

CSC432: Information Security

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include: Historical view of Networking and Security, Basic Notions of Confidentiality, Integrity, Availability; Authentication Models; Cryptography: Symmetric Crypto-systems, Asymmetric Crypto-systems, Hash Functions. Protection Models; Security Kernels; Secure Programming; Audit; Security Resources, Security Protocols; Intrusion Detection and Response; Operational Security Issues; Physical Security Issues; Personnel Security; Security Policies; Policy Formation and Enforcement; Access Controls; Information Flow; Legal and Social Issues; Identification and Authentication in Local and Distributed Systems; Classification and Trust Modeling; Risk Assessment.