Information Systems Security students will learn to identify risks, threats and vulnerabilities to a computer system and acquire the skills to isolate these threats and fortify or harden computer systems, software, networks and the physical sites.

INFORMATION SYSTEMS SECURITY CERTIFICATE PROGRAM

Program Description
The Information Systems Security certificate program provides students with the core skills required to take a lead role in information security within their organization. Students will be able to identify risks, threats and vulnerabilities to a computer system. They will acquire the skills to isolate these threats and fortify or harden computer systems, software, networks and the physical sites. Students will also develop working knowledge of the various laws governing the computer security area and how compliance can be effected.

The certificate is designed with a two fold approach; to accept students who already have a degree and want to upgrade their skills or to accept entry level students who are brand new to the knowledge set and do not have a degree. These students will be able to intern at a company and apply the skills and abilities, before venturing into an employment setting.

Program Competencies
1. Achieve entry-level working knowledge of popular microcomputer application packages.

Related Course Objectives
a. Application packages for steganography
b. Firewall packages
c. Anti-virus packages
   • Assess hacker challenges, malicious break-ins and insider threats.
   • Analyze the security issues that are specific to database systems.
   • Identify and secure web exposures.
   • Observe TCP/IP packet streams to understand zone based security.

CURRICULUM

First Semester
DA 107 Introduction to Information Systems Security (4 cr)
DA 150 Programming Visual Basic (4 cr)
DA 202 Legal, Ethical Regulatory Framework of Security (3 cr)
DA 215 Windows 2000 Server (4 cr)

Second Semester
DA 200 Computer and Network Security (DA 107 pre-requisite) (4 cr)
DA 201 Operations and Database Security (DA 107 pre-requisite) (4 cr)
DA 203 ISS internship (optional) (2 cr)
DA 215 Windows 2000 Server (4 cr)
DA Elective TBD (4 cr)

Degree: Certificate
Hegis: 5199
Curriculum Code: 1931.ISS
Location: North (expand to City and South)
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Erie Community College deprecates such conduct as an abuse of authority. Allegations leading to conviction can result in suspension or termination of employment. Related inquiries should be addressed to: Title IX, ADA and Section 504 Compliance Coordinator, Darley Willis, Director of Equity and Diversity, 851-1119.