Course Information
Division: Business
Contact Hours: 45
Total Credits: 3

Prerequisites
CIS 130 Introduction to Computer Information Systems
IAS 103 Information Security Principles

Course Description
This course covers tools, techniques, and methodologies in performing computer system and network security vulnerability risk analyses. Security Best Practices and audit requirements for specific environments will be studied. Topics to be covered include internal and external penetration tests, wireless security technology, risk analysis methodology, and security audits. The purpose of this course is to provide undergraduate level students with an educational experience in the application of risk management theory and principles to information security policy, information systems computer and network facilities, and the life cycle development process.

This course is a required core course for students pursuing an:
AAS in Cybersecurity and Information Assurance

Course Outcomes
In order to evidence success in this course, the students will be able to:

1. Define Information Assurance;
2. Define and Demonstrate Risk Management and Risk Analysis;
3. Demonstrate vulnerability assessment techniques;
4. Demonstrate threat analysis techniques;
5. Apply threat matrix analysis;
6. Plan vulnerability assessment, threat assessment and risk analysis projects;
7. Apply risk management principles throughout the software and systems development life cycles to include continuity;
8. Demonstrate Incident Handling, Continuity, and Disaster Recovery techniques;
9. Define Network Security assessment and Accreditation techniques;

Program Outcomes Addressed by this Course:

Upon successful completion of this course, students should be able to meet the program outcomes listed below:
Cybersecurity and Information Assurance

1. Define Information Assurance;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

2. Define and Demonstrate Risk Management and Risk Analysis;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

3. Demonstrate threat analysis techniques;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

4. Demonstrate threat analysis techniques;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

5. Apply threat matrix analysis;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

6. Plan vulnerability assessment, threat assessment and risk analysis projects;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.

7. Apply risk management principles throughout the software and systems development life cycles to include continuity;
   **Applies to Program Outcome**
   Identify and explain risk and potential security issues.
   Demonstrate foundation knowledge of information security/assurance within the organization.
8. Demonstrate Incident Handling, Continuity, and Disaster Recovery techniques;
   Applies to Program Outcome
   Identify and explain risk and potential security issues.

   Demonstrate foundation knowledge of information security/assurance within the organization.

9. Define Network Security assessment and Accreditation techniques;
   Applies to Program Outcome
   Identify and explain risk and potential security issues.

   Demonstrate foundation knowledge of information security/assurance within the organization.

Date Updated:
By: