## **UNIX Operating System Fundamentals**

## **Introduction to UNIX**

- Discuss the history of UNIX and its continuing significance as a technology
- Understand the importance of standards in achieving software portability and describe standards relevant to UNIX
- Compare the current UNIX variants
- Describe the various uses of UNIX and how UNIX systems are implemented
- Describe the various UNIX user interfaces
- Log into and out of a UNIX shell and use a command-line interface
- Describe the role of the operating system in providing a productive environment for computer users

## **UNIX System Architecture**

- Describe the layered architecture of the UNIX operating system
- Describe the kernal process and explain how data is accessed, displayed, and stored
- List the key system calls made available by a POSIX compliant kernal
- Describe the different types of files used in UNIX systems, and describe the filesystems used by UNIX systems
- Provide an overview of the Filesystem Hierarchy Standard (FHS)
- Locate files within filesystems based on their functions and permissions
- Describe the function of a UNIX shell and provide an overview of the shell environments available on UNIX systems
- Use standard input and output, and pipe commands