

Bridge to Careers in Information Technology: Computer Fundamentals

Course Overview

The information technology industry is continually seeking high-skilled workers. The Workforce Access *Bridge to Careers in Information Technology: Computer Fundamentals* online course is aimed at helping learners develop an understanding of the industry-specific foundational competencies needed for careers in information technology, and to build the academic and workplace skills needed for success in postsecondary or career training. Students are introduced to different jobs in the four sectors of the information technology industry:

- Network Systems
- Information Support Services
- Web and Digital Communications
- Programming and Software Development

Learning Outcomes

While taking this course, students will learn to:

- Discuss the history and impact of Information Technology
- Identify the basic types of computer operating systems, including mobile and desktop systems
- Identify the components of a database management system and understand data integration
- Describe different types of network configurations
- Identify common internal threats and discuss the precautions you can take to properly secure a network
- Explain how help desks identify and determine the cause of technological problems
- Describe the basic concept of data security and identify the dangers of security failure
- Discuss the importance of preventing data loss and describe different security services and tools
- Discuss organizations that set standards in IT and describe their main areas of focus
- Identify federal regulations relevant to technology and understand what each law protects
- Describe digital piracy and discuss the roles of intellectual property law and fair use in digital piracy
- Develop reading for information, locating information, and applied mathematics skills contextualized to the information technology industry

Modes of Course Delivery

The *Bridge to Careers in Information Technology: Computer Fundamentals* course can be used as a core curriculum or as a supplement to enhance regular instruction. Because of this flexibility, the course can be delivered in a self-paced or a customized mode. Custom mode allows instructors to assign lessons and assessments and set the pace for the course.

Pacing and Course Duration

Sample 10-week and 12-week pacing guides are provided in the Teacher Planning Guide. The pacing guides can be used as is or adapted to account for shorter or longer terms to suit individual needs. Each of the lessons requires approximately 40-50 minutes of study. Additional academic skill support lessons, discussion prompts, and writing activities can be used to enhance students' learning.

Assessments and Reporting

Assessments for the course include interactive formative assessments within each lesson, as well as scored pretests and posttests for each lesson. Teachers and students can generate reports to show progress and mastery of industry and academic knowledge of skills.

How to Access *Bridge to Careers in Information Technology: Computer Fundamentals*

When you order *Bridge to Careers in Information Technology: Computer Fundamentals*, you will access everything you need in the ConnectED Learning Management System, including the core lessons, academic skill support lessons, teacher planning guide, lesson plans, and other useful resources. For more information on this or other *Workforce Access* courses, please go to www.workforceaccess.com.

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