are also examined. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 204 Bus. Org. & Gov't Regulation (3 Credits)
This course examines in detail the various forms of business organizations with an emphasis on partnerships and corporations. Employment law and government regulations of businesses are also studied. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct as applied to partnerships and corporations and other business organizations.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 205 Administrative Law (3 Credits)
Administrative law is the body of law that governs the activities of administrative agencies of government. Government agency action can include rulemaking, adjudication, or the enforcement of a specific regulatory agenda. This introductory course in administrative law focuses on the sources and evolution of administrative law, administrative agencies, due process, delegation, rule making, investigation, adjudication, and judicial review. The course includes examination of the Administrative Procedures Act and a review of the ethical principles of administrative law.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 206 Litigation Procedures (3 Credits)
This course examines the rules governing a case as it moves through the courts and basic litigation procedures. Topics covered include state and federal court rules and procedures, client interviews, pleadings, discovery proceedings, trial preparation, and the appellate process. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 210 Property Transactions (3 Credits)
Students are introduced to the law of property as well as to the various types of property transactions and related matters. Topics covered include contracts, mortgages, leases, deeds, title searches, and recording statutes. Students learn to prepare sample real estate closing documents. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 220 Family Law (3 Credits)
This course examines substantive and procedural laws and rules pertaining to marriage, dissolution of marriage civil unions, annulment, alimony, domestic partnerships, spousal abuse, legitimacy, adoption, surrogacy, child abuse, child abduction, child support, visitation and custody, separation agreements, surrogate motherhood, and custody issues. The course examines in detail the Code of Professional Ethics and other related standards of proper conduct.
Pre-requisites: ENG 101 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or Transf. Eng 101 Mth 100 with a score of 999

PLS 225 Law Office Mngt. & Field Exp. (3 Credits)
Students are placed in law-related positions to gain practical experience necessary for success as legal assistants. Students are required to follow established learning objectives related to their positions to effect the attainment of specific job competencies. Students are required to attend routine sessions on campus with their professor to review their work experiences. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct.
Pre-requisites: PLS 102 with a minimum grade of C

Philosophy (PHI)

Division: Humanities and Bilingual Studies Division

PHI 101 Introduction to Philosophy (3 Credits)
This course introduces students to the study of philosophy, its history, and its major figures. Questions such as these will be focused in on: Does God exist? Is there life after death? Do we have free will? Is our universe real? These, and more, will allow students to touch upon the main branches of philosophy (aesthetics, epistemology, ethics, logic, and metaphysics), allowing for a strong foundational understanding of the material.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Physical Education (PHE)

Division: Social Sciences Division

PHE 101 Introduction to Physical Ed (2 Credits)
Course Description: This course provides an introduction and professional orientation to the field of physical education. The role of the instructor of physical education in schools, industry, and community agencies is emphasized. The scientific foundations of physical activity and career opportunities in physical education are also examined.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

PHE 115 First Aid and Safety (2 Credits)
An introduction to preventive measures and first aid practices and procedures in case of accidents or illness. Principles and procedures essential to effective safety education are emphasized. The course follows the current American Red Cross guidelines leading to certification. Students will demonstrate techniques and skills on fellow classmates and manikins. This course is required of all physical education majors and special attention is given to gymnasium and playgroup situations.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

PHE 119 Concepts in Physical Education (2 Credits)
Through a series of lectures and self-administered tests, various aspects of Physical Fitness will be explored. In addition to mastering selected concepts concerning fitness, each student will develop through self-testing, his or her own physical fitness profile. Each student will access his/her fitness level and design a program of exercise to achieve and /or maintain fitness for living.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 and Transf. Eng 101 Mth 100 with a score of 999

PHE 151 Soccer/Speedball (1 Credit)
This fifteen-week course is designed to develop basic skills, knowledge, and appreciation of soccer and to also develop performance proficiency in the game.

PHE 153 Basketball (1 Credit)

PHE 157 Volleyball (1 Credit)
This course covers the historical development and present status of the sport. Students receive instruction in the fundamental skills, game strategy, rules, terminology, and specifics concerning safety. This course is fifteen weeks long and students are advised to be prepared for a demanding level of physical interaction.

PHE 251 Badminton/Squash Racquets (1 Credit)
Students receive instruction in the fundamental skills and techniques of the sport. The course also examines the history of the sport, current trends, rules, terminology, equipment, and etiquette. Students will play in double and single games to perfect their skills. This fifteen-week course is designed to allow students of varied physical states of preparedness to explore a moderate form of exercise.

PHE 255 Tennis (1 Credit)
Students receive instruction in the fundamental skills and techniques of the sport. The course covers forehand and backhand strokes, serve, volley, lob, and smash. Strategies, hand grips, rules of the game, and selection of equipment are also discussed. Development of performance proficiency in the sport is a basic objective of this course. By the end of this fifteen-week course, students will be expected to successfully engage in doubles and intra class competition

PHE 256 Track and Field (1 Credit)
This course introduces students to the techniques and mechanics of such activities as running/sprinting, jumping, throwing, and hurdling and to the development of speed, power, and endurance. This fifteen-week course will necessitate that students come to class prepared with appropriate running attire.

PHE 257 Weight Training for Fitness (1 Credit)
Students are required to follow a regimen of progressive, resistance exercises for developing physical fitness. Individual assistance is rendered to help the student with the regimen in order to build strength, stamina, endurance, and muscle tone. At the end of the fifteen-week course, students will complete a personal assessment of their individual progress.

PHE 262 Coach & Officiating Soccer (2 Credits)
This course covers the basic principles and coaching methods for competitive soccer and also mechanics of officiating.

PHE 263 Coach & Officiating Basketball (2 Credits)
This course covers the basic principles and coaching methods for competitive basketball, strategy, scouting essentials, and mechanics of officiating.

PHE 266 Coach & Officiat X CNTRY T & F (2 Credits)
This course covers coaching principles and practices, scouting techniques, rules, strategy, and scoring.

PHE 270 Aerobic Activity (1 Credit)
This course is designed to help students develop and maintain body flexibility, muscular strength, muscular endurance, cardiovascular endurance, and ideal body composition through aerobic dance and exercise. Students perform prescribed dance/exercise type movements to music.

PHE 275 Table Tennis (1 Credit)
This course introduces the student to the skills, strategies, techniques, and components of the game of Table Tennis. Hand-eye coordination, agility, reaction time, cardiovascular endurance, and mental alertness skills will be developed to enhance competitive abilities. Rules, equipment, and tournament play will be taught as a part of the Table Tennis experience.

PHE 276 Self Defense (1 Credit)
This course is designed to help students develop self-defense skills. Students receive instruction on a variety of basic self-defense movements from various martial arts sources (e.g., karate, wrestling, judo, street fighting, and Kapap Krav). Physical, verbal, and conditioning aspects of self-defense will be examined.

PHE 277 Introduction to Yoga (1 Credit)
During this fifteen-week course, students perform stretching and breathing exercises based on Hatha Yoga. These exercises (asanas), if practiced regularly and methodically, aid in maintaining good health, improving cardiovascular circulation, and reducing stress. The exercises, when mastered, stretch and flex all major areas of the body in a balanced fashion, increasing blood flow and improving breathing. Students keep a journal of their individual progress and research the benefits of Hatha Yoga and its relationship to good health.

Physical Therapist Assistant (PTA)

Division: Nursing and Health Sciences Division

PTA 101 Fundamentals of PTA (5 Credits)
This course is designed to orient the student to the role of the Physical Therapist Assistant and some of the duties involved therein. It covers the history of Physical Therapy, philosophy, duties, patient psychology, and ethics. Students learn about the relationship and placement of Physical Therapy in today's medical picture. Fundamentals of body structure, osteology, and kinesiology are stressed throughout. Students practice patient positioning, draping, transfers, therapeutic massage, and are also introduced to therapeutic exercises. Students learn via laboratory work and practice sessions in class.

PTA 102 Principles of PTA (5 Credits)
This course is designed to introduce the student to the disorders most commonly seen in patient care. It includes detailed examination of the application and effects of various modalities and equipment, particularly the use of heat, cold, water and electricity in clinical practice. Students learn the use of equipment, including traction and intermittent compression pumps. They also learn the practical application of goniometric measurements, manual muscle testing and ambulation training. Students learn via laboratory work, practice sessions in class and observations in physical therapy clinics.
Pre-requisites: PTA 101 with a minimum grade of C

PTA 103 PTA Practicum I (4 Credits)
In this course, each student is assigned to a clinical setting that exposes the student to practical application of those principles and techniques covered in PTA 101, PTA 102, and PTA 106. The student meets periodically with his/her Academic Coordinator of Clinical Education (ACCE) for review and help with any encountered difficulties.
Pre-requisites: PTA 102 with a minimum grade of C and PTA 106 with a minimum grade of C

PTA 106 Ther.Inter./Child Dev.&Geronto (3 Credits)
This course introduces the student to human development throughout the lifespan. Students learn about acquisition of gross and fine motor skills in the pediatric population and the concept of positioning and adaptive equipment. Normal infantile reflexes are introduced and the affects of persisting abnormal reflexes are discussed. Emphasis is placed on equilibrium and righting reactions and the normal/abnormal developmental sequence. Geriatric pathology is presented and students are trained to recognize and treat age-related changes affecting all biological systems.
Pre-requisites: PTA 101 with a minimum grade of C and BIO 121 with a minimum grade of C

PTA 201 Principles of PTA II (4 Credits)
The course is designed to educate the student on the impairments, functional limitations, and treatments of patients with neurological disorders, amputations, and burns. The course also covers considerations for treating geriatric, pediatric, and cardiopulmonary patients.
Pre-requisites: PTA 103 with a minimum grade of C

PTA 202 Principles of PTA III (4 Credits)
This course is designed to educate the student on specific orthopedic pathologies and rehabilitation, cardiac and respiratory pathologies and treatment, burns, prosthetic and orthotic management. Advanced therapeutic exercise and use of various pieces of exercise equipment will be included.
Pre-requisites: PTA 201 with a minimum grade of C and PTA 203 with a minimum grade of C

PTA 203 PTA Practicum II (4 Credits)
In this course, students continue to practice Physical Therapist Assisting. Assignments are made on the basis of demonstrated need for additional knowledge and/or skill. Students are assigned to hospitals, nursing homes, sub-acute hospitals, and pediatric facilities. The student meets periodically with his/her Academic Coordinator of Clinical Education (ACCE) for review and help with any encountered difficulties.
Pre-requisites: PTA 103 with a minimum grade of C

PTA 205 PTA Practicum III (6 Credits)
In this course, each student is assigned to a clinical setting that exposes the student to practical application of those principles and techniques covered in PTA 101, 102, and 106. The student meets periodically with his/her Academic Coordinator of Clinical Education (ACCE) for review and help with any encountered difficulties.
Pre-requisites: PTA 201 with a minimum grade of C and PTA 203 with a minimum grade of C and PTA 209 with a minimum grade of C

PTA 206 Prof. Issues Phys.Thera.Assist (1 Credit)
In this course, students will learn their professional responsibilities and develop strategies to better meet the challenges of practice in the current environment. They will also examine current initiatives affecting the field that will likely impact on physical therapy practice in the future. Preparation of a resume and job interview skills will be included. Finally, this course will cover the application process for State licensure as a PTA, and students will complete their application to sit for the National Physical Therapy Examination (NPTE).
Pre-requisites: PTA 201 with a minimum grade of C and PTA 203 with a minimum grade of C and PTA 209 with a minimum grade of C

PTA 209 Therapeutic Exercise (2 Credits)
Students are introduced to the basic concepts of Exercise Physiology. Current exercise techniques are presented and practiced. The student is also instructed in various disabilities and injuries. The student is trained in the use of various exercise equipment, including isokinetic machines. Importance is given to the development of patient programs to improve posture, strength, power, endurance, flexibility, and relaxation
Pre-requisites: PTA 103 with a minimum grade of C

Physics (PHY)

Division: Biology, Chemistry and Physics Division

PHY 101 College Physics I (4 Credits)
This is the first half of a standard college physics sequence for technology, architecture, or biological science majors. Lecture and laboratory work is supported by individual assistance and computer activities. This course includes the study of kinematics, dynamics, momentum, energy, circular motion, universal gravitation, rotational motion, the structure of materials, and fluid
Pre-requisites: (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 109) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 275) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 26) or MTH 100 with a minimum grade of C

PHY 102 College Physics II (4 Credits)
This is the second half of a standard college physics course sequence. Lecture and laboratory work is supported by individual assistance and computer activities. This half emphasizes the study of electricity magnetism and light, with additional topics including solids, fluids, heat, thermodynamics, vibrations, waves, sound, and topics in modern physics.
Pre-requisites: PHY 101 with a minimum grade of C

PHY 103 General Physics I (4 Credits)
This is a first course in general physics for engineering, mathematics and computer science majors. Topics covered include the calculus-based study of vectors, particle kinematics, Newton's laws, friction, conservation of energy and momentum, gravitation and rotation. Emphasis is placed on problem solving and applications to laboratory experience.
Pre-requisites: MTH 121 with a minimum grade of C

PHY 104 General Physics II (4 Credits)
This is a continuation of PHY 103 with an emphasis on electrostatics, direct current and alternating current circuits, electromagnetism, magnetic properties of matter, and electromagnetic oscillations. The laboratory is based upon electrical measurements using modern electronic test equipment.
Pre-requisites: PHY 103 with a minimum grade of C and MTH 121 with a minimum grade of C

PHY 105 Concepts in Physics (4 Credits)
Pre-requisites: MTH 092 with a minimum grade of C

PHY 110 Intro. Data Reduction Applica. (3 Credits)
This is a one semester course in which the theory and application of data reduction and error analysis are introduced. Topics include the binomial distribution, the Gaussian and Poisson probability density functions, estimation of moments, and propagation of uncertainty. Data modeling, including least-squares fitting of linear and polynomial functions, is presented. Using computer softwar, students are expected to apply the concepts of data reduction error analysis to real data sets derived from the physical sciences.
Pre-requisites: PHY 103 with a minimum grade of C and MTH 121 with a minimum grade of C

PHY 111 Theory of Optics (3 Credits)
This course introduces the physics of optics and light. Topics include the nature of light, reflection, refraction, and image formation for simple optical systems. Laboratory experiments are demonstrated.

PHY 113 Astronomy (4 Credits)
This is an introductory course in astronomy. The major topics covered are: historic works of Aristotle, Ptolemy, Brahe, Kepler and Copernicus, age and origin of the Solar System with descriptions of the planets and their satellites, structure and evaluation of the Sun and other stars. Additional topics include: nature of light, atomic structure, gravitation, and relativity. Lecture and laboratory work is supported by individual assistance and computer activities.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

PHY 114 Meteorology (4 Credits)
This course covers the composition and structure of the atmosphere, the flows of energy to, from and through the atmosphere, and the resulting motions produced from small to planetary scales. The physical principles of atmospheric phenomena are stressed to provide an understanding of weather's impact on humans, particularly the impact of severe weather. Methods of analysis are developed through the study of current weather as meteorological data are delivered via the Internet.
Pre-requisites: ((Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

PHY 203 General Physics III (5 Credits)
This course is a continuation of PHY 103 and PHY 104, which completes the introductory physics sequence for engineering majors. The theory and applications of the following topics are covered: oscillations with an introduction to Maxwell's Equations and its applications to microwaves, hydrodynamics, kinetic theory, physical and geometrical optics, introduction to atomic theory, the periodic table and elementary particles.
Pre-requisites: PHY 104 with a minimum grade of C and MTH 122 with a minimum grade of C

PHY 299 Physics Research Capstone (2 Credits)
This course is intended for students who are nearing the end of their Associate in Science degree and who are looking to obtain research experience in physics, applied physics, engineering or science. The course is the culmination of learning in the physics curriculum and as such, it refelctively builds upon learning from various college core, mathematics and physical science courses. Each student will develop a proposal for their Capstone project. The project will be conducted at ECC or at an approved research laboratory of a four-year institution under the supervision of a full-time faculty member. As part of the course, students will learn to communicate mathematical and scientific reasoning effectively in written and spoken form.

Political Science (POL)

Division: Social Sciences Division

POL 104 American Government (3 Credits)
This course examines the United States Constitution, Declaration of Independence, and the structure and processes of the American governmental system. All of the branches of government are examined within the economical, historical, political, social, and contemporary context.
Pre-requisites: (((Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P)) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

Problem Solving (PSR)

Division: Remedial

PSR 080 Prob Solving & Reasoning Skill (1.5 Credits)
This is a thinking skills course designed to help the pre-college level student learn to solve problems that pertain to course work and to everyday life situations. Emphasis is placed on developing the student's ability to think things through, make decisions, solve problems, and understand the processes of thinking and decision-making. This course is limited to Special Programs students.

Psychology (PSY)

Division: Social Sciences Division

PSY 101 General Psychology I (3 Credits)
This introductory course examines the history, methodology, definitions, and ideas relating to such concepts as personality formation, self-concept, defense mechanisms, emotions, and conditioning. Emphasis is placed on the relationship of these concepts to the student's understanding of self and others in everyday interactions.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

PSY 102 General Psychology II (3 Credits)
This course examines the structure and function of our various senses as starting points for all human knowledge. Visual perception and illusions, along with concepts related to human learning and forgetting is studies. An understanding of the nature of thinking, problem solving, and language is developed.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 205 Theories of Personality (3 Credits)
This course explores current approaches and theories of personality development and organization. Emphasizing healthy personality development, selective theories of personality that guide research as represented by the psychoanalytic, sociocultural, trait, learning, sociobiological, and existential-humanistic paradigms will be presented and critically evaluated.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 209 Abnormal Psychology (3 Credits)
This course will examine the different types of mental illness that exists within modern society. The influence of heredity and environment upon mental illness is considered and recent therapeutic methods are critically examined.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 210 Group Dynamics (3 Credits)
This course explores the fundamental concepts of understanding interpersonal behavior in the context of small groups. Integrating group theory and research with experiential activities, students will gain a better understanding of group processes and improve their interpersonal skills as group members. This course will be of special value to students entering mental health, social work, education, business, or similarly related professions in which the knowledge of group processes would be beneficial.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 211 Social Psychology (3 Credits)
This course is designed to help students understand and explain social-psychological phenomena. Concepts such as conformity, fear, humor, gratitude, lying, selfishness and attitude, and impression formation are examined. Various methods are applied to enable students to understand the behavior and thoughts of individuals and groups. The course objective is to develop students' ability to independently analyze social-psychosocial phenomena.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 219 Child Psychology and Develop. (3 Credits)
This course examines the interrelationships between the psychological and physical development of the child from birth through adolescence. Topics include physical and emotional influences on growth, intellectual development, the significance of interpersonal relations, and cultural aspects of personality.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 220 Educational Psychology (3 Credits)
The practical application of psychological principles to the educative process is explored. The theoretical ideas behind the practices are explained. Methods of student evaluation are considered. Techniques of motivating students are described and related to studies of efficient learning methods. Special problems of adjustment and their effects on school performance are discussed.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 225 Child&Adolescent Abnormal Psy. (3 Credits)
This course will focus on the etiology, classification, diagnosis, and treatment of childhood disorders. Emphasizing the developmental aspects of child psychopathology, how children's and adolescents' psychological disorders are distinguishable from those of adults will be examined. Particular attention will also be devoted to understanding how the mental health, education, health care, and juvenile justice systems provide services to children and adolescents with psychological disorders.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 230 Life-Span Developmental Psy. (3 Credits)
This course id an overview of the major developmental stages from conception to death. Emphasis on the physical, cognitive and socio-emotional aspects of growth and development. Students taking this course will learn about important developmental psychological principles and be able to apply these principles in understanding their own respective growth and development.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 232 Human Sexuality (3 Credits)
This course examines various theoretical perspectives on sexuality, such as its biological, psychological, social, and cultural dimensions. Topics examined include, but are not limited to, male and female sexual anatomy, physiology, and response; sexuality over the life span; variations in sexual behavior and expression; sexual dysfunctions, paraphilias, and related therapies. Emphasis is placed on the human sexual experience as a vehicle for self-awareness, self-understanding, and self-acceptance.
Pre-requisites: PSY 101 with a minimum grade of C or SOC 101 with a minimum grade of C or SOC 108 with a minimum grade of C

PSY 250 Theory/Prac./Couns./Psychothe. (3 Credits)
This course will present the current theories and practices used in counseling and psychotherapy. It will cover topics such as ethical issues and therapies such as psychodynamic, cognitive behavioral, group, and peer self-help groups.
Pre-requisites: PSY 101 with a minimum grade of C

PSY 251 Counsel & Treat of Addictions (3 Credits)
This course provides an introduction to the individual, group, and family treatment of alcohol and drug dependency. The theoretical and historical basis and the implications of a variety of treatment methods are considered including 12-step self-help programs, therapeutic communities, detoxification, rehabilitation, outpatient care, half-way houses, methadone, and employee and student assistance. Treatment planning by objectives and stages is stressed. Special topics of concern such as engagement, mandated treatment, enabling, and the treatment relationship are surveyed. This course is approved for 42 educational hours toward New Jersey's Certified Alcohol and Drug Counselor (CADC) certification or recertification.
Pre-requisites: PSY 101 with a minimum grade of C

Radiography (RTC)

Division: Nursing and Health Sciences Division

RTC 100 Radiologic Technology I (2 Credits)
This course provides detailed information on the theory of X-ray techniques and its practical application in radiography. Seminars are conducted in the classroom/laboratory on radiographic image evaluation. Students learn to critique or differentiate between radiographs of diagnostic quality and non-diagnostic quality.
Co-requisites: RTC 101, RTC 103 and RTC 108

RTC 101 Radiologic Positioning Prin I (4 Credits)
This course provides instruction, with related terminology, in radiographic positioning of lower and upper extremities, chests, and abdomens. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Co-requisites: RTC 100, RTC 103 and RTC 108

RTC 103 Patient Care and Ethics (2 Credits)
This course acquaints students with nursing procedures and techniques used in the general care of the patient. Emphasis is on the role of the technologist in various nursing situations. Students are also instructed in the ethical principles and the responsibilities entailed by becoming a member of a paramedical profession.
Co-requisites: RTC 100, RTC 101 and RTC 108

RTC 104 Radiation Protection (2 Credits)
This course develops students' knowledge of safety standards in operating radiation equipment. Students learn the principles of radiation protection and practical skills to ensure maximum safety for both patients and the equipment operator. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 100 with a minimum grade of C and RTC 101 with a minimum grade of C and RTC 103 with a minimum grade of C and RTC 108 with a minimum grade of C

RTC 105 Radiologic Technology II (2 Credits)
Students gain, through problem solving and completing experiments, a thorough working knowledge of manipulating exposure factors. Students also learn the principles for constructing technique charts for all situations and all kilovoltage ranges. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 100 with a minimum grade of C

RTC 106 Radiologic Positioning Prin II (4 Credits)
This course is a continuation of RTC 101. Instruction is provided in radiographic positioning of the vertebral column, pelvic girdles, and bones of the thorax. Students are taught radiographic procedures using contrast media. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 101 with a minimum grade of C

RTC 107 Contrast Media (2 Credits)
Students are further acquainted with procedures in radiography involving the use of contrast media. Detailed information is provided on the equipment and media used, and on the reactions and contradictions to these media. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 101 with a minimum grade of C

RTC 108 Clinical Radiogrphy I (1 Credit)
Students are assigned to clinical affiliations for a 15-week period, two days each week, to perform routine examinations under the supervision of a registered radiologic technologist. Critiques of radiographic images are conducted at the clinical site.
Co-requisites: RTC 100, RTC 101 and RTC 103

RTC 109 Radiologic Pos Principles III (2 Credits)
This course provides precise and detailed information, with related terminology, on the various positions of the skull including routine positions and projections with regard to facial bones, paranasal sinuses, and mastoid. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 104 with a minimum grade of C and RTC 105 with a minimum grade of C and RTC 106 with a minimum grade of C and RTC 107 with a minimum grade of C and RTC 111 with a minimum grade of C

RTC 110 Radiologic ADV Posit Prin IV (1 Credit)
Students gain, through problem solving and completion of experiments, a thorough working knowledge of special and troublesome procedures. This course is for students who have practiced the basic views and are aware of positioning limitations. Students learn alternate positioning skills to image various anatomical structures in the emergency room environment. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 105 with a minimum grade of C and RTC 106 with a minimum grade of C

RTC 111 Clinical Radiography II (1 Credit)
Students are assigned to clinical affiliations for approximately fifteen week period, two days each week, to perform routine examinations under the supervision of a registered radiologic technologist. Critiques of radiographic images are conducted at the clinical site.
Pre-requisites: RTC 108 with a minimum grade of C

RTC 112 Clinical Radiography III (1 Credit)
Students are assigned to clinical affiliations for approximately seven weeks, three days each week, to perform routine examinations under the supervision of a registered radiologic technologist. Critiques of radiographic images are conducted at the clinical site.
Pre-requisites: RTC 111 with a minimum grade of C

RTC 200 Medical Surgical Disease (2 Credits)
This course deals with application of X-ray technology on seriously ill or injured patients to produce informative radiographs. Students learn about anatomical changes resulting from disease and/or injury and how to take radiographs that are most informative for diagnosis and treatment. Critiques of radiographic images are conducted at the classroom and clinical sites.
Pre-requisites: RTC 202 with a minimum grade of C

RTC 201 Radiation Biology (2 Credits)
This course provides basic information on the effects of radiation therapy and radioisotopes on biological systems. It is geared toward students whose training is primarily in the field of diagnostic X-ray technology. Critiques of radiographic images are conducted in the classroom/laboratory, focusing on the effects of radiation as related to radiation biology and health physics
Pre-requisites: RTC 202 with a minimum grade of C

RTC 202 Clinical Radiography IV (1 Credit)
Students are assigned to clinical affiliations for approximately six weeks, four days per week, to perform all radiographic procedures under the supervision of a registered radiologic technologist. Critiques of radiographic images are conducted at the clinical sites.
Pre-requisites: RTC 112 with a minimum grade of C

RTC 203 Special Procedures (3 Credits)
Students learn about the specialized and highly technical procedures in radiography, such as computed tomography (CT), magnetic resonance imaging (MRI), and angiography, and the general indications for each examination. Students will be introduced to Radiation Oncology, Nuclear Medicine, and Bone Densitometry. Quality control methods are also covered. Selected radiographs supplement anatomical review of the systems to be examined, prior to radiographic procedures. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted in the classroom/laboratory.
Pre-requisites: RTC 205 with a minimum grade of C

RTC 204 Pediatric/GeriatricRadiography (1 Credit)
Pediatrics and geriatrics are specialized fields. It is important that the technologist follows definite procedural methods with young and elderly patients. Advantages include saving time, film, and energy, as well as minimizing the amount of radiation on the patient. This course provides detailed instruction in radiographic positioning, procedures, and equipment for pediatric and geriatric patients. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiography lab. Critiques of radiographic images are conducted.
Pre-requisites: RTC 202 with a minimum grade of C and RTC 205 with a minimum grade of C

RTC 205 Clinical Radiography V (2 Credits)
Students are assigned to clinical affiliations for approximately fifteen weeks, three days per week, to assist in pediatric and geriatric procedures in addition to all other radiographic procedures under the supervision of a registered radiologic technologist. Critiques of radiographic images are conducted at the clinical site.
Pre-requisites: RTC 202 with a minimum grade of C

RTC 206 Clinical Radiography VI (2 Credits)
Students are assigned to clinical affiliations for approximately fifteen weeks, three days per week, for mastery of radiologic technology skills. Students perform all radiographic procedures including assisting in O.R. and special procedures under the supervision of a registered technologist. Critiques of radiographic images are conducted at the clinical sites.
Pre-requisites: RTC 205 with a minimum grade of C

RTC 207 Clinical Radiography VII (1 Credit)
Students are assigned to clinical affiliations for approximately seven weeks, four days per week. In addition to diagnostic radiography participation, students will rotate through CT, MRI, NM, Special Procedures, and Bone Densitometry departments under the supervision of a registered technologist where they will observe these modalities. Critiques of radiographic images are conducted. Successful completion of a comprehensive examination is required.
Pre-requisites: RTC 206 with a minimum grade of C

RTC 208 Comprehensive Radiography Rev. (2 Credits)

RTC 210 Radiography Seminar (2 Credits)
This is a seminar course where students integrate all radiography concepts. The focus is on analysis and application of current professional trends and issues in addition to application of sound scientific formulas and the importance of minimizing patient dose of ionizing radiation. The role as a member of the profession is explored and operationalized. Computer assisted test taking skills in all areas of radiography practice will be included. Students enrolled in the ECC Radiography Program must pass this course with a grade of "C" or better.

Religion (REL)

Division: Humanities and Bilingual Studies Division

REL 105 Comparative Religion (3 Credits)
This course is an introduction to the study of comparative religion, which is an examination of the historical backgrounds and present day vitality of the world's major living religious. Students will analyze, compare, and contrast key themes and ideas found within these religious traditions.
Pre-requisites: (Write Placer Essay with a score of 1 and Reading (Next-Gen) with a score of 200)

Rutgers Newark Exchange (EXA)

Division: Essex

EXA 001 Exchange course at Rutgers/NWK (1 Credit)

EXA 002 Exchange Course/Rutgers NWK (2 Credits)

EXA 003 Exchange Course/Rutgers NWK (3 Credits)

EXA 004 Exchange Course /Rutgers NWK (4 Credits)

EXA 005 Exchange Course/ Rutgers NWK (5 Credits)

EXA 006 Exchange Course/Rutgers NWK (6 Credits)

Rutgers Newark Exchange (EXC)

Division: Essex

EXC 003 Exchange Course/Rutgers NWK (3 Credits)

Rutgers Newark Exchange (EXR)

Division: Essex

EXR 001 Exchange Course - Rutgers NWK (1 Credit)

EXR 002 Exchange Course - Rutgers NWK (2 Credits)

EXR 003 Exchange Course - Rutgers NWK (3 Credits)

EXR 004 Exchange Course - Rutgers NWK (4 Credits)

Sociology (SOC)

Division: Social Sciences Division

SOC 101 Introduction to Sociology (3 Credits)
This class will help students critically analyze the world through a sociological lens. The major theories and methodologies used by sociologists to understand the social world will be examined and applied.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

SOC 108 Social Problems (3 Credits)
This course examines the causes of selected social problems. National and Global social problems are examined, as well as those that affect urban areas.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

SOC 111 Helper Theory (3 Credits)
This course examines ways in which the helping professions intervene in individual, group, community, and societal processes with the goal of improving social functioning.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

SOC 113 Foundations of Community Healt (3 Credits)
This course introduces students to the public health field, especially the history and role of community health workers in both local and global health systems. A focus will be on the community health worker's position in providing accurate information regarding community health needs, promoting health education strategies, preventing disease and injury, advocating to reduce health disparities, and inspiring needed policy changes.

SOC 121 Soc Svcs Policies & Procs I (3 Credits)
This course examines from a historical perspective the processes involved in formulating social service policies and eligibility criteria, and in distribution of benefits. This course covers the relationship of social service agencies and institutions to federal, state, and municipal government and to policy development, and includes an introduction to policy development, and includes an introduction to the structure and mode of operation of these agencies and institutions.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 with a minimum grade of C or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

SOC 153 Alc. & Subs. Abuse Prev.& Edu. (3 Credits)
This course provides an introduction to the individual, group, and social factors that predispose or create a risk for substance abusing behavior, the knowledge and skills needed for entry into the prevention profession, and the broad range of prevention activities and strategies utilized to reduce the risk or frequency of substance abusing behaviors. This course is approved as 42 educational hours towards the CADC credential.
Pre-requisites: PSY 101 with a minimum grade of C or SOC 101 with a minimum grade of C

SOC 201 Social Gerontology (3 Credits)
This course examines the role of the aged in today's society; the biological, psychological, and social aspects of aging; problems in the health of the aged; problems in retirement and leisure; the economics and politics of aging; issues confronting the aging person; and the prospects for the aged in tomorrow's society.
Pre-requisites: COLLEGE DEGREE with a score of 988

SOC 203 Racial and Cultural Minorities (3 Credits)
This course analyzes the influence and contributions of selected racial, ethnic, and cultural minorities in contemporary American life. Emphasis is placed on the structural elements in American society affecting the entry of such groups into the mainstream of American life. The social and psychological dynamics of prejudice and discrimination are examined.
Pre-requisites: SOC 101 with a minimum grade of C

SOC 204 Urban Sociology (3 Credits)
Urbanism is stressed as a way of life with distinct social relationships and values. Emphasis is on the social and physical environment of modern urban life, its relationships, processes, and implications, and various alternatives open to urban people.
Pre-requisites: SOC 101 with a minimum grade of C

SOC 205 Sociology of the Black Comm. (3 Credits)
This course examines the social forces operating in the Black community. Consideration is given to the changes in the philosophy of the Black movement and changes in attitude about integration. Black leadership is particularly stressed.
Pre-requisites: SOC 101 with a minimum grade of C

SOC 206 Social Stratification (3 Credits)
This course considers the significance of social stratification as an aspect of the structure of social systems. It includes discussion of various stratification theories, historical trends, and cultural variations in stratification.
Pre-requisites: SOC 101 with a minimum grade of C

SOC 207 Understanding Death & Dying (3 Credits)
This course takes a close look at aspects of the dying process in such situations as murder, suicide, capital punishment, and grief. It examines the thoughts, feelings, and actions of the dying and those affected by death so that the student can gain greater insight into the subtle relationships these factors have with each other and with death. This course is designed for all students seeking better understanding of death and the process of bereavement in contemporary society and other cultures across the world.
Pre-requisites: COLLEGE DEGREE with a score of 988

SOC 219 Sociology of the Family (3 Credits)
This course is a sociological study of the family as an institution. Topics covered include historical development, the American system, child-rearing, and marriage.
Pre-requisites: SOC 101 with a minimum grade of C

SOC 228 Hum & Soc Svcs Fieldwork I (3 Credits)
Students are place in a voluntary internship capacity for a minimum of ten hours per week at a recognized human service agency, under the supervision of agency staff and an ECC faculty member. Students can gain first-hand knowledge of how human services agencies function. Evaluation conducted during and at the end of the semester is a cooperative effort by the agency and the faculty member responsible. Separate sections are offered for students pursuing careers in social work, mental health, alcoholism/substance abuse, and gerontology.
Pre-requisites: SOC 111 with a minimum grade of C

SOC 229 Hum & Soc Svcs Internship I (3 Credits)
Students discuss and analyze situations encountered in their internship placement, receive specialized training in their professional specialization, and are instructed in how to prepare to enter the career market in human and social services. Separate sections are offered for students pursuing careers in social work, mental health, alcoholism/substance abuse, mental health and social work.
Pre-requisites: SOC 111 with a minimum grade of C

SOC 230 Hum & Soc Svcs Fieldwork II (3 Credits)
This is the second semester internship placement in social work, mental health, or alcoholism/substance abuse, continuing SOC 228.
Pre-requisites: SOC 228 with a minimum grade of C

SOC 231 Hum & Soc Svcs Internship II (3 Credits)
This second semester internship seminar continues the work of SOC 229.
Pre-requisites: SOC 229 with a minimum grade of C

SOC 250 Alc & Drug Abuse in Amer. Soc. (3 Credits)
The course examines the causes and varieties of chemical dependency and abuse. Topics covered include the effects of alcohol, sedatives, narcotics, stimulants, hallucinogens, polyaddiction, and abuse; the psychological, social, genetic, and cultural factors involved in their use and abuse; the progression of addiction; and the resultant medical conditions. This course is approved as 42 educational hours towards the CADC credential. Also, this course, together with SOC 252, constitutes the educational requirements for the Chemical Dependency Associate in New Jersey and is also approved as educational hours toward the CJC credential.
Pre-requisites: PSY 101 with a minimum grade of C or SOC 101 with a minimum grade of C

SOC 252 Case Mngmt of the Addictions (3 Credits)
This course provides an introduction to the knowledge, skills, and attitudes necessary for addiction counselors to perform counseling functions, clinical evaluation, treatment planning, and case management. It introduces students to the professional and ethical responsibilities of professional practice. This course is approved as 42 educational hours towards the CADC credential. Also, this course, together with SOC 250 Alcohol and Drug Use in American Society, constitutes the educational requirements for the Chemical Dependency Associate (CDA) in New Jersey. In addition, SOC 250 and CJI 211 Counseling the Addicted Offender, constitutes the educational requirements for the Criminal Justice Counselor (CJC).
Pre-requisites: SOC 101 with a minimum grade of C or PSY 101 with a minimum grade of C

Spanish (SPN)

Division: Humanities and Bilingual Studies Division

SPN 101 Elementary Spanish I (3 Credits)
This is the first half of a year's course for students with little or no background in the Spanish language. Listening comprehension, speaking, reading and writing are developed within the limits of basic vocabulary, idioms and grammar.

SPN 102 Elementary Spanish II (3 Credits)
This course is a continuation of SPN 101. The student's knowledge of vocabulary and grammar expands to include multiple tenses and use of the verbs. The four language skills listening comprehension, speaking, reading and writing continue to be developed.
Pre-requisites: SPN 101 with a minimum grade of C

SPN 201 Intermediate Spanish I (3 Credits)
This course thoroughly reviews Spanish grammar while continuing the aims of SPN 101 and SPN 102. Facility in using the language is enhanced through more advanced reading selections, discussions, and writing in the language.
Pre-requisites: SPN 101 with a minimum grade of C and SPN 102 with a minimum grade of C

SPN 202 Intermediate Spanish II (3 Credits)
This course is a continuation of SPN 201. It completes a thorough review of Spanish grammar. Emphasis is equally placed on all four skills: listening comprehension, speaking, reading, and especially writing in order to prepare students for higher level literature courses.
Pre-requisites: SPN 101 with a minimum grade of C and SPN 102 with a minimum grade of C and SPN 201 with a minimum grade of C

Supply Chain Management (SCM)

Division: Business Division

SCM 101 Intro. to Operations and SCM (3 Credits)
Introduction to Operations and Supply Chain Management provides an overview of the field of Supply Chain Management. Topics covered include Operations and Supply Chain Strategies, Process Choice and Layout Decisions, Business Processes, Managing Quality and Capacity, Supply Management, Logistics, Forecasting, Sales and Operations Planning, Managing inventory and production across the Supply Chain, Information Systems, Lean Production and Managing Projects.
Pre-requisites: (Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P or ESL 063 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

SCM 201 Principles Supply Chain Mgmt. (3 Credits)
Pre-requisites: SCM 101 with a minimum grade of C

SCM 219 Transportation & Warehousing (3 Credits)
Pre-requisites: SCM 101 with a minimum grade of C

SCM 229 Demand Planning & Fulfillment (3 Credits)
Pre-requisites: SCM 201 with a minimum grade of C

SCM 239 Procurement & Risk Management (3 Credits)
Pre-requisites: SCM 201 with a minimum grade of C

SCM 249 Manufacturing/Operations Plan. (3 Credits)
Pre-requisites: SCM 201 with a minimum grade of C

Uniform Construction Code (UCC)

Division: Mathematics, Engineering Technologies and Computer Sciences (METCS) Division

UCC 109 Subcode Official (3 Credits)
This course is designed to satisfy the educational requirement for licensure as a Uniform Construction Code Enforcement Subcode Official. The course covers in detail the administrative background and procedures in the office, the legal aspects of code enforcement, and the related legislation.

UCC 110 Construction Official (3 Credits)
This course is designed to satisfy the educational requirement for licensure as a Construction Official. It provides students the technical and administrative knowledge to effectively enforce the Uniform Construction Code at the local level.

UCC 119 Building Inspector RCS (6 Credits)
This course is designed to satisfy the educational requirement for licensure as a Building Inspector RCS. The course is based on the International Residential Code (one- and two-family dwelling code), International Building Code, the Uniform Construction Code Regulations, NJAC 5:23. It covers techniques for evaluating structural design and materials, plan review, basic fire protection requirements, and field inspection and reporting as applied to Class III residential and small commercial structures. Reference is made to the New Jersey Uniform Construction Code.

UCC 121 Building Inspector ICS (6 Credits)
This course is designed to satisfy the educational requirement for licensure as a Building Inspector ICS. The course is based on the New Jersey Uniform Construction Code, International Building Code, International Mechanical Code, International Fuel Gas Code, and International Energy Conservation Code. It covers techniques for evaluating structural design, fire protection, and mechanical systems, plan analysis, and field inspection and reporting as applied to class II industrial and commercial structures.

UCC 130 Electrical Inspector ICS (4 Credits)
This course is designed to satisfy the educational requirement for licensure as an Electrical Inspector ICS. The course is based on the New Jersey Uniform Construction Code and the National Electric Code. The course consists of 30 hours of instruction in systems design and 30 hours of instruction in plan review and field inspection techniques.

UCC 140 Fire Prot Inspector Part I (4 Credits)
This course is designed to satisfy the educational requirement for mastery of the Fire Protection Subcode for residential and small commercial structures. The course is based on the New Jersey Uniform Construction Code and the (ICC) International Building Code. It covers techniques for plan review, materials testing, field inspection, and report writing. It is part one of a two-part 120-hour course required for licensure as Fire Protection Inspector ICS

UCC 141 Fire Protection Inspector II (4 Credits)
This course covers techniques for plan review and field inspection of fire protection systems and electrical systems. It is a detailed study of the New Jersey Uniform Code and the International Building Code, focusing on its relation to fire prevention. It is part two of a two-part 120-hour course required for licensure as Fire Protection Inspector ICS.
Pre-requisites: UCC 140 with a minimum grade of C

UCC 151 Plumbing Inspector ICS (8 Credits)
This course is designed to satisfy the educational requirement for licensure as a Plumbing Inspector ICS. The course is based on the New Jersey Uniform Construction Code and the National Standard Plumbing Code as applied to class II and III structures. It includes design, testing and analysis techniques for evaluating water service, distribution, and drainage systems; training in plan review and field inspection procedures; and a study of New Jersey public health requirements (NJAC 5:23-3).

UCC 170 Technical Assistant (3 Credits)
This course is designed to meet the state's educational program requirements to become licensed, through the Department of Community Affairs, as a Technical Assistant to the Construction Official's office. The course consists of the state-required 45 hours of classroom instruction covering the duties and responsibilities of a Technical Assistant. The instructor equally emphasizes specific requirements of the Construction Official when working in the Uniform Construction Code office. This course also covers information relevant to UCC groups, issuing certificates, and assistance with public permits.

UCC 220 Building Inspector HHS (4 Credits)
This course is designed to satisfy the educational requirement for licensure as a Building Inspector HHS (Hazardous and High-Rise Structure). Instruction focuses on technical competency in design analysis, materials and standards, and methods for securing compliance in advanced structural systems, advanced fire protection systems, and advanced mechanical systems as applied to class I and all other structures established in Subchapter 3 of the New Jersey Uniform Construction Code (NJAC 5:23-3).
Pre-requisites: UCC 121 with a minimum grade of C

UCC 230 Electrical Inspector HHS (3 Credits)
This course is designed to meet the state's standard for educational program requirements to become licensed, through the Department of Community Affairs, as a New Jersey Electrical Inspector HHS (NJAC 5:23-5.20(h)). This course provides classroom instruction a covering the duties and responsibilities of hazardous and high-rise structures (HHS), electrical plan review, and inspection. The instructor especially emphasizes code requirements, regulations, and manufacture specifications for the installation of the various types of electrical systems, as well as the rehabilitation and barrier-free subcodes, plan review, and field inspections.
Pre-requisites: UCC 130 with a minimum grade of C

UCC 240 Fire Protection Inspector HHS (4 Credits)
This course is designed to satisfy the educational requirement for licensure as a Fire Protection Inspector HHS. It provides the background technical and administrative knowledge to needed to effectively enforce the Uniform Construction Code as applied to hazardous and high-rise structures at the local level.
Pre-requisites: UCC 141 with a minimum grade of C

UCC 250 Plumbing Inspector HHS (4 Credits)
This course is designed to satisfy the educational requirement for licensure as a Fire Protection Inspector HHS. It provides the background technical and administrative knowledge to needed to effectively enforce the Uniform Construction Code as applied to hazardous and high-rise structures at the local level.
Pre-requisites: UCC 151 with a minimum grade of C

Vision Care Technology (OPH)

Division: Nursing and Health Sciences Division

OPH 123 Ophthalmic Laboratory I (4 Credits)
This course teaches the use of basic lens measuring devices and gauges, LEAP system of blocking, and use of automatic and hand edging machinery. Standard frame alignment will be presented using zyl frames. Students will learn skills needed to fabricate a pair of eyeglasses including use of lensometers and vertometers and laying out single vision lenses in preparation for edging and final insertion into zyl and metal frames.

OPH 124 Ophthalmic Laboratory II (4 Credits)
Laboratory "finishing" procedures will be practiced; neutralizing, duplication, layout, edging, beveling, single vision and bifocal lenses, and insertion of lenses into plastic and combination frames. Students will also learn lens drilling and mounting in rimless and semi-rimless mountings, the use of both hand and automatic equipment related to the finishing operation, the identification of spectacle frames and patterns, and the use of the lens-hardening oven. Repair of frames and temples and the interpretation of shop-orders will be included.
Pre-requisites: OPH 123 with a minimum grade of C and OPH 126 with a minimum grade of C

OPH 126 Ophthalmic Materials I (3 Credits)
This course provides an introduction to the field of ophthalmic optics. The roles of the Ophthalmic Laboratory Technician, Ophthalmic Dispenser, Optometrist, and Ophthalmologist will be explained. The course continues with the history of lenses, basic optical terminology, lens characteristics, the metric system, and the refraction of light. Instructions will also include calculation of lens curvature, lens power, and prism. The gross anatomy of the eye will be introduced, as well as the use of optical charts and graphs.

OPH 127 Ophthalmic Materials II (3 Credits)
This course is a continuation of Ophthalmic Materials I. it includes calculations and formulae to compute marked and true power, lens thickness, and the relation of center to edge thickness. Performance of higher power lens and the importance of lens position will be considered, as well as the function of bifocals and multifocal lenses along with the proper management of their related optical effects. Lectures will include optical standards, tolerance, and an introduction to absorptive lenses with their applications.
Pre-requisites: OPH 126 with a minimum grade of C and OPH 123 with a minimum grade of C

OPH 201 Ophthalmic Dispensing I (5 Credits)
An examination of professional ethics, practices and responsibilities will be followed by an evaluation of absorptive lenses and optical coatings. The calculation and elimination of vertical imbalance, by various methods, is thoroughly presented. Lecture and laboratory sessions include techniques in ocular and facial measurements for single vision, multifocal and lenses to correct Aphakia. Included are proper techniques in adjusting plastic frames and the neutralizing and analysis of completed spectacles. Practical problems are offered with the goal being development of the skills necessary at the dispensing table.
Pre-requisites: OPH 124 with a minimum grade of C and OPH 127 with a minimum grade of C

OPH 202 Ophthalmic Dispensing II (5 Credits)
The psychology of dispensing will be stressed along with the procedures for proper management of the Presbyopic and low-vision patient. The interpretation of complex prescriptions, i.e., the effect of changing lens position, crossing cylinders, and the design of Iseikonic lenses, is covered. Instruction includes the fitting of progressive lenses, eyeglasses for occupational and vocational use, and the considerations of style and fashion. Lecture and practical sessions include techniques in adjusting metal and rimless frames, analyzing and neutralizing unknown spectacles, frame repairs, and classroom participation in simulated case histories.
Pre-requisites: OPH 201 with a minimum grade of C and OPH 203 with a minimum grade of C

OPH 203 Contact Lenses I (3 Credits)
This course provides an introduction to contact lenses. Topics include: The history of contact lenses, lens materials, the anatomy and physiology of the cornea, corneal topography and its relation to lens design. Instruction will include use of the Keratometer and Slit Lamp as well as the procedures required in the design and inspection of hard contact lenses.
Pre-requisites: OPH 124 with a minimum grade of C and OPH 127 with a minimum grade of C

OPH 204 Contact Lenses II (3 Credits)
Fitting requisites, lens-cornea relationships, and the fitting of soft contact lenses are presented. Emphasis on lens parameters, residual astigmatism and recognition of patient symptoms is fully presented. Included are extended wear, scleral, cosmetic, and therapeutic lens fitting methods and a full understanding of the signs, symptoms and management of the Keratometer patient. Instruction continues in the use of the Keratometer and Slit Lamp with the basic fitting philosophy of rigid and gas permeable contact lens fitting. Refraction techniques are described and demonstrated.
Pre-requisites: OPH 201 with a minimum grade of C and OPH 203 with a minimum grade of C

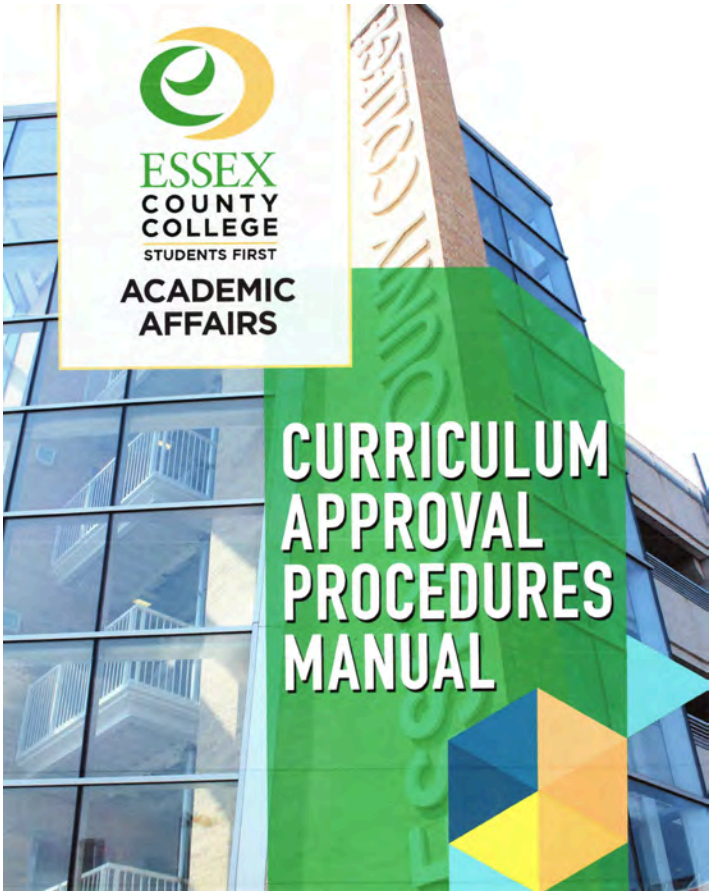
OPH 210 Principles of Refraction I (3 Credits)
This course is designed to develop the student's knowledge of clinical refraction. Topics will include: etiology, types, symptoms, testing and treatment of refractive anomalies of the eye, accommodation, presbyopia, versions, vengeances, anisometropia and aniseikonia, asthenopia, patient history, procedures involved in preliminary testing, objective and subjective refraction, basic techniques in retinoscope.

OPH 273 Supervised Clin Instruction (3 Credits)
This course provides the student with co-op experience in two areas. Of this experience, 20% will be received in the College's ophthalmic dispensary and the remaining portion will be received at a retail optical dispensary chosen from the department's approved site list. The entire hands-on experience is performed under the supervision of a licensed optician.
Pre-requisites: OPH 124 with a minimum grade of C and OPH 127 with a minimum grade of C

ADDENDUM

Approved program and course, changes and additions will be included in the next published version of the catalog.

- Courses (p. 291)
- Programs (p. 291)



Courses

Approved changes and additions will be included in the next published version of the catalog.

CONCURRENT COURSE CHANGE

- BIO 116 Intro to Anatomy & Physiology: Grade of "C" or better in MTH 090S/100 or MTH 100 and ENG 099-101 or ENG 101

COURSE DEACTIVATION

- MTH 092/MTH 092T Elementary Algebra and Tutorial

COURSE DESCRIPTION CHANGE

- Content to follow

COURSE PREREQUISITE CHANGE

- BIO 103 General Biology I: Grade of "C" or better in MTH 090S/100 or MTH 100 and ENG 099-101 or ENG 101
- CHM 101 College Chemistry I: Grade of "C" or better in MTH 090S/100 or MTH 100, ENG 099-101 or ENG 101. High school chemistry strongly recommended.
- GEO 101 Rocks, Minerals and Fossils: Grade of "C" or better in MTH 090S/100 or MTH 100 and ENG 099-101 or ENG 101
- GEO 102 Surface Processes and Natural Disasters: Grade of "C" or better in MTH 090S/100 or MTH 100 and ENG 099-101 or ENG 101
- PHY 100 Physical Science: Grade of "C" or better in MTH 090S/100 or MTH 100
- PHY 113 Astronomy: Grade of "C" or better in MTH 090S/100 or MTH 100 or MTH 101
- PHY 114 Meteorology: Revise Course Pre-requisite: Grade of "C" or better in MTH 090S/100 or MTH 100 or MTH 101

COURSE PREREQUISITE/COREQUISITE CHANGE

- CSC 121 Computer Science I: Shift from pre-requisite to co-requisite/ eligibility-based model for MTH 100. Co-requisites: eligibility for MTH 100, or completion of MTH 100 with a grade of C or better

NEW COURSES

- HMM 104 Food Protection and Safety
- HMM 110 Introduction to Culinary Arts
- HMM 112 Culinary Nutrition
- HMM 114 Introduction to Baking and Pastry Arts
- HMM 210 Commercial Restaurant Operations & Service Management

Programs

Approved program changes and additions will be included in the next published version of the catalog.

CHANGE IN EXISTING DEGREE PROGRAMS

Accounting - AS (2001)

Delete all other math courses in the curriculum with the exception of the following: MTH 100, MTH 101 and MTH 127.

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (6)		
ECO 101	Principles of Economics I (Macro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		

Select any English Literature course		3
Select one of the following:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (16 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
Select two ACC 200-level courses		8
Additional Course Requirements (12 Credits)		
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
BUS 211	Principles of Marketing	3
or BUS 251	Business Law I	
ECO 102	Principles of Economics II	3
Total Credits		**60**

The A.S. in Accounting is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Business Administration - AS (2005)

Delete all other math courses in the curriculum with the exception of the following: MTH 100, MTH 101 and MTH 127.

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (6)		
ECO 101	Principles of Economics I	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
BUS 231	Global Business I	3
Select any two BUS 200-level courses		6
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
ECO 102	Principles of Economics II	3
Free Elective (one 2-credit course or two 1-credit courses)		2
Total Credits		**60**

The A.S. in Business Administration is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Business Administration: Hospitality Management - AAS (200H)

Delete all other math courses in the curriculum with the exception of the following: MTH 100, MTH 101 and MTH 127.

Code	Title	Credits
General Education Requirements (25 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (4)		
Select one of the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 100, MTH 101, MTH 127		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society & Human Behavior (9)		
ECO 101	Principles of Economics I	3
Select any two of the following:		6
ANT 101, ANT 105, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Requirements (18 Credits)		
BUS 101	Business Organization & Mgmt	3
HMM 103	Intro. to Hospitality Mgmt.	3
HMM 226	Supervisory Development	3
HMM 261	Hotel/Motel Housing Management	3
HMM 263	Front Office Procedures	3

HMM 264	Food & Beverage Management	3
Additional Course Requirements (17 Credits)		
ACC 101	Prin of Accounting I Financial	4
ACC 102	Prin Accounting II Managerial	4
SCM 101	Intro. to Operations and SCM	3
Select one of the following:		3
HMM 256 (recommended), BUS 201, BUS 203, BUS 204, BUS 207, BUS 211, BUS 213, BUS 221, BUS 231, BUS 251, BUS 252, BUS 253		
Free Elective [1]		3
Total Credits		**60**

[1] CEE 298 Cooperative Edu. Experience I is recommended.

Computer Science - AS (2302)

Reclassify MTH 122 (Calculus II) from a major requirement to the Quantitative/Scientific Knowledge, Skills, and Reasoning General Education category. The course remains part of the degree requirements but will no longer be designated as a required Computer Science major course.

Code	Title	Credits
General Education Requirements (34 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (11)		
MTH 121	Calc with Analytic Geom I	4
MTH 122	Calc with Analytic Geom II	4
MTH 136	Discrete Mathematics	3
or MTH 239	Introduction to Linear Algebra	
Select one of the following sequences:		8
BIO 103-BIO 104, BIO 121-BIO 122,		
CHM 103-CHM 104, PHY 103-PHY 104		
Society & Human Behavior (3)		
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (26 Credits)		
CSC 121	Computer Science I	3
CSC 122	Computer Science II	3
CSC 221	Computer Sys and Architecture	3
CSC 223	Ethics and Computer Technology	3
CSC 225	Data Structures	3
CSC 228	Operating Systems	4
Select one of the following:		4
CSC 116, CSC 230, CSC 231, CSC 251, CSC 255		
Select one of the following:		3
CSC 100, CSC 104, CSC 151, MTH 141		
Total Credits		**60**

- If you do not place into MTH 121 Calc with Analytic Geom I the prerequisites are: MTH 100 Intro. to College Mathematics, MTH 119 Pre-Calculus I and MTH 120 Pre-Calculus II. Math Placement is determined by the Mathematics Department. These courses should be taken in high school or the summer before your first semester at ECC.

Criminal Justice - AS (0898)

MTH 101 Statistics and MTH 103 Modern Math will be the two MTH courses students can choose to utilize to satisfy the Gen Ed Quantitative/ Scientific Knowledge, Skills & Reasoning General Education category; remove the Science Sequence requirement allowing students to register for any science course.

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either two Science courses & one MTH course or two MTH courses & one Science course:		12
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 101, MTH 103 *		
Recommended BIO 101 & BIO 102		
Society & Human Behavior (6)		
POL 104	American Government	3
Select one of the following:		3
ANT 101, PSY 101, SOC 101, SOC 108		
Humanistic Perspective (6)		
Select any 200-level English Literature Course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105		
Historical Perspective (3)		
Select any History (HST) Course		3
Major Requirements (18 Credits)		
CJI 101	Intro to Criminal Justice	3
CJI 121	Introduction to Corrections	3
CJI 136	Criminology	3
CJI 202	Crime and Delinquency	3
CJI 205	Introduction to Criminal Law	3
Select one of the following courses:		3
CJI 102, CJI 103, CJI 111, CJI 112, CJI 120, CJI 123, CJI 203, CJI 204, CJI 210, CJI 250 (only Do NOT take 211)		
Additional Course Requirements (9 Credits)		
SPN 101 or FRN 101		3
Select any additional History (HST) course		3

Social Science elective: 3-credit Social Science course from the following disciplines, ANT, CJI, EDU, PLS, POL, PSY or SOC	3
Total Credits	**60**

* (contact your Advisor regarding any other College level Math options)

Education - AA (0206)

Replace the major requirement of EDU 233 (Education Seminar I) with Any Education (EDU) course. The Major Requirements will be EDU 101, PSY 219, and any three Education (EDU) courses. EDU 233 will no longer be required and will instead be offered as an education option.

MTH 101 Statistics and MTH 103 Modern Math will be the two MTH courses students can choose to utilize to satisfy the Gen Ed Quantitative/ Scientific Knowledge, Skills & Reasoning General Education category; remove the Science Sequence requirement allowing students to register for any science course.

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either two Science courses & one MTH course or two MTH courses & one Science course:		12
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 101, MTH 103		
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 102, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (9)		
Select two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global and Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
EDU 101	Introduction to Education	3
PSY 219	Child Psychology and Develop.	3
Select any three Education (EDU) courses		9
Total Credits		**60**

Electrical Engineering Technology - AAS (2313)

Delete ELC 250 (Electric Design) and replace it with Approved Technical Electives, and expand the Approved Technical Electives to any ELC, ENR, CSC, CIS, or MTH courses including both 100-level courses and 200-level courses.

Code	Title	Credits
General Education Requirements (22 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
or ENG 105	Technical Writing	
Quantitative/Scientific Knowledge, Skills & Reasoning (7)		
MTH 114	Unified Calculus I *	3
PHY 101	College Physics I	4
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature Course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
or Select any History (HST) Course		
Major Course Requirements (24 Credits)		
ELC 115	Electric Circuits I	3
ELC 116	Electric Circuits II	3
ELC 120	Fundamentals of Analog ELC	3
ELC 218	Pulse and Digital Circuits	3
ELC 222	Intro to Communication Systems	3
ELC 228	Intro to Microprocessors	3
Approved Technical Electives		6
Select two of the following courses:		
Any ARC, CET, CIS, CSC, ELC, ENR, or MET courses		
Additional Course Requirements (14 Credits)		
ENR 100	Fund. of Engineering Design	2
ENR 103	Engr. Graphics & Intro. to CAD	2
MTH 213	Unified Calculus II	3
PHY 102	College Physics II	4
CSC 106	Roadmap to Computing Engineers	3
Total Credits		**60**

* If you do not place into MTH 114 the prerequisites are:
  - MTH 100 Introductory College Mathematics (4 credits)
  - MTH 113 College Algebra with Trigonometry (4 credits)

Math Placement is determined by the Mathematics Department

These courses should be taken in high school or the summer before your first semester at ECC.

This program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org./) under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.

Finance - AS (2016)

Delete all other math courses in the curriculum with the exception of the following: MTH 100, MTH 101 and MTH 127.

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3
Society and Human Behavior (9)		
ECO 101	Principles of Economics I (Macro)	3
ECO 102	Principles of Economics II (Micro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102 , PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
FIN 101	Introduction to Finance	3
FIN 201	Money and Banking	3
FIN 207	Principles of Investments	3
FIN 209	International Finance	3
FIN 211	Fin.Sem./Exp.& Directed Study	3
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
Select one of the following:		3
BUS 211, BUS 231, BUS 251		
Total Credits		**60**

The A.S. in Finance is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

Paralegal Studies - AS (2015)

MTH 101 Statistics and MTH 103 Modern Math will be the two MTH courses students can choose to utilize to satisfy the Gen Ed Quantitative/Scientific Knowledge, Skills & Reasoning General Education category; remove the Science Sequence requirement allowing students to register for any science course.

Code	Title	Credits
General Education Requirements (30 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either two Science courses & one MTH course or two MTH courses & one Science course:		12
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 101, MTH 103		
Society & Human Behavior (6)		
POL 104	American Government	3
Select one of the following:		3
ANT 101, ANT 105, ECO 101, ECO 102, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (24 Credits)		
PLS 101	Intro. to Law for Paralegals	3
PLS 102	Legal Research and Writing	3
PLS 105	Torts	3
PLS 107	Contracts	3
PLS 202	Adv. Legal Research & Writing	3
PLS 204	Bus. Org. & Gov't Regulation	3
PLS 205	Administrative Law	3
PLS 206	Litigation Procedures	3
Additional Course Requirements (6 Credits)		
Select two of the following:		6
PLS 203, PLS 210, PLS 220, PLS 225		
Total Credits		**60**

The AS degree in Paralegal Studies is approved by the **American Bar Association,** https://www.americanbar.org (https://www.americanbar.org/).

Physical Education - AS (0899)

MTH 101 Statistics and MTH 103 Modern Math will be the two MTH courses students can choose to utilize to satisfy the Gen Ed Quantitative/ Scientific Knowledge, Skills & Reasoning General Education category; remove the Science Sequence requirement allowing students to register for any science course.

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either two Science courses & one MTH course or two MTH courses & one Science course:		12
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 101, MTH 103		
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
HLT 101	Healthful Living	3
PHE 101	Introduction to Physical Ed	2
PHE 115	First Aid and Safety	2
PHE 119	Concepts in Physical Education	2
Select one of the following:		2
PHE 262, PHE 263, PHE 266		
Select four PHE activity courses (each one credit)		4
Additional Course Requirements (12 Credits)		
BUS 101	Business Organization & Mgmt	3
Select any additional History (HST) course		3
Select any English Literature course		3
Select one Social Science course from those designated as ANT, CJI, EDU, POL, PSY or SOC		3
Total Credits		**60**

Social Sciences - AS (0710)

MTH 101 Statistics and MTH 103 Modern Math will be the two MTH courses students can choose to utilize to satisfy the Gen Ed Quantitative/ Scientific Knowledge, Skills & Reasoning General Education category; remove the Science Sequence requirement allowing students to register for any science course.

Code	Title	Credits
General Education Requirements (33 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select either two Science courses & one MTH course or two MTH courses & one Science course:		12
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
MTH 101, MTH 103		
Society & Human Behavior (6)		
Select two of the following:		6
ANT 101, ANT 105, ECO 101, ECO 102, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (6)		
Select any English Literature course		3
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
Select any five Social Science courses from those designated as ANT, CJI, EDU, POL, PSY or SOC		15
Additional Course Requirements (12 Credits)		
Select any additional History (HST) course		3
Select any two 200 level Social Science courses from those designated as ANT, CJI, EDU, POL, PSY or SOC		6
Free Elective		3
Total Credits		**60**

Supply Chain Management - AS (2017)

Delete all other math courses in the curriculum with the exception of the following: MTH 100, MTH 101 and MTH 127.

Code	Title	Credits
General Education Requirements (32 Credits)		
Written & Oral Communication (6)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
Quantitative/Scientific Knowledge, Skills & Reasoning (8)		
Select one Math course from the following:		4
MTH 100, MTH 101, MTH 127		
Select one Science course from the following:		4
BIO 101, BIO 102, BIO 103, BIO 104, BIO 116, BIO 121, BIO 122, BIO 211, BIO 220, BIO 237,		
CHM 101, CHM 102, CHM 103, CHM 104, GEO 101, GEO 102,		
PHY 101, PHY 102, PHY 103, PHY 104, PHY 105, PHY 113, PHY 114,		
Technological Competency (3)		
CIS 131	Micro Computers in Business	3

Society & Human Behavior (9)		
ECO 101	Principles of Economics I (Macro)	3
ECO 102	Principles of Economics II (Micro)	3
Select one of the following:		3
ANT 101, ANT 105, POL 104, PSY 101, PSY 102, PSY 219, SOC 101, SOC 108, SOC 219		
Humanistic Perspective (3)		
Select any English Literature course		3
or Select one of the following courses:		
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (3)		
Select any History (HST) course		3
Major Requirements (15 Credits)		
SCM 101	Intro. to Operations and SCM	3
SCM 201	Principles Supply Chain Mgmt.	3
SCM 219	Transportation & Warehousing	3
Select two of the following:		6
SCM 229, SCM 239, SCM 249		
Additional Course Requirements (13 Credits)		
ACC 101	Prin of Accounting I Financial	4
BUS 101	Business Organization & Mgmt	3
BUS 201	Principles of Management	3
Select one of the following:		3
BUS 211, BUS 231, BUS 251		
Total Credits		**60**

The A.S. in Supply Chain Management is accredited by the Accreditation Council for Business Schools and Programs (ACBSP), http://www.acbsp.org. (https://acbsp.org/)

NEW DEGREE PROGRAMS

Chemical Technology - Academic Certificate (3306)

Code	Title	Credits
General Education Requirements (10 Credits)		
ENG 101	College Composition I	3
ENG 105	Technical Writing	3
MTH 100	Intro. to College Mathematics	4
or MTH 101	Statistics and Probability I	
Major Requirements (20 Credits)		
CHM 101	College Chemistry I	4
CHM 102	College Chemistry II	4
CHM 299	Research Study in Chemistry	3
CHT 131	Introduction to Cheminformatics	3
CHT 132	Technical Chemistry - Calculations	3
CHT 133	Instrumental Methods	3
Total Credits		**30**

Culinary Arts - Academic Certificate (2009)

Code	Title	Credits
General Education Requirements (6 Credits)		
ENG 101	College Composition I	3
ECO 101	Principles of Economics I	3
Major Requirements (12 Credits)		
HMM 103	Intro. to Hospitality Mgmt.	3
HMM 104	Food Protection and Safety (3)	3
HMM 110	Introduction to Culinary Arts (3)	3
HMM 114	Introduction to Baking and Pastry Arts (3)	3
Additional Requirements (12 Credits)		
BUS 203	Intro. to Entrepreneurship	3
HMM 112	Culinary Nutrition (3)	3
HMM 210	Commercial Restaurant Operations & Service Management (3)	3
HMM 264	Food & Beverage Management	3
Total Credits		**30**

Education: Autism Spectrum Disorders Option - AA (020A)

Code	Title	Credits
General Education Requirements (45 Credits)		
Written & Oral Communication (9)		
ENG 101	College Composition I	3
ENG 102	College Composition II	3
ENG 109	Effective Speech	3
Quantitative/Scientific Knowledge, Skills & Reasoning (12)		
Select any two Science courses (prerequisites are enforced for certain ones) and one Math course OR one Science course and two Math courses		12
Science courses: BIO 101, BIO 102, CHM 101, CHM 102, GEO 101, GEO 102, PHY 113, PHY 114		
Math courses: MTH 101, MTH 103		
Society & Human Behavior (6)		
PSY 101	General Psychology I	3
PSY 219	Child Psychology and Develop.	3
Humanistic Perspective (9)		
Select two English Literature courses		6
Select one of the following courses:		3
ART 100, ART 101, ART 102, ART 200, CIN 101, CIN 103, DRA 100, FRN 101, FRN 102, MUS 100, MUS 109, MUS 110, MUS 117, PHI 101, REL 105, SPN 101, SPN 102		
Historical Perspective (6)		
Select any two History (HST) courses		6
Global and Cultural Awareness of Diversity (3)		
Select one of the following:		3
ANT 101, ANT 105, ART 101, ART 102, ART 200, CIN 103,		
ENG 205, ENG 215, ENG 232, ENG 237, ENG 238, ENG 242, ENG 263, ENG 264, ENG 270,		
HST 101, HST 102, HST 121, HST 122, HST 131, HST 132, HST 134, HST 135, HST 136, HST 137, HST 204, HST 205, HST 206, HST 208,		
MUS 109, MUS 110, MUS 117, PSY 232, REL 105, SOC 108, SOC 205, SOC 207		
Major Requirements (15 Credits)		
EDU 101	Introduction to Education	3
EDU 203	Children with Special Needs	3
EDU 234	Education Fieldwork I	3
EDU 240	Foundations of Autism Spectrum	3

EDU 241	Applied Behavioral Analysis	3
Total Credits		**60**

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