

# Cybersecurity & Network Technology (A.A.S.)

Division of Mathematics, Engineering Technologies and Computer Sciences — Curriculum Code: 2312

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

The rapid growth and development of mobile computing and internet technologies has also raised concerns in cybersecurity and networking. The A.A.S. degree program in Cybersecurity & Network Technology was created to meet the changing needs of the Information Technology industry and provide students with the technical expertise to administer computer networks and secure scalable connected networks.

## Program Requirements

### GENERAL EDUCATION REQUIREMENTS

Written & Oral Communication (6 credits)

[ENG 101](#) (3 credits)

[ENG 102](#) or [ENG 105](#) (one 3-credit course)

Quantitative Knowledge & Skills and Scientific Knowledge and Reasoning (8 credits)

[MTH 100](#) (4 credits)

AND

Choose one mathematics course or one lab science course from the following: [MTH 113](#)[MTH 119](#)[MTH 120](#)[MTH 121](#)[MTH 122](#)[MTH 127](#)[MTH 136](#)[MTH 213](#)[MTH 221](#)[MTH 222](#)[MTH 239](#)[BIO 101](#)[BIO 102](#)[BIO 103](#)[BIO 104](#)[BIO 121](#)[BIO 122](#)[CHM 101](#)[CHM 102](#)[CHM 103](#)[CHM 104](#)[PHY 101](#)[PHY 102](#)[PHY 103](#)[PHY 104](#)[PHY 113](#) or [PHY 114](#) (one 4-credit course)

Society & Human Behavior (3 credits)

Choose one of the following courses: [ANT 101](#)[ANT 105](#)[ECO 101](#)[ECO 102](#)[POL 101](#)[POL 104](#)[PSY 101](#)[PSY 102](#)[PSY 219](#)[SOC 101](#)[SOC 108](#) or [SOC 219](#) (one 3-credit course)

Historical Perspective (3 credits)

Choose one of the following history courses: [HST 101](#)[HST 102](#)[HST 111](#)[HST 112](#)[HST 121](#)[HST 122](#)[HST 131](#)[HST 132](#)[HST 134](#)[HST 135](#)[HST 136](#)[HST 137](#)[HST 161](#) or [HST 162](#) (one 3-credit course)

### MAJOR COURSE REQUIREMENTS

[CSC 104](#) Network Fundamentals (3 credits)

[CSC 113](#) Introduction to Linux/Unix Operating System (4 credits)

[CSC 114](#) Computer Networks I (4 credits)

[CSC 116](#) Introduction to Computer and Network Security (4 credits)

[CSC 137](#) Introduction to Programming in Java (4 credits)

[CSC 214](#) Computer Networks II (4 credits)

[CSC 226](#) Network Defense and Countermeasures (4 credits)

[CSC 230](#) Computer and Internet Forensics (4 credits)

### **ADDITIONAL COURSE REQUIREMENTS**

Approved Ethics Course ([HIT 102](#) Introduction to Customer Service, Ethics, and Compliance in Health Information Systems is strongly recommended) (one 3- or 4-credit course)

[CSC 250](#) Information Technology Capstone Project, [CSC 260](#) Internship or Approved Technical Course, or Approved Technical Course (one 3- or 4-credit course)

[CSC 253](#) Introduction to System and Cloud Administration (4 credits)

*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.*

### **RECOMMENDED SEQUENCE OF COURSES**

Total Credits Required for Degree: 61-63

First Semester

[ENG 101](#) College Composition I (3 credits)

[CSC 104](#) Network Fundamentals (3 credits)

[CSC 137](#) Introduction to Programming in Java (4 credits)

[MTH 100](#) Introductory College Mathematics (4 credits)

Second Semester

[CSC 113](#) Introduction to Linux/Unix Operating System (4 credits)

[CSC 114](#) Computer Networks (4 credits)

[CSC 116](#) Introduction to Computer and Network Security (4 credits)

Quantitative Knowledge & Skills or Scientific Knowledge & Reasoning mathematics or lab science requirement (4 credits)

Summer Session

Historical Perspective requirement (3 credits)

Third Semester

[CSC 214](#) Computer Networks II (4 credits)

[CSC 226](#) Network Defense & Counter Measures (4 credits)

[CSC 253](#) Introduction to System & Cloud Administration (4 credits)

Society & Human Behavior requirement (3 credits)

Fourth Semester

Approved Ethics Course ([HIT 102](#) Introduction to Customer Service, Ethics & Compliance in Healthcare Technology is recommended) (3- or 4-credit course)

[CSC 230](#) Computer & Internet Forensics (4 credits)

[CSC 250](#) IT Capstone Project (3 credits), [CSC 260](#) Internship, or Approved Technical Course (3- or 4-credit course)

[ENG 102](#) College Composition II or [ENG 105](#) Technical Writing (3 credits)

NOTES:

(1) The two General Education Integrated Course Goals, Ethical Reasoning & Action and Information Literacy, are both addressed by the required curriculum described above, regardless of specific choices made by the individual student.

(2) This plan assumes the completion of all required developmental courses in Reading, English, and Mathematics as well as other [pre-requisites](#) and [co-requisites](#) for some of the courses, as listed in the Course Descriptions section.