

INFORMATION SECURITY (ITSY)

ITSY 1400

Fundamentals of Information Security

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course is an introduction to information security including ethics, the legal environment and risk management. It covers basic information security goals of availability, integrity, accuracy, and confidentiality. Vocabulary and terminology specific to the field of information security are discussed. Identification of exposures and vulnerabilities and countermeasures are addressed. The importance of appropriate planning policies and controls is also discussed.

Prerequisite: None.

ITSY 1442

Information Technology Security

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course describes the instruction in security for network 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.

Prerequisite: ITCC 1414.

ITSY 2400

Operating System Security

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course covers 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.

Prerequisites: None.

ITSY 2401

Firewalls and Network Security Design

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course identifies elements of secure network design that may include segmentation, Firewall implementation or a combination thereof to mitigate various types of security threats and attacks. Use Best Practices to design, implement, monitor and manage a network security plan. Examine security incident postmortem reporting and ongoing network security activities.

Prerequisite: ITSY 2459.

ITSY 2441

Security Management Practices

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course provides 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.

Prerequisite: ITSY 1400 and ITCC 1414.

ITSY 2442

Incident Response and Handling

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course covers 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.

Prerequisites: ITSY 1400 and ITNW 1416.

ITSY 2443

Computer System Forensics

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course provides an in-depth study of system forensics including methodologies used for analysis of computer security breaches. Students will learn to collect document and evaluate evidence to perform postmortem analysis of a security breach.

Prerequisite: ITSY 1400 and ITNW 1416.

ITSY 2445

Network Defense and Countermeasures

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course 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.

Prerequisites: ITNW 1416.

ITSY 2459

Security Assessment and Auditing

CRT HRS:4 LEC HRS:3 LAB HRS:3 OTH HRS:0

This course is a 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 industry specific levels of protection are in place to assure regulatory compliance.

Prerequisites: ITNW 1453, ITSY 2445, and ITSY 2442.