

Master of Science in Cybersecurity

Course	Course Title	CYSCM1	CYSCM2	CYSCM3	CYSCM4	CYSCM5	CYSCM6	CYSCM7	CYSCM8	ILO1	ILO2	ILO3	ILO4	ILO5
ISEC 610	Information Assurance	X	X	X	X	X	X	X	X	X	X	X	X	X
ISEC 620	Software and App Security		X							X	X			X
ISEC 630	Information Risk Management			X						X	X			X
ISEC 640	Cryptography				X					X	X			X
ISEC 650	Advanced Network Security					X				X	X			X
ISEC 660	Cybercrime, Ethics, and Privacy						X			X	X	X	X	X
ISEC 670	Ethical Hacking							X		X	X		X	X
ISEC 680	Info Security Policy & Governance								X	X	X		X	X
ISEC 690	Security Research and Capstone	X	X	X	X	X	X	X	X	X	X	X	X	X

Institution Learning Outcomes

- ILO1 Communication: Communicate professionally using a variety of modalities (written, spoken, and technological).
- ILO2 Critical Thinking: Analyze and evaluate information to make reasoned arguments and solve problems.
- ILO3 Civic & Global Engagement: Integrate knowledge and skills to engage with and respond to social, environmental, and economic challenges at local, national, and global levels.
- ILO4 Ethics: Analyze and evaluate complex issues and situations to make informed ethical decisions.
- ILO5 Disciplinary Expertise

Program Learning Outcomes

- CYSCM1 Evaluate organizational security posture in light of the breadth of the information security body of knowledge.
- CYSCM2 Model threats in software development in order to recommend changes in software development processes and implementations.
- CYSCM3 Employ quantitative and qualitative means to analyze risk in information systems
- CYSCM4 Recommend cryptographic algorithms and implementations for preserving confidentiality and integrity in information systems.
- CYSCM5 Defend infrastructure against common threats and attacks.
- CYSCM6 Analyze and assess an organization's compliance with regulatory requirements and ethical reasoning.
- CYSCM7 Assess network security and recommend appropriate remediation at the protocol, device, operating system, and application level.
- CYSCM8 Develop organizational policies and procedures to govern overall IT security strategy.

