DEVELOPMENT CRITERIA NARRATIVE & DOCUMENTATION

2. Catalog Description

The Application Security Associate of Science 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.

3. Program Requirements

Application Security Certificate of Achievement

Requirements	Dept. Name/#	Name	Major Units	GE Units	Sequence
	CIS 005 or	Introduction to Computer Science	5		
	CIS 006 or	Introduction to Programming	5		
	CIS 007 or	Control Structures and Objects	4		Semester 1
	CS 20 and	Python Application Programming	3		
	CIS 071	Introduction to Information Systems Security	3		
	CIS 055 and	Hacker Techniques, Exploits, and Incident Handling	3		

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	CIS 060	Computer Forensics Fundamentals	3		Semester 2
	CIS 059 and	Applications in Security	3		Semester 3
	CIS 056	Secure Coding in Java and .NET	3		
	CIS 057 and	Web Applications PEN Testing	3		Semester 4
	CIS 054	IT Security Goals, Strategy, Policy, and Leadership	3		
		Select from restricted electives	3-4		
	COPED 469	Occupational Work Experience in Information Security	3		Any Semester
	CIS 221	Cyber Safety, Online Identity and Computer Literacy	3		
	CIS 247	Information Systems Skills Challenge	1 - 4		
	CIS 051	Introduction to Information Technology Project Management	4		
	CIS 098	Database Programming with SQL	4		
	CIS 178	Build Automation for DevOps and QA	4		
Major Requirements			27-30		
Total Units			27-30		