

# Common Course Outline

## Network Security

### DCOM 210

4 Semester Hours

## The Community College of Baltimore County

### **Description**

The purpose of the course is to enable the student to design and implement a secure network infrastructure. Upon completion of the course, students will be able to evaluate an organization's existing security system, to identify weaknesses, and to design and implement the hardware, software, and procedures necessary to reduce or eliminate an organization vulnerability to security threats. Using a hands-on approach, students will install and securely configure network hardware and software.

### **Overall Course Objectives**

- Configure authentication security
- Create a secure administrative structure
- Implement group security
- Create group policies
- Set up NTFS and file security
- Secure network services
- Configure a secure DNS server
- Implement a public key infrastructure
- Install digital signing
- Configure file encryption

### **Major Topics**

- Configure TCP/IP security (IPSec)
- Set up a virtual private network (VPN)
- Design internet security
- Configure web server security
- Create a secure extranet
- Install and configure a firewall
- Configure filters
- Develop procedures to maintain a secure network

### **Course Requirements**

Evaluation: There will be two exams (a mid-term and a final) and two quizzes. Each exam accounts for one-third of the student's final grade; each quiz accounts for one-sixth of the final grade.

### **Other Course Information**

This course will be a requirement in the Network Technology MCSE Certificate Option and is a DCOM Program Elective.