

# Course Outline

**MSFT-240**

**Designing a Microsoft Windows 2000 Network Infrastructure**

3 Semester Hours

## HOWARD COMMUNITY COLLEGE

### Description

This course will give students the skills required to analyze the business requirements for a network infrastructure and design a network infrastructure that meets business requirements. Network infrastructure elements include: Network topology, routing, IP addressing, name resolution such as WINS and DNS, virtual private networks (VPNs), remote access, and telephony solutions. Prerequisite: MSFT-215 or MSFT-156 (3 hours lecture, 1 hour lab)

### Overall Course Objectives

Upon completion of this course the student will be able to:

1. Modify and design a network topology.
2. Design a TCP/IP networking strategy.
3. Design a DHCP strategy.
4. Design name resolution services.
5. Design a multi-protocol strategy.
6. Design a Distributed file system (Dfs) strategy.
7. Design an Internet and extranet access solution.
8. Design a load-balancing strategy.
9. Design an implementation strategy for dial-up remote access.
10. Design a virtual private network (VPN) strategy.
11. Design a Routing and Remote Access routing solution to connect locations.
12. Design a strategy for monitoring and managing Windows 2000 network services.
13. Design network services that support application architecture.
14. Design a plan for the interaction of Windows 2000 network services such as WINS, DHCP, and DNS.
15. Design a resource strategy.

## **Major Topics**

- I. Analyzing Business Requirements
- II. Analyzing Technical Requirements
- III. Designing a Windows 2000 Network Infrastructure
- IV. Designing for Internet Connectivity
- V. Designing a Wide Area Network Infrastructure
- VI. Designing a Management and Implementation Strategy for Windows 2000 Networking

## **About Certification Curriculum at HCC**

When a student takes a certification course at HCC, that student usually receives more instruction time than they would receive in other formats. Therefore, while taking certification courses at HCC, the student may expect not only instruction from certification materials but additional academic and practical exercises and course work to better equip the student not only for the corresponding certification exam but for eventual utilization in their professional endeavors.

## **Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include the following: two quizzes or exams and one lab activity.

## **Other Course Information**

This course is a Network Administration core course. This course is also intended for students who wish to become a Microsoft Certified Systems Engineer 2000.

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