Cybersecurity

Division of Mathematics, Engineering Technologies and Computer Sciences — Curriculum Code: 3322

Will Earn Upon Program Completion: Academic Certificate

The new technological age has placed demands on how to handle, secure, and maintain computer and network systems. The Cybersecurity academic certificate program deals with emerging information technologies to troubleshoot networking and security issues within operating systems such as Apple, Android, Windows, and more. This certificate program will offer a mixture of general education, professional courses, and technical experiences at local facilities. It prepares students to prevent, detect, and battle digital crime with classes that blend technology with critical thinking, forensics, and investigative techniques. Upon completion of the program, a student will have obtained the knowledge and techniques demanded by the information technology industry. Furthermore, this program prepares students for computer-related certificate exams such as CompTIA Security + and/or EC-Council Computer Hacking Forensic Investigator.

COURSES

Program Requirements

GENERAL EDUCATION REQUIREMENTS (6 CREDITS)

Written & Oral Communication (3 credits)

ENG 101 (3 credits)

Technological Competency (3 credits)

CSC 100 (3 credits)

MAJOR COURSE REQUIREMENTS (24 CREDITS)

CSC 113 Introduction to Linux/Unix Operating System or an approved technology course (one 4-credit course)

CSC 114 Computer Networks I (4 credits)

CSC 116 Introduction to Computer & Network Security (4 credits)

CSC 226 Network Defense & Counter Measures (4 credits)

CSC 230 Computer & Internet Forensics (4 credits)

CSC 250 Information Technology Capstone Project or an approved technology course (one 4-credit course)

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.

RECOMMENDED SEQUENCE OF COURSES

Total Credits Required for Academic Certificate: 30

First Semester
CSC 100 Fundamentals of Computer Science (3 credits)
CSC 113 Introduction to Linux/ Unix Operating System or an approved Technical Course (one 4-credit course)
CSC 114 Computer Networks I (4 credits)
CSC 116 Introduction to Computer & Network Security (4 credits)

Second Semester
ENG 101 College Composition I (3 credits)
CSC 226 Network Defense & Counter Measures (4 credits)
CSC 230 Computer & Internet Forensics (4 credits)
CSC 250 Information Technology Capstone Project or an approved technical course (one 4-credit course)

NOTES:

(1) 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.