

Applications Security - A.S. Degree

Description

The Application Security Associate of Science degree confers best practices and competencies in secure software deployment, design, management, and vulnerability mitigation. A software application delivers value through services accessible through remote connections as well as through systems directly on the local network making it a high value target for hacking attempts. Graduates of this program are able to manage and optimize software applications to ensure compliance with security controls; help prevent, detect, investigate and respond to application security threats and attacks; facilitate application security vulnerability assessments, perform penetration tests and risk assessments; investigate application security events and incidents, including forensic analysis. They are able to form and lead incident response teams and represent software application security interests in the creation of organization practices and policies.

Major Core Courses

Units: 21.0

CIS 054	IT Security Goals, Strategy, Policy, and Leadership
CIS 055	Hacker Techniques, Exploits, and Incident Handling
CIS 056	Secure Coding in Java and .NET
CIS 057	Web Application PEN Testing
CIS 059	Applications in Information Security
CIS 060	Computer Forensics Fundamentals
CIS 071	Introduction to Information Systems Security

Major Elective Courses List A

Units: 3.0-5.0

Select one course for a minimum of 3 units.

CIS 005	Introduction to Computer Science
CIS 006	Introduction to Computer Programming
CIS 007	Control Structures and Objects
CS 020	Python Application Programming

Major Elective Courses List B

Units: 3.0-4.0

Select one course for a minimum of 3 units.

CIS 051	Introduction to Information Technology Project Management
CIS 098	Database Programming with SQL
CIS 178	Build Automation for DevOps and QA
CIS 221	Cyber Safety, Online Identity, and Computer Literacy
CIS 247	Information Systems Skills Challenge
COPEd 469	Occupational Work Experience in Security Administration

Elective Courses to Meet 60 Units

Units: 14.0

Select degree-applicable courses for 11-14 units.

Local AA/AS General Education Courses

Units: 19.0

Select general education courses for a minimum of 19 units.

Total: 60.0-63.0