TCN-6420 Modeling and Performance Evaluation of Telecommunication Networks

Catalog Description
This course covers methods and research issues in the models and performance evaluation of high-speed and cellular networks. Focuses on the tools from Markov queues, queuing networks theory and applications. (3 credits)

Prerequisites
TCN 5030 (Computer Communications and Networking Technologies) or equivalent.

Type
Elective for MSIT, MSTN and MSCS

Course Objectives
Students will learn techniques for reasoning and analyzing the performance of computer communication and network systems, including mathematical models (e.g., probability and statistics, queuing theory) and simulation.

Topics
- Introduction to performance evaluation
- Measurement techniques and tools
- Probability and statistics
- Simulation
- Queuing models
- Experimental design and analysis
- Other topics of practical/subject matters

Textbook
Discrete Event System Simulation, by Jerry Banks, John Carson, II, Barry Nelson, and David Nicol. Prentice Hall, June 2009. ISBN: 9780136062127.

Last Update
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