

**DEVELOPMENT CRITERIA NARRATIVE & DOCUMENTATION**

**2. Catalog Description**

The Infrastructure Security Certificate of Achievement program provides best practices and competencies for students to design, install and implement services and applications; manage and optimize security infrastructure to ensure compliance with security controls; help prevent, detect, investigate and respond to operational security threats and attacks; facilitate security vulnerability assessments, penetration tests and risk assessments; investigate security events and incidents, including forensic analysis; represent security interests on project teams by ensuring security standards and requirements; conduct security research, analysis and review of infrastructure designs to ensure compliance with company security policies; evaluate new products and technologies to protect against existing and emerging security threats; and develop and implement information security policies and procedures

**3. Program Requirements**

Infrastructure Security Certificate of Achievement

Requirements	Dept. Name/#	Name	Major Units	GE Units	Sequence
	CIS 005 or	Introduction to Computer Science	5		Semester 1
	CIS 006 or	Introduction to Programming	5		
	CIS 007 or	Control Structures and Objects	4		
	CS 20 and	Python Application Programming	3		
	CIS 072	Systems and Network Administration	3		
	CIS 055 and	Hacker Techniques, Exploits, and Incident Handling	3		Semester 2
	CIS 060	Computer Forensics Fundamentals	3		

**DEVELOPMENT CRITERIA NARRATIVE & DOCUMENTATION**

	CIS 052 and	Cloud Security Fundamentals	3		Semester 3
	CIS 053	Intrusion Detection In-Depth: Compliance, Security, Forensics and Troubleshooting	3		
	CIS 058 and	Hacker Guard – Baseline Training for IT Administrators and Operators	3		Semester 4
	CIS 054	IT Security Goals, Strategy, Policy, and Leadership	3		
		Select from restricted electives listed	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		
<b>Total Units</b>			27-30		