Changes to Programs of Study

Cyber Security Technician Associate of Science Degree

The goals of this new degree are to fill a documented need in the area of cyber security, information security and information assurance of our service area employers. The degree is designed for students pursuing professional employment in information security for business. This degree program provides students with skills to enter the job market as information security specialists, information security technicians, information assurance technicians, networking security technicians, and cyber security technicians. Designed for both full and part-time students, this program is appropriate to both those currently employed and those seeking to enter this field. The courses are aligned with industry degree and students are prepared to take the A+ exam, Net+ exam, Security+ and Server+ exam.

Cyber Security Technician Associate of Science degree is designed for students pursuing professional employment in information security for business. This degree program provides students with skills to enter the job market as information assurance technicians, information security analysts, network security professionals and cyber security technicians. Designed for both full-time and part-time students, this program is appropriate to both those currently employed and those seeking to enter the field. This degree program is also transferable to California State University at San Bernardino.

Students exiting this program are prepared to enter the fields of information security, network security, information assurance or cyber security.

Program Learning Outcomes

Upon successful completion of the program, the student will be able to

- Configure, install, diagnose, and support hardware and software issues.

- Utilize identifying tools and methodologies that hackers use to break into a network computer and defend a computer and local area network against a variety of different types of security attacks using a number of hands-on techniques.

- Design, analyze, and support computer networks.

- Apply problem-solving, programming, and application development including the ability to design, test, debug, and implement complex computer programs.

- Operate servers, storage, and virtualization including implementing and evaluating network security solutions.

- Read and interpret technical information, as well as communicate with and write clearly for wide ranges of audiences.

Courses

Note: Some courses within the major may have a required prerequisite. If you feel you have equivalent knowledge and skills to those included in the prerequisite course through professional experience, licensure or certification, you have the opportunity to submit a Prerequisite Challenge to be reviewed by the faculty chair. For the Prerequisite Challenge to be considered, you must submit documentation/ verification to substantiate the basis for the challenge. Please consult a counselor for more information regarding Prerequisite Challenge.

Complete all the following courses:

CSCI C101	Introduction to Computer Information Systems	3 Units
CSCI C142	Information & Communication Technology Essentials	4
CSCI C143	Computer Network Fundamentals	3
CSCI C146	Security+ Fundamentals of Networks	3
CSCI C251	Introduction to Programming Concepts and Methodologies	3
CSCI C190	Introduction to Cyber Security: Ethical Hacking	3
CSCI C193	System and Network Administration	3
CSCI C195	Introduction to Systems Analysis and Design	3

Complete one of the following courses:

MATH C121	Elementary Probability and Statistics	4 Units
or MATH C121H	Elementary Probability and Statistics – Honors	5
MATH C130	Finite Mathematics	4
MATH C131	Basic Functions and Calculus for Business	4

Complete one of the following general education patterns:

OPTION A	Cerro Coso Local General Education Pattern
OPTION B	CSU General Education Breadth
OPTION C	IGETC - Intersegmental General Education Transfer Curriculum