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Course Details

- Duration - 12 weeks
- Lectures
 - 3 hrs a week
 - Monday, Tuesday, Thursday @ 10-11
- Assessment
 - Coursework 20%
 - * Networking
 - * Security/Cryptography
 - Summer Exam 80%

Course Outline

- Transport Layer
 - Multiplexing and demultiplexing
 - Connectionless Transport: UDP
 - Connection-orientated Transport: TCP
 - TCP Congestion Control
- Application Layer
 - Network Application Architectures
 - WWW and HTTP
 - Simple Mail Transfer Protocol (SMTP)
 - Domain Name Server (DNS)
 - P2P Applications
 - Web Applications
- Network Security
 - Symmetric & Asymmetric-key cryptography
 - Digital signatures, X.509 Certs & PKI
 - Authentication Protocols

- HTTPS - SSL/TLS
 - IPsec
 - DNSSEC
- Electronic Payment Systems
 - Ecash
 - Bitcoin
 - Micropayments
- Mobile Communications
 - Medium Access Control
 - 2G, 3G & Beyond
 - 802.11 Wireless LANs