Program	Degree(s) Associate with PLO	PLO	SLO	Outcome Statement	Course/Program Associated with Outcome	Assessment Measure	Thresh. Not Met	Thresh. Partially Met	Thresh. Met	Thresh. Exceed	Outcome
Cybersecurity	AAS	PLO1		**Students will demonstrate knowledge of, and skills related to, cybersecurity.**			**0-59%**	**60-69%**	**70-79%**	**80-100%**	
			1.1	Outline best practices for the information security goals of confidentiality, integrity and availability; explain ethical practices; and define vocabulary/terminology related to information security.	**ITSY 1300 (I) *(KU)** AAS, Cert 2, Cert 1	Students will perform a security audit of a local small business scenario by identifying one specific measure for each pillar of the CIA Triad, such as using password managers for Confidentiality, enabling file versioning to maintain Integrity, and setting up an automated cloud backup to guarantee Availability. Students will present finding to class. (formative) 5 questions on the final exam will cover the CIA triad. 15 questions on final exam will cover vocabulary and terminology related to information security	3	2	1	16	At Expected Levels NM < 15%

	1.2	Students will apply National Institute of Standards and Technology (NIST) guidelines and other best practices; develop backup/recovery procedures to provide for data security; use desktop /device operating system features to implement security; identify computer and network threats and vulnerabilities and methods to prevent their effects; use tools to enhance network security; and use encryption techniques to protect network local and distributed systems data.	**ITSY 1342 (R) *** AAS, Cert 2, Cert 1	An essay question on the final exam where the student must outline a real-life solution using the NIST guidelines. 3 questions on final exam on data security. 3 questions on final exam on operating systems security 3 questions on final exam on security features	1	0	2	16	Above Expected Levels NM < 10%
	1.3	Students will develop a security plan; establish suitable level of protection; analyze legal issues associated with business sectors; implement network security design; and revise risk analysis and security plan.	ITSY 2341 (Assessed, SPM1, 2026) AAS, Cert 2, Cert 1	Capstone project where the student implements a security protocol system to neutralize a real-time threat. Student will have to create a security assessment plan for a small business in the area	0	0	1	8	Above Expected Levels NM < 10%

			1.4	Students will identify network security risks, security design, and monitoring solutions; identify sources of computer threats, evaluate potential practices, tools, and technologies to protect individual network systems; establish and sustain an	ITSY 2300 (R) AAS, Cert 2, Cert 1	Final project where students must identify a diverse network threat and security design vulnerability, then evaluate and select the appropriate tools to mitigate these risks.	1	0	1	4	Below Expected Levels NM > 15%
				operating system security plan utilizing systems and application security tools; and implement procedures to secure and monitor audit logs and set system administrator alerts.							
			1.5	Students will demonstrate system security skills through software and hardware firewall implementation and testing; use system tools, practices, and technologies to implement a security plan; evaluate practices, tools, and technologies to identify security breaches, sources of attacks, and protect mission critical systems; establish levels of security based on an analysis of security logs; and use relevant tools to identify network vulnerabilities, and	ITSY 2301 (R) (Assessed, SUM2, 2025) AAS, Cert 2, Cert 1	Final project where students implement stress-tests firewall configurations, utilize industry-standard tools to execute a comprehensive security plan, and analyze audit logs to establish data-driven security tiers.	0	2	6	9	Above Expected Levels NM < 10%

				respond/mitigate to various types of attacks.							
			1.6	Students will analyze framework and strategies associated with network attack and defense Students will assemble network defense tools; differentiate between authorized and unauthorized activity on a network; respond to a breach in security through the use of	ITSY 2345 (Assessed, FAM2, 2025 AAS, Cert 2, Cert 1	Final project where students simulate role as both attackers and defenders where they must use network knowledge to infiltrate or deflect a coordinated networking event, then present decisions to the class.	2	0	1	13	At Expected Levels NM < 15%

				countermeasures designed to minimize the impact of the breach on the network; document network events; and present an analysis of network breach and plan for remediation.		(formative) 5 questions on final exam cover network defense 3 questions cover security breaches 3 questions cover countermeasures					
			1.7	Students will appraise a security plan to ensure appropriate level of protection; assess network security design; audit network system based on security design; use relevant tools to assure security requirements; and review security policies and procedures on a regular basis.	ITSY 2359 (Assessed, FAM2, 2025) AAS, Cert 2,	Final capstone project where students create a comprehensive technical audit and peer review of a simulated enterprise network, using industrystandard tools to validate the security architecture, configurations, and formal policies meet established protection requirements.	0	0	1	17	Above Expected Levels NM < 10%

			1.8	Students will identify sources of attacks; restore the system to normal operation; identify and prevent security threats; perform a postmortem analysis; identify computer investigation issues; and identify the roles and responsibility of the incident response team.	ITSY 2342 (R) AAS, Cert 2	Students will complete a simulated incident response capstone where they must identify an active threat, execute recovery protocols to restore operations, and produce a formal postmortem report that analyzes investigation hurdles and team performance.	0	1	0	18	Above Expected Levels NM < 10%

Cybersecurity	AAS	PLO2		**Students will demonstrate knowledge of, and skills related to computer systems.**			**Not Met 0-59%**	**Partial 60-69%**	**Met 70-79%**	**Exceed 80-100%**	**Outcome**

	2.1	Students will demonstrate knowledge of using a Windows operating system. Including identifying hardware requirements; install or upgrade to a Windows operating system; troubleshoot post-installation configuration issues; setup, manage and configure Windows security, network connectivity, file systems, desktop environment, users accounts and privileges; use profiles to control desktop customization; identify and setup Internet services; and configure and troubleshoot mobile computing.	**ITMT 1358 (I) *** AAS, Cert 2, Cert 1	Class projects where students use a live Windows client environment to configure a list of system settings, executive a script in PowerShell, and perform a system restore from a specified point in time. (formative) 3 lab-based, hands-on questions on final exam where the student must perform the correct action. 3 questions on final exam on troubleshooting Windows 3 questions on final exam on configuring Windows 3 questions on final exam on user accounts and profiles 2 questions on final exam on mobile device troubleshooting	3	1	2	4	Below Expected Levels NM > 15%

	2.2	Students will demonstrate the knowledge of using a Linux operating system. Including install, administer, and manage a Linux system; demonstrate proficiency with Linux utilities, commands, and applications; identify and resolve securitybased issues; and integrate a Linux system into an existing network.	ITSC 1316 (Assessed SPM1, 2026) AAS, Cert 2, Cert 1	The project requires students to install, network and secure a Linux Ubuntu server (without the GUI) featuring DHCP and DNS (formative) 3 lab-based, hands-on questions on final exam where the student must perform the correct action in a Linux operating environment. 3 questions on final exam on Linux utilities 3 questions on final exam on Linux commands 3 questions on final exam on Linux security	1	1	1	7	Above Expected Levels NM < 10%

			2.3	Students will install and configure virtual machine managers; 'create and network virtual machines and set priorities for accessing resources; move and clone virtual machines; and ensure high availability for applications within virtual machines.	ITNW 1313 (Assessed, SPM1, 2026) AAS, Cert 2, Cert 1	Final project requires students to load and operate three systems on multiple hypervisors. 3 questions on final exam on access virtual resources 3 questions on final exam on access virtual application servers	6	1	1	16	Below Expected Levels NM > 15%

Cybersecurity	AAS	PLO3		**Students will demonstrate knowledge of, and skills related to networking technology.**			**Not Met 0-59%**	**Partial 60-69%**	**Met 70-79%**	**Exceed 80-100%**	**Outcome**

	3.1	Students will relate the characteristics of network topologies and protocols to the OSI model. Instruction in networking technologies and their implementation. Topics include the OSI reference model, network protocols, transmission media, and networking hardware and software.	**ITNW 1325 (I)*** AAS, Cert 2, Cert 1	Students will design and simulate a cross-network communication scenario where they must map the journey of a single data packet using Wireshark, NMAP, and Windows utilities—from an application request to physical transmission—by identifying the specific protocols and encapsulation processes occurring at each of the seven OSI layers. The student will print and present the TCP 3-way handshake. (formative) 4 multiple-choice questions on the final exam will cover the OSI model. One real-world essay question requires students to assess which layer of the OSI model is featured.	4	1	2	10	Below Expected Levels NM > 15%

				15 questions on networking terminology 2 questions on final cover transmission media 10 questions on final will be related to networking hardware 4 questions on final will be related to networking software					

	3.2	Students will identify and define terminology, hardware, and software components of computer networks; utilize equipment, protocols, and topologies to differentiate between various network systems; demonstrate skills in installing network hardware, software, and cable; troubleshoot network connectivity; configure network protocol; and install and configure network client software.	ITNW 1358 (Assessed, SPM1 2026) AAS, Cert 2, Cert 1	Students will configure a small office network by implementing a tiered subnetting scheme, establishing VLANs for department isolation, and using Wireshark to troubleshoot and document the ICMP, ping, and DNS resolution processes. (formative) Two questions on the final exam distinguishing between LANs and WANs. One lab-based, hands-on question requiring students to install server OS and setup DNS	1	0	1	8	Above Expected Levels NM < 10%

				2 questions on final cover installation of OS 3 questions on final cover configuration 6 questions on final cover troubleshooting					

				2 questions on final cover connectivity					
	3.3	Students will analyze framework and strategies associated with network attack and defense Students will assemble network defense tools; differentiate between authorized and unauthorized activity on a network; respond to a breach in security through the use of countermeasures designed to minimize the impact of the breach on the network; document network events; and present an analysis of network breach and plan for remediation.	ITSY 2345 (Assessed, FAM2, 2025 AAS, Cert 2, Cert 1	Final project in simulated role as both attackers and defenders where students must use network knowledge to infiltrate or deter a coordinated networking event (formative) 5 questions on final exam cover network defense 3 questions cover security breaches 3 questions cover countermeasures Students will present a plan analyzing a network breach and suggest a plan	2	0	1	13	At Expected Level NM < 15%

Cybersecurity	AAS	PLO4		**Students will demonstrate knowledge of, and skills related to computer programming.**			**Not Met 0-59%**	**Partial 60-69%**	**Met 70-79%**	**Exceed 80-100%**	**Outcome**
			4.1	Students will design, write, test, and document computer programs. Students will create code in Python.	**ITSE 1302 *** (Assessed FAM1, 2025) AAS, Cert 2, Cert 1	Students will have unit programming exercises in Python that count for twenty percent of their grade Students will perform five coding exercises on the final exam, each worth five points.	5	0	2	13	Below Expected Levels NM > 15%

			4.2	Student will 1) Evaluate the performance of machine learning models and fine-tune them for better accuracy. 2) Implement machine learning algorithms using popular programming languages and tools. 3) Understand the fundamental concepts and principles of machine learning. 4) Explain the differences between supervised and unsupervised learning techniques.	ITAI 1371 (R) AAS	In final exam, the students will be tasked with choosing the appropriate machine-learning model based on given criteria. The students must create an algorithm to perform a task (formative) 3 questions on the final exam cover fundamental concepts of machine learning 2 questions on the final exam cover learning techniques					

			4.3	Students will design programming solutions using scripting languages; design, write, and test scripts; and implement secure scripting techniques.	ITSE 1359 (R) AAS	4 questions on the final exam will involve students creating code scripts in JavaScript 5 questions on the final exam will involve students creating scripts in Python 5 questions will involve scripting in Windows PowerShell 7 questions will cover scripting in Linux Bash Shell					

I, Michael Smith, have reviewed this plan.