

**Course Outline**  
**MSFT-283**  
**Designing Security for a Microsoft Windows Server 2003 Network**  
3 semester hours

**HOWARD COMMUNITY COLLEGE**

**Description**

This course provides students with the knowledge and skills to design a secure network infrastructure. Topics include assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. The course encourages decision-making skills through an interactive tool that simulates real-life scenarios that the target audience may encounter. Students are given the task of collecting the information and sorting through the details to resolve the given security requirement. Prerequisite: MSFT-215 or MSFT-279 (3 hours lecture, 1 hour lab)

**Overall Course Objectives**

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

1. Plan a framework for network security.
2. Identify threats to network security.
3. Analyze security risks.
4. Design security for physical resources.
5. Design security for computers.
6. Design security for accounts.
7. Design security for authentication.
8. Design security for data and data transmission.
9. Design security for network perimeters.
10. Design an incident response procedure.
11. Design an acceptable use policy.
12. Design policies for managing networks.
13. Design an operations framework for managing security

**Major Topics**

- I. Introduction to Designing Security
- II. Creation of a Plan for Network Security
- III. Identification of Threats to Network Security
- IV. Analyzing Security Risks
- V. Creation of a Security Design for Physical Resources, Computers and Accounts.
- VI. Creation of a Security Design for Authentication
- VII. Creation of a Security Design for Data and Data Transmission
- VIII. Creation of a Security Design for Network Perimeters
- IX. Designing Responses to Security Incidents
- X. Designing an Acceptable Use Policy
- XI. Designing Policies for Managing Networks
- XII. Designing an Operations Framework to Manage Security

### **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 on Windows Server 2003. It will provide the needed foundation to pass Microsoft Certification Exam 70-298.