

SECURITY CONCEPTS (SEC)

SEC-110 Security Concepts 3 (Credits)

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

Class: 2 Lab: 2 Clinical: 0 Work: 0

SEC-150 Secure Communications 3 (Credits)

This course provides an overview of current technologies used to provide secure transport of information across networks. Topics include data integrity through encryption, Virtual Private Networks, SSL, SSH, and IPsec. Upon completion, students should be able to implement secure data transmission technologies.

Class: 2 Lab: 2 Clinical: 0 Work: 0

SEC-151 Introduction to Protocol Analysis 3 (Credits)

This course introduces protocol analysis. Topics include protocol analysis tools, TCP/IP concepts, Internet protocols, network traffic analysis, monitoring network traffic, network security protocol analysis, and understanding data flow through protocol analysis. Upon completion, students should be able to perform simple protocol analysis to determine baseline network performance and identify anomalies.

Class: 2 Lab: 3 Clinical: 0 Work: 0

SEC-160 Security Administration I 3 (Credits)

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

Class: 2 Lab: 2 Clinical: 0 Work: 0

SEC-210 Intrusion Detection 3 (Credits)

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host-based systems.

Class: 2 Lab: 2 Clinical: 0 Work: 0