

Computer Information Systems Program

A Dual Admissions Program with Kean University

Division of Engineering Technologies and Computer Sciences — Curriculum Code: 2002

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

Why major in Computer Information Systems?

This program prepares students to transfer upon graduation to four-year institutions to pursue baccalaureate degrees in Computer Information Systems or Management Information Services, or to enter the information technology field directly. With the rapid growth in information technology, demand has increased for qualified individuals to serve in such capacities as technical support specialist, network technician, database application specialist, PC technician, and Help Desk technician.

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

Yes. You may choose to participate in the Dual Admissions Program with Kean University and have all your credits applied to the first two years of Kean's bachelor's degree program, or you may transfer to one of many other four-year colleges and universities and apply most or all of your courses toward a bachelor's degree program.

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

All new students must take a basic skills competency test. Based on the results of the test, you may be required to take developmental courses in reading, English, and/or mathematics.

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

If you do not need developmental course work and you attend full time, you can complete the degree in two years. Part-time students can complete the program in three or four years.

Where should I direct specific questions about this program?

Contact the Division at (973) 877-4400.

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

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

Depending on selection of major elective, graduates will be able to do one of the following in addition to the above program objectives:

- ◆ Design digital circuitry;
- ◆ Utilize multitasking, pre-emptive scheduling, and time sharing operating system concepts and associated communications, networking, and security; or
- ◆ Develop applications for a network environment and demonstrate an understanding of the advantages of object-oriented design techniques including encapsulation, abstraction, inheritance, and reusability.

Computer Information Systems — A.S. Degree Program

<p>GENERAL EDUCATION REQUIREMENTS: (35 credits)</p> <p>Communications (6 credits) ENG 101 College Composition I 3 ENG 102 College Composition II 3</p> <p>Social Science (6 credits) Select two courses from: ANT 101, 105; ECO 101, 102; POL 101, 104; PSY 101, 102 219; SOC 101, 108, 219 6</p> <p>Lab Science/Math (14 credits) MTH 113 College Algebra with Trigonometry 4 MTH 114 Unified Calculus I 3 MTH 136 Discrete Mathematics 3 Select one course from: BIO 101-104, 121, 122; CHM 101-104; PHY 101-104, 113, 114 4</p> <p>Humanities (9 credits) Select one History course from: HST 101, 102, 111, 112, 121, 122, 131, 132, 134-137, 161, 162 3 One of the following 200-level English lit. courses: ENG 205, 208, 215, 221, 222, 232, 237, 238, 242, 250, 263, or 264 3 ART 100, 101, or 102 or MUS 100, 108, or 109 3</p> <p>MAJOR COURSE REQUIREMENTS: (26 credits)</p> <p>CIS 212 Systems Analysis & Design 3 CIS 215 Data Communications 3 CSC 121 Computer Science I 4 CSC 122 Computer Science II 4 CSC 225 Data Structures 4 CSC 221 Computer Systems & Architec. or CSC 228 Operating Systems or CSC 235 Advanced Object-Oriented Prog. 4 CSC 231 Database Design 4</p> <p>ADDITIONAL COURSE REQUIREMENTS: (7 credits)</p> <p>ACC 101 Principles of Accounting I 4 BUS 101 Business Organ. & Management 3</p> <p>Total Credits Required for Degree 68</p>	<p>RECOMMENDED SEQUENCE OF COURSES:*</p> <p>First Semester</p> <p>ENG 101 College Composition I 3 CSC 121 Computer Science I 4 MTH 113 College Algebra with Trigonometry 4 History requirement 3</p> <p>Second Semester</p> <p>ENG 102 College Composition II 3 CSC 122 Computer Science II 4 BUS 101 Business Organ. & Management 3 MTH 114 Unified Calculus I 3 Social Science requirement 3</p> <p>Summer</p> <p>Social Science requirement 3 Art/Music requirement 3</p> <p>Third Semester</p> <p>CIS 212 Systems Analysis & Design 3 CSC 225 Data Structures 4 ACC 101 Principles of Accounting I 4 MTH 136 Discrete Mathematics 3 English literature requirement 3</p> <p>Fourth Semester</p> <p>CIS 215 Data Communications 3 CSC 221 Computer Systems & Architec. or CSC 228 Operating Systems or CSC 235 Advanced Object-Oriented Prog. 4 CSC 231 Database Design 4 Lab Science requirement 4</p>
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***NOTE:** This plan assumes the completion of all required developmental courses in reading, writing, and mathematics as well as other pre- and co-requisites for some of the courses, as listed in the Course Descriptions section.