ITSY - CIS

ITSY 1042 Computer and Information Systems Security/Information Assurance 6.4-12.8 Credit Hours (64 to 128 Lec)

ITSY 1300 Fundamentals of Information Security 3 Credit Hours (2 Lec, 4 Lab)
An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed.(For Homeland Security majors)
Course Type: Technical/Vocational Course

ITSY 1342 Information Technology Security 3 Credit Hours (2 Lec, 4 Lab)
Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices.
Course Type: Technical/Vocational Course

ITSY 1400 Fundamentals of Information Security 4 Credit Hours (3 Lec, 2 Lab)
An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. (Fall only)
Course Type: Technical/Vocational Course

ITSY 1442 Information Technology Security 4 Credit Hours (3 Lec, 2 Lab)
Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices.
Course Type: Technical/Vocational Course

ITSY 2001 Computer and Information Systems Security/Information Assurance 6.4-12.8 Credit Hours (64 to 128 Lec)

ITSY 2042 Computer and Information Systems Security/Information Assurance 6.4-12.8 Credit Hours (64 to 128 Lec)

ITSY 2301 Firewalls and Network Security 3 Credit Hours (2 Lec, 4 Lab)
Identify elements of firewall design, types of security threats and responses to security attacks. Use Best Practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.
Course Type: Technical/Vocational Course

ITSY 2317 Wireless Security Development 3 Credit Hours (2 Lec, 4 Lab)
Development of information security policies, standards, and guidelines for an organization. Includes Demilitarized Zone (DMZ), antivirus, Virtual Private Network (VPN), wireless communications, remote access, and other critical administrative and operational security policies. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. Emphasizes wireless security goals of availability, integrity, and confidentiality in the design, planning, implementing, operating, and troubleshooting of wireless LAN along with administrative controls.
Course Type: Technical/Vocational Course

ITSY 2330 Intrusion Detection 3 Credit Hours (2 Lec, 3 Lab)
Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team.
Course Type: Technical/Vocational Course

ITSY 2341 Security Management Practices 3 Credit Hours (2 Lec, 4 Lab)
In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.
Course Type: Technical/Vocational Course

ITSY 2343 Computer System Forensics Computer System Forencis 3 Credit Hours (2 Lec, 4 Lab)
In-depth study of system forensics including methodologies used for analysis of computer security breaches. Collect document and evaluate evidence to perform postmortem analysis of a security breach.
Prerequisite: ITNW 1325 with a grade of C or higher, ITNW 1413 with a grade of C or higher, ITSC 1316 with a grade of C or higher, ITSC 1342 with a grade of C or higher, and ITSE 1346 with a grade of C or higher

ITSY 2359 Security Assessment and Auditing 3 Credit Hours (3 Lec, 1 Lab)
Comprehensive experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems that ensure appropriate levels of protection are in place to assure regulatory compliance. (Fall only) Prerequisite: Taken in final semester before graduating or consent of instructor and credit or concurrent enrollment in ENGL 1301
Course Type: Technical/Vocational Course

ITSY 2400 Operating System Security 4 Credit Hours (4 Lec, 1 Lab)
Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards.
Course Type: Technical/Vocational Course

ITSY 2401 Firewalls and Network Security 4 Credit Hours (3 Lec, 2 Lab)
ntify elements of firewall design, types of security threats, and responses to security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities.
Course Type: Technical/Vocational Course

ITSY 2430 Intrusion Detection 4 Credit Hours (4 Lec, 1 Lab)
Computer information systems security monitoring, intrusion detection, and crisis management. Includes alarm management, signature configuration, sensor configuration, and troubleshooting components. Emphasizes identifying, resolving, and documenting network crises and activating the response team. Prerequisite: ITCC 2420 and ITSY 2442
Course Type: Technical/Vocational Course

ITSY 2441 Security Management Practices 4 Credit Hours (3 Lec, 2 Lab)
In-depth coverage of security management practices, including asset evaluation and risk management; cyber law and ethics issues; policies and procedures; business recovery and business continuity planning; network security design; and developing and maintaining a security plan.
Course Type: Technical/Vocational Course

ITSY 2442 Incident Response & Handling 4 Credit Hours (3 Lec, 2 Lab)
In-depth coverage of incident response and incident handling, including identifying sources of attacks and security breaches; analyzing security logs; recovering the system to normal; performing postmortem analysis; and implementing and modifying security measures. (Spring only)
Prerequisite: ITCC 1444, ITSC 1447 and ITNW 2405
Course Type: Technical/Vocational Course

ITSY 2443 Computer System Forensics 4 Credit Hours (4 Lec, 1 Lab)
In-depth study of system forensics including methodologies used for analysis of computer security breaches. Collect document and evaluate evidence to perform postmortem analysis of a security breach. (Fall only)
Prerequisite: ITCC 2420 and ITSY 2442
Course Type: Technical/Vocational Course

ITSY 2445 Network Defense Countermeasure 4 Credit Hours (3 Lec, 2 Lab)
This is a practical application and comprehensive course that includes the planning, design, and construction of defenses for a complex network that will sustain an attack, document events, and mitigate the effects of the attack.
Course Type: Technical/Vocational Course

ITSY 2459 Security Assessment Auditing 4 Credit Hours (3 Lec, 2 Lab)
Comprehensive experience for the security curriculum. Synthesizes technical material covered in prior courses to monitor, audit, analyze, and revise computer and network security systems that ensure appropriate levels of protection are in place to assure regulatory compliance.
Course Type: Technical/Vocational Course