

TCN-6430 Networks Management and Control Standards

Catalog Description

Protocols for management of telecom networks, including Simple Network Management Protocol and Common Management Information Protocol. Extension of protocols to optimize network performance. (3 credits)

Prerequisites

TCN-5030 or equivalent.

Type

Required for MSTN

System Administration Track Course for MSIT

Course Objectives

This course provides students with a comprehensive view of the network management problem, including its concepts, challenges, dimensions, models and techniques. It covers the network management technologies (e.g., SNMP) widely used today, and also introduces students to the emerging technologies (e.g., OpenFlow) and research in the field.

Topics

Review of important network elements

Scope and challenges of network management

ISO Telecommunications Management Network model and framework for network management (FCAPS)

Simple Network Management Protocol (SNMP)

Software Defined Networking, OpenFlow

Textbook

Required:

None

Recommended:

Douglas Comer, *Automated Network Management Systems*, (Prentice Hall, 2006)

Alexander Clemm, *Network Management Fundamentals*, (Cisco Press, 2006)

Last Update

Xin Sun 9/05/2012