TCN-5080 Secure Telecommunications Transactions

Catalog Description
Telecom and information security issues such as: digital signatures, cryptography as applied to telecom transactions, network policing, nested authentication, and improving system trust. (3 credits)

Prerequisites
TCN-5030 or permission of the instructor.

Type
Required for MSTN

Course Objectives
This course provides an in-depth understanding of the threats, principles, and mechanisms in network security. Students will study cryptographic algorithms and their applications in security protocols in different layers of the Internet protocol stack. Students will also learn to determine appropriate security mechanisms for specific network applications.

Topics
Symmetric Key Encryption
Public Key Encryption
Hash Functions
Message Authentication Code
Digital Signatures
Authentication Protocols
IP Security
Email Security
Web Security
Firewalls

Textbook


Last Update
Deng Pan 8/30/2012