



Computer Science and Forensics I Program Competencies

Desktop Operating Systems

- Install Microsoft Windows Operating Systems
- Upgrade an Operating System
- Install an Open-Source Operating System
- Manage the User Experience
- Perform Remote Installations
- Perform CD-Based Installations
- Upgrade an Existing Operating System
- Maintain the Operating System
- Install Hardware Devices and Drivers
- Answer End-User Related Questions
- Install Local and Network Printer Devices
- Configure File and Folder Security
- Manage Disk Quotas

Network Operating Systems

- Install and Configure a Windows Server Operating System
- Perform Updates
- Install and Configure Windows Active Directory
- Add Users and Groups
- Configure a Group Policy Object
- Manage Internet Information Services
- Host a Web Site
- Install and Configure DNS
- Perform Standard Computer Back-up Procedures

Networking and Connectivity

- Demonstrate Knowledge of Basic Network Classifications and Topologies
- Demonstrate Knowledge of Protocol Concepts
- Demonstrate Knowledge of the TCP/IP Protocol Suite
- Troubleshoot Connectivity Issues

Microsoft Office

- Create Word Processing Documents
- Create Spreadsheets
- Create Business Presentations



Computer Science and Forensics II Program Competencies

Secure Network Management

- Audit File and Folder Access
- Implement Secure Network Management Activities and Procedures
- Implement Computer and Network Security Systems
- Evaluate Security Concerns Specific to Wireless Networks and Devices
- Identify Current Regulatory Issues
- Install and Update Virus Detection and Protection Software
- Demonstrate Basic Knowledge of Cryptography Concepts

Computer Forensics

- Set Up a Workstation for Computer Forensics
- Demonstrate Basic Knowledge of Evidence Collection
- Demonstrate Basic Knowledge of Using Computer Forensics Tools
- Demonstrate Basic Knowledge of Conducting a Forensics Investigation
- Use of a Linux Live Boot CD for Evidence Collection
- Use of Data Acquisition Tools
- Demonstrate Hashing Techniques
- Demonstrate Basic Knowledge of Conducting an Email Investigation
- File System Structures (NTFS and FAT)
- Use of Hexadecimal and Binary Notation

Applied Programming Languages

- Demonstrate Knowledge of Logical Operations and Control Structures
- Use Integrated Development Environment to Build a Program
- Code Programs
- Debug Programs
- Use of Variables
- Use of Input and Output Statements

Databases

- Create Tables
- Create Queries
- Create Forms
- Create Reports