

Cyber Security, AAS

School of Technology

Program Description

The Cyber Security AAS program provides a comprehensive foundation in the theory and application of both technical and non-technical security skills. The program covers a range of competencies required by the quickly evolving digital security industry. Some of these skills include applying protection, detection, and response technologies and procedures to identify threats, vulnerabilities, exploits, and controls in various digital environments. Emphasis is placed on identifying, analyzing, mitigating, and communicating risks to digital systems using various tools, techniques, and technologies.

Career Opportunities

Cybercrime is a multibillion-dollar industry that adversely impacts virtually everyone in some manner. Cyber security professionals are in high demand, both now and in future. The U.S. Bureau of Labor Statistics projects an 18 percent growth in employment opportunities for information security analysts through 2024—that is 11 percent higher than the average rate of growth for all occupations.

Graduates may find employment as analysts or consultants in private investigation firms, private security firms and supporting positions with local, state, and federal law enforcement agencies. Networking professionals may find employment as corporate security managers, Internet security consultants, security technicians, or other network positions with an emphasis on security.

Program Learning Outcomes

Upon successfully completing this program, students will be able to:

- Apply the principles and components of cyber security.
- Use computer forensics to investigate cyber-attacks.
- Implement ethical hacking to assess cyber security.
- Postures and vulnerabilities.
- Design and implement secure networks.
- Design, implement, and maintain a local area network.
- Analyze and solve computer hardware and software problems.
- Develop oral, written, and listening communication skills.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
1st Fall	1	PDV 101	First Year Seminar	1		
	2	CPT 145	Introduction to Computer Technology	3		
	3	CPT 150	Microcomputer Concepts	3		
	4	CIS 168	Principles of Information Security	3		
	5	MTH 157	College Algebra	3	MTH 100 or Placement	Page 42 Column IV
1st Spring	6	CIS 212	Digital Forensics Fundamentals	3		
	7	CPT 182	Operating Systems	3	CPT 145	
	8	CPT 183	Local Area Networks	3		
	9	ENG 161	College Writing	3	ENG 085 with Permission of Instructor, ENG 095 or Placement	
	10	SOC 155	Principles of Sociology	3	Varies	Page 42 Column III
	11	CPT 161	Introduction to Cloud Computing	3		
2nd Fall	12	CIS 255	Ethical Hacking and Software Defense	3	CIS 168	
	13	CPT 214	Wireless Communication	3	CPT 172 or CPT 183	
	14	CPT 248	PC Hardware	3		
	15	CPT 156	Programming with Python	3		
	16	CPT 262	Windows Client Server	3	CPT 182	
2nd Spring	17	CIS 209	Network Security Fundamentals	3		
	18	CIS 265	Penetration Testing	3		
	19	ENG 162	Technical Communication	3	ENG 161	ENG 163
	20	CPT 256	Linux Desktop	3		
	21	SPC 155	Effective Speech	3		SPC 156

Minimum Program Credits

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