

Course: ISTM 282
George Washington University
School of Business
Department of Information Systems and Technology Management

Telecommunications and Enterprise Networks

Course Summary

This course covers telecommunications and networking as applied to enterprises in the commercial and public sector. It provides a survey of the technologies and applications of telecommunications systems with emphasis on LANs and Internet technologies. Emphasis is placed upon selection of technologies and configurations necessary to support business applications. Prerequisite: M.S.I.S.T. candidacy or department approval.

- **Hands-on Assignments/Activities** - The OPNET Tutorials, Hands-on Cable Fabrication, TCP/IP Command Exercise, Visio network design drawing, Pat Lee's OPNET Model, P2P Network Setup assignments have been established for this purpose.
- **Team Project** - The Team Project provides students an opportunity to collaborate with teammates to design, cost, and test network communication solutions using the OPNET Modeler 14.5 Modeling and Simulation tool.

Team Project Using OPNET Modeler

The Team Project requires students to design and assess two optional data network and telecommunication system solutions to the First Bank of Paradise case study presented in the text. Each design option must be fully described using the Visio network design software, assessed for performance using the OPNET modeling and simulation software (OPNET Modeler 14.5), and assessed against costs from a comprehensive bill-of-materials (BOM).

Design solutions must address all functional requirements presented in the text. Performance measures must be estimated using OPNET simulation results. The GWU GECA Lab OPNET software is required for this assignment as it is the latest and best maintained SW available for this assignment.