Information Technology Applications prepares students to work in the field of Information Technology. Students will be able to demonstrate digital literacy through basic study of computer hardware, operating systems, networking, the Internet, web publishing, spreadsheets and database software. Through a series of hand-on activities, students will learn what to expect in the field of Information Technology and begin exploring career options in the field.

Information Technology Applications is an introductory level Career and Technical Education course applicable to programs of study in information technology as well as other career clusters. This course is built to state and national standards. Students who successfully complete the course will be prepared to pursue the Microsoft® Office Specialist certifications in Microsoft Word, Microsoft Excel and Microsoft Access, as well as IC3 certification.

Length: One semester

UNIT 1: INFORMATION TECHNOLOGY

LESSON 1: EXPLORING INFORMATION TECHNOLOGY

Study: You and the World of Information Technology
Examine information technology and its impact on business and society.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: What Can Information Technology Do for You?
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Study: Emerging Technologies
Explore how emerging technologies impact business and society.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Emerging Technologies
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Comparing Emerging Technologies
Compare and contrast various emerging technologies, including their impact on society and how they are evaluated.
Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 2: INFORMATION TECHNOLOGY CAREERS

Study: IT Career Opportunities
Identify information technology career clusters and occupations.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: IT Career Opportunities
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Study: IT Career Requirements
Examine job requirements for a variety of information technology careers.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: IT Career Requirements
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Exploring IT Careers

Research a variety of information technology careers.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 3: YOUR IT CAREER

Study: Creating a Plan

Identify the purpose of a personal growth plan in the information technology industry.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Creating a Plan

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Career Portfolio

Explain how to create a career portfolio.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Career Portfolio

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: IT Career Self-Assessment

Explore personal skills and aptitudes while completing an IT career self-assessment.

Duration: 0 hrs 40 mins Scoring: 0 points

LESSON 4: INFORMATION TECHNOLOGY WRAP-UP

Project: Creating a Career Portfolio

Create an electronic career portfolio.

Duration: 2 hrs 30 mins Scoring: 100 points

Review: Understanding Information Technology

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Understanding Information Technology

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 40 mins Scoring: 60 points

UNIT 2: COMPUTER HARDWARE AND SOFTWARE

LESSON 1: COMPUTER HARDWARE

Study: The Microcomputer

Explore the modern computer and its hardware components.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Microcomputer

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Computer Peripherals

Explain the use of computer peripherals.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Computer Peripherals

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Using Computer Peripherals

Use computer peripherals to complete tasks.

Duration: 0 hrs 40 mins Scoring: 0 points

LESSON 2: COMPUTER SOFTWARE

Study: Operating Systems
Explore the purpose and history of computer operating systems.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Operating Systems
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Study: What Is Application Software?
Identify computer software components.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: What Is Application Software?
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Operating Systems and Application Software
Identify operating system and application software components.
Duration: 0 hrs 40 mins Scoring: 40 points

Study: Appropriate Use of Application Software
Identify the appropriate uses of various software applications.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Appropriate Use of Application Software
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Comparing Application Software
Compare various application software.
Duration: 0 hrs 40 mins Scoring: 0 points

Study: File Management
Explore file management.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: File Management
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

LESSON 3: TROUBLESHOOTING COMPUTER PROBLEMS

Study: Maintaining and Troubleshooting Computer Hardware
Describe ways to maintain and troubleshoot computer hardware.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Maintaining and Troubleshooting Computer Hardware
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Study: Maintaining and Troubleshooting Computer Software
Describe ways to maintain and troubleshoot computer software.
Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Maintaining and Troubleshooting Computer Software
Take a quiz to assess your understanding of the material.
Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Computer Maintenance and Troubleshooting

Apply troubleshooting strategies to computer hardware problems.

Duration: 0 hrs 40 mins Scoring: 0 points

LESSON 4: UNDERSTANDING COMPUTER HARDWARE AND SOFTWARE WRAP-UP

Project: Analyzing Application Software

Use application software in response to a business-related scenario.

Duration: 2 hrs 30 mins Scoring: 100 points

Review: Understanding Computer Hardware and Software

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Understanding Computer Hardware and Software

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 40 mins Scoring: 60 points

UNIT 3: SPREADSHEETS AND DATABASES

LESSON 1: SPREADSHEETS

Study: Spreadsheet Basics

Describe the components and features of spreadsheets.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Spreadsheet Basics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Using Spreadsheets

Use a spreadsheet to perform mathematical processes.

Duration: 0 hrs 40 mins Scoring: 0 points

Study: Using Spreadsheets in Business

Explain the processes for using spreadsheet software in a business setting.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Using Spreadsheets in Business

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Solving Business Problems with Spreadsheets

Use a spreadsheet to perform business-related tasks.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 2: DATABASES

Study: Database Basics

Describe the components and features of database software.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Database Basics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Using Databases to Solve Business Problems

Explain the processes for using database software in a business setting.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Using Databases to Solve Business Problems

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Using Databases
Use a database to find and organize information.

Duration: 0 hrs 40 mins Scoring: 0 points

LESSON 3: SPREADSHEETS AND DATABASES WRAP-UP

Project: Creating a Spreadsheet and Database
Use a spreadsheet and database to complete a business process.

Duration: 2 hrs 30 mins Scoring: 100 points

Review: Using Spreadsheets and Databases
Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Using Spreadsheets and Databases
Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 40 mins Scoring: 60 points

UNIT 4: INFORMATION SYSTEMS AND NETWORKING

LESSON 1: INFORMATION SYSTEMS

Study: Information Systems and Business Planning
Identify the purpose of information systems in business planning.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Information Systems and Business Planning
Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Information Systems and Business Operations
Identify the purpose of information systems in business strategies and operations.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Information Systems and Business Operations
Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Using Information Systems
Use information systems for business planning, strategies, and operations.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 2: NETWORKING

Study: Network Basics
Explore the purpose and components of networks in the business environment.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Network Basics
Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Analyzing Networks
Identify features and components of networks.

Duration: 0 hrs 40 mins Scoring: 0 points

Study: Network Troubleshooting
Identify network troubleshooting strategies.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Network Troubleshooting

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Troubleshooting

Apply network troubleshooting strategies.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 3: INFORMATION SYSTEMS AND NETWORKING WRAP-UP

Project: Analyzing Information Systems and Networks

Analyze the use of information systems and networks in a business scenario.

Duration: 2 hrs 30 mins Scoring: 100 points

Review: Understanding Information Systems and Networking

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Understanding Information Systems and Networking

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 40 mins Scoring: 60 points

UNIT 5: EXPLORING THE WEB

LESSON 1: USING THE INTERNET

Study: The Internet

Explore the history of the Internet.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: The Internet

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Navigating the Internet

Use the Internet to complete tasks.

Duration: 0 hrs 40 mins Scoring: 0 points

Study: Internet Search Strategies

Identify effective Internet search strategies.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Internet Search Strategies

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Using Internet Search Strategies

Apply effective Internet search strategies.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 2: INTERNET SECURITY, LAWS, AND ETHICS

Study: Internet Security and Law

Explore Internet security, legal, and ethical issues.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Internet Security and Law

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Ethical Internet Use

Identify issues of copyright and intellectual property as they relate to ethical Internet use.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Ethical Internet Use

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Practice: Exploring Internet Law and Ethics

Analyze legal and ethical issues of using the Internet.

Duration: 0 hrs 40 mins Scoring: 40 points

LESSON 3: WEB PAGE DESIGN

Study: Web Page Basics

Identify the components of a web page.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Web Page Basics

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Study: Understanding HTML

Explain how to use HTML to create web pages.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Understanding HTML

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

Checkup: Using HTML

Use HTML to create a web page.

Duration: 0 hrs 40 mins Scoring: 0 points

Study: Enhancing Web Pages

Explore ways to enhance web page design.

Duration: 0 hrs 40 mins Scoring: 0 points

Quiz: Enhancing Web Pages

Take a quiz to assess your understanding of the material.

Duration: 0 hrs 20 mins Scoring: 30 points

LESSON 4: EXPLORING THE WEB WRAP-UP

Project: Creating a Website

Create web pages to produce an effective website.

Duration: 2 hrs 30 mins Scoring: 100 points

Review: Exploring the Web

Prepare for the unit test by reviewing key concepts and skills.

Duration: 0 hrs 30 mins Scoring: 0 points

Test (CS): Exploring the Web

Take a computer-scored test to assess what you have learned in this unit.

Duration: 0 hrs 40 mins Scoring: 60 points

UNIT 6: WRAP-UP

LESSON 1: WRAP-UP

Review: Semester Review

Prepare for the end-of-course exam by reviewing key concepts and skills.

Duration: 0 hrs 45 mins Scoring: 0 points

Exam: Semester Exam

Take a computer-scored exam to assess what you have learned in previous units.