# Computer Basics

Introduction to Computers	48
Exploring the Internet	48
Core Hardware	48
Introduction to PC Hardware	48
PC Repair and Troubleshooting	48

# **Introduction to Computers**

If you are unfamiliar with personal computer (PC) computing technology, this program offers you a broadly based introduction to the essentials. You learn the basic components of modern PC equipment through hands-on, informative, and practical exercises. The Windows operating system is used throughout this workshop.

## **Learning Objectives**

- General concepts of PC computing
- Explore the Windows interface
- Identify and explain the function of system components
- Explore typical application software
- Identify and explain the function of various input and output devices
- Understand the advantages of a network of PCs
- Understand how application software, the operating system, and hardware interact

#### **Who Should Attend**

 Individuals interested in gaining a fundamental understanding of PCs

# Introduction to PC Hardware

This course is for beginners or those who need a refresher course in current PC technology. You learn how computers work from the inside out. This is a perfect start for gaining knowledge of PC hardware, operating systems, and the relationship between them. The course combines lectures with hands-on lab time

#### **Learning Objectives**

- Purchasing a PC or build your own
- Troubleshooting and maintenance fundamentals
- How a CPU works and communicates with other devices

#### **Who Should Attend**

 Those interested in current PC technology or other individuals who want a basic introduction to computers

# **Exploring the Internet**

As the Internet continues to evolve into a mainstream medium for e-mail, financial services, education, and commerce, the number of Internet users is rapidly increasing. This workshop provides you with hands-on experience connecting to the Internet, using Internet services, setting up newsreaders, transferring files with FTP, and configuring the browser.

## **Learning Objectives**

- Basic concepts and history of the Internet
- Explore the World Wide Web
- Explore e-mail and types of newsreader applications
- Use search engines to locate information
- Use multiple search engines to search more efficiently
- Understand how Telnet works and use it to log in to remote hosts
- Understand IP addressing, the basics of TCP, and the domain name system

#### **Who Should Attend**

 Individuals who wish to learn fundamentals of the Internet and how to use its various tools

# PC Repair and Troubleshooting

This course teaches you the basic techniques for diagnosing, repairing, and upgrading PCs at the board level. In this hands-on lab, you customize a PC system with peripheral equipment and upgrade computers with CD ROMs, sound cards, network interface cards, and memory.

#### **Learning Objectives**

- How to install peripheral I/O devices
- How to use ports and extension slots for add on devices
- Know the different kinds of physical memory and how they work
- Know how to ugrade and troubleshoot memory
- Know how to install and troubleshoot hard drives

#### **Who Should Attend**

 Individuals interested in a PC repair career or those considering building their own system

## **Core Hardware**

This course defines basic terms and explores concepts involved in PC installation, hardware configuration, and upgrades. You gain an understanding of the proper procedures used when installing and configuring various devices and peripherals. Common problems and symptoms associated with PCs are explored, as well as valuable preventative maintenance and troubleshooting concepts and techniques. You gain hands-on experience with motherboards, processors, and various types of memory. You also learn basic printer and networking concepts.

# **Learning Objectives**

- Introduction to microcomputers
- Safety
- System components
- Bus architectures
- Ports, connectors, and cables
- Expansion boards
- Storage systems
- Peripheral devices
- Portable computing
- Networking

#### **Who Should Attend**

 Those who are interested in learning hands-on computer diagnostic repair and maintenance