

**CIT 211. NETWORK INFRASTRUCTURE. (MCP #3).**

**Credit Hours:** 3

**Scheduled hours per week**

Lecture: 2

Lab: 2

Other: 0

**Catalog Course Description:** This is a course designed to prepare the student for the Microsoft MCITP certification. Topics covered include DNA, DHCP, Remote access, network protocols, WINS, IP routing, NAT, and troubleshooting.

**Pre-requisites:** Grade of “C” or better in CIT 114

**Co-requisites:** N/A

**Course Learning Outcomes:**

- Install, configure, manage, maintain, and trouble shoot a Window server operating system and associated network infrastructure services.
- Prepare for a MS Server operating system certification

**Topics to be studied:**

- Deploying a Windows server operating system
- Windows Server Update Service
- Advanced File Service Configuration
- Server Monitoring and Auditing
- Remote Access Configuration
- Network Policy Configuration
- Domain Controller and Active Directory Management
- User and Service Account Configuration
- Group Policy Settings and Preferences
- Managing Group Policy
- Managing and Configuring DNS

**Relationship of Course to Program or Discipline Learning Outcomes:**

	Identify and describe layers of the OSI and TCP/IP models, and use them effectively in troubleshooting
	Describe and apply LAN and WAN technologies in wired and wireless environments
X	Demonstrate ability to apply workstation and server installation, configuration, management and troubleshooting techniques
	Demonstrate ability to install, configure, manage, and maintain routing and switching technologies
X	Describe and discuss different operating systems and their relationship with hardware, their functions, advantages and disadvantages, and their respective tools and software packages
X	Explain Information Systems and choose appropriate systems based on requirements
X	Describe basic information security and computer ethics

For general education courses, a listing of the general education competencies that are met.)

<b>Relationship of Course to General Education Learning Outcomes:</b>	
<b>Composition and Rhetoric</b> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	
<b>Science &amp; Technology</b> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	X
<b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	X
<b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	
<b>Human Inquiry &amp; the Past</b> Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills.	
<b>The Arts &amp; Creativity</b> Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
<b>5/3/2016</b>	

**Special requirements of the course:**

N/A

**Additional information:**

This course is designed to prepare the student for a career in the computer industry. Along with the above stated course objectives this course will prepare the student to take a Microsoft server operating system certification exam.

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**Date:** 10/20/2017