A. Course Description

Credits: 4

Prerequisites: ICS 141 Programming with Objects AND MATH 215 Discrete Mathematics OR CFS 280 Introduction to Computer Forensics

Lab Hours/ Weeks: Corequisites: None

Lecture Hours/ Week :

MnTC Goals: None

This course introduces principles of computer security with integrated hands-on labs. The course prepares students to effectively protect information assets by providing fundamental details about security threats, vulnerabilities, and their countermeasures ranging from a simple computer to enterprise computing. Topics include broad range of today’s security challenges, common security threats and countermeasures, security management, access control mechanisms, applied cryptography, privacy issues, computer ethics, file system security, and network security.

B. Course Effective Dates: 08/17/2004 - 12/16/2009 12/17/2009 - 08/14/2017 08/15/2017 - Present

C. Outline of Major Content Areas:

See Course Description for major content areas.

D. Learning Outcomes (General)

1. Comprehend emerging issues related to adequate security management of information and computing resources.
2. Explain computer and information security issues using technical vocabulary.
3. Recognize information and computing asset security threats and vulnerabilities.
4. Communicate about basic aspects of the productive use of computer security processes.
5. Familiar with example technologies employed to provide security controls over information and computing resources in processing and communications.
6. Skillful in using products on the market being used to provide asset protection of these resources.
7. Understand the basic concepts of computer security management, its basic technological characteristics, and technical implementations.

E. Learning Outcomes (MN Transfer Curriculum)

This contains no goal areas.

G. Special Information

Note: Students are responsible to both be aware of and abide by prerequisites for ICS courses for which they enroll, and will be administratively dropped from a course if they have not met prerequisites.