IDEA Objectives: E = 1  
I = 3, 4

WILMINGTON UNIVERSITY  
COLLEGE OF TECHNOLOGY  
MASTERS OF SCIENCE - INFORMATION SYSTEMS TECHNOLOGIES  
BASIC COURSE INFORMATION

COURSE TITLE: Web and Data Security  
COURSE NUMBER: SEC 6040

I. RATIONALE:  
Web and Data Security is designed to educate students in the technologies, terms, and processes related to Internet security. The primary emphasis is on intrusion detection, the course also covers such essential practices as developing and implementing security policy. The text provides the student with a solid foundation in network security policies and procedures, but assumes familiarity with the Internet and basic networking concepts. The course includes many hands-on activities along with realistic case studies.

II. MAJOR INSTRUCTIONAL GOALS:

During this course, students should improve their understanding of:

GOAL A: Understand the value of an Information Security Policy

Learning Outcomes: The student will be able to:
A-1 Describe the cultural significance of policies
A-2 Recognize the role policy plays in government
A-3 Evaluate the role policy plays in corporate culture
A-4 Identify how federal regulations apply to corporations and other organizations
A-5 Describe the need for and development of information security policies, and identify guidelines and models for writing policies
A-6 Create and develop a security policy with the appropriate standards, guidelines, and procedures

GOAL B: The student will gain an understanding of Information Security Policy Domains

Learning Outcome: The students will be able to:
B-1 Create and assess policies associated with the management of security-related activities
B-2 Define the concept of physical security and how it relates to information security
B-3 Advocate for formal backup and restore procedures
B-4 Build code that protects the security of the sensitive data on which it relies
B-5 Identify security issues related to personnel decisions, and qualifications of security personnel

GOAL C: Understand the functionality of network security components, and software.

Learning Outcomes: The student will be able to:
C-1 Identify, examine, evaluate, and chose a set of components and software that best meet technical requirements to secure the network
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C-2 Estimate initial and recurring costs for network security support, components, and operations
C-3 Differentiate between the requirements of a global and/or enterprise-wide IT security system and a functional IT security system
C-4 Describe an information security blueprint, identify its major components, and explain how it is used to support a network security program

GOAL D: Understand the role of IT in reaching security objectives

Learning Outcomes: The student will be able to:
D-1 Describe threats to information security
D-2 Describe the significance of alignment of external partners, business units, and customers with the IT organization
D-3 Differentiate between effective business strategies based on a company’s vision, strategy, and mission statements
D-4 Identify types of attacks and problems that occur when systems are not properly protected
D-5 Explain integral parts of overall good information security practices

Note: A cooperative and participative learning strategy will be deployed with every expectation that the student will contribute heavily, in a self-directed action-learning mode, to this educational experience. Students should anticipate that assignments, and this syllabus, will be adjusted to match the pace of the course, the class size, and to meet the needs of individual students.

9/08/09