CYBER DEFENSE ASSOCIATE IN SCIENCE DEGREE

Division: Business and Computer Information Systems

PROGRAM CODE: 1S37246
Financial Aid Eligible

The **Cyber Defense Associate in Science Degree** provides concepts and hands-on skills to identify Cybersecurity threats and implement procedures to protect Cyber assets. It will also enhance students' chances to pursue a professional career in Cybersecurity by preparing them for industry-recognized certificates such as CompTIA ITF+, Network+, Security+, CySA+, Project+, Cisco CCNA and CyberOps, and AWS Certified Cloud Practitioner and Certified Solutions Architect – Associate. To earn an Associate Degree students must complete: (1) all major course requirements with a grade of C or better; (2) Cypress College Native General Education requirements; California State University General Education Breadth requirements (CSU GE Breadth) or IGETC General Education requirements; (3) the social justice, equity and sustainability and reading requirements; (4) any elective courses to complete a minimum of 60 units; and (5) have a minimum GPA of 2.0. At least 50 percent of all major course work must be completed at Cypress College. This degree requires a total of 26-28 units in the major, in addition to other graduation requirements.

Code	Title	Units
Complete the required and elective core courses and one area of emphasis (26 to 28 units)		
Required Core Courses (8 units):		
CIS 190 C	IT and Cybersecurity Funds	4
CIS 230 C	Cisco Networking 1	4
Elective core courses (9 units)		
CIS 195 C	Network Security	3
CIS 196 C	Ethical Hacking	3
CIS 247 C	Python Programming	3
Complete all courses in one emphasis area from the following areas:		9-11
Cisco Networking Emphasis (9 units):		
CIS 231 C & CIS 232 C	Cisco Networking 2 and Cisco Networking 3	6
Select ONE secondary Course for the Cisco Networking Emphasis (3 units):		
CIS 239 C	CCNA Bootcamp	3
or CIS 233 C	Cisco CyberOps	
or CIS 258 C	Cisco Security	
OR		
System Administration and Technical Support Emphasis (9 units):		
CIS 164 C & CIS 185 C	IT Support Services and Administering Windows Server	6
Select ONE secondary Course for the System Administration and Technical Support Emphasis (3 units):		
CIS 189 C	Admintg Wdws Active Dir Svs	3
or CIS 243 C	Linux Server Administration	
or CIS 110 C	Linux Operating System	
OR		
Visualization and Cloud Computing Emphasis (9 units):		
CIS 201 C & CIS 259 C	Microsoft Virtualization and Cloud Deployment and Advanced Cloud Implementation	6
Select ONE secondary Course for the Virtualization & Cloud Computing Emphasis (3 units):		
CIS 202 C	VMware Cloud and Virtual Netw	3
or CIS 274 C	IT Project Management	
OR		
Development, Security, and Operations (DevSecOps) Engineering emphasis (11 units)		
CIS 257 C	Cloud Implementation and Secur	4
Select ONE secondary Course for the Development, Security, and Operations (DevSecOps) Engineering Emphasis (3 units):		
CIS 226 C	Java Programming	3
or CIS 226 C	Java Programming	
or CIS 256 C	Appl. Security & Pntratn Test.	
or CIS 259 C	Advanced Cloud Implementation	
or CIS 274 C	IT Project Management	
or CIS 275 C	Data Structures in Python	
Total Units		**26-28**

Program Student Learning Outcomes:

OUTCOME 1: Acquire the skills, including identifying and analyzing security threats and vulnerabilities, manage local and wide area networks, implement cloud computing and virtualization solutions, and administer Windows and Linux operating systems, necessary for workforce preparation and to pursue a professional career in the field of Cybersecurity Analyst, Network Management, Cloud Architect, and System Administration and Support.

https://www.curricunet.com/Cypress/reports/program_report.cfm?programs_id=1636