THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Information Security

CSE 4471

Credit Hours:
3.00

Course Levels:
Undergraduate (1000-5000 level)

Course Components:
Lecture

Course Description:
Introduction to security of digital information; threats and attacks; regulations; risk management; attack detection and response; cryptography; forensics; technical training and certifications.

Prerequisites and Co-requisites:
Prereq: 2231 and 2321; and enrollment in CSE, CIS, ECE, or Data Analytics major, or Information Security or CIS minor.

Course Goals / Objectives:
- Be competent with information security governance, and related legal and regulatory issues
- Be competent with understanding external and internal information security threats to an organization
- Be competent with information security awareness and a clear understanding of its importance
- Be competent with how threats to an organization are discovered, analyzed, and dealt with
- Be familiar with a high-level understanding of how information security functions in an organization
- Be familiar with the structure of policies, standards and guidelines

Course Topics:
- Information security, roles within an organization
- Legal, regulatory issues
- Threats, vulnerabilities, exploits
- Governance, policy, standards, guidelines
- Risk management
- Firewalls, Intrusion Detection, Incident Response, Forensics, Honeypots, VPN, Vulnerability Scanning
- Cryptography
- Access Control
- Physical Security, Personnel, Training, Education, Awareness, Certification

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Designation:
Elective