



## Certification Exam: ICT Fundamentals Essentials Certificate Test

The ICT Fundamentals course focuses on introductory Digital Tool literacy. Students will review computing functions, systems, devices, and networking types. They will learn how the Internet functions, how Web browsers and search engines function. Effective communication skills using email and other technologies, and the appropriate use of various applications used in cloud computing or physical location implementation. Using various word processing and spreadsheet applications features and functions. Internet safety practices and risks, ethical and legal issues related to Internet content, and how to apply copyright and fair use guidelines. Describe security issues and how to secure various devices.

## Candidate Profile

The ICT Fundamentals certification and courseware serve a wide range of learners seeking practical, industry-relevant skills, including:

### Elementary Students

- Grades 3 & 4
- Builds safe technology habits, kindness in digital communication, and awareness of personal information and privacy.
- Use classroom tablets, computers, or educational apps.
- Curious about how the Internet and digital tools work.

### Middle School Students

- Grades 5- 8<sup>th</sup> +
- Benefit from learning safe technology habits, respectful online behavior, and basic digital responsibility.
- Enjoys using computers or tablets for learning and games.
- Build awareness, responsibility, and safe practices to foster independence while using digital devices and platforms.

## Career Profile

This course aligns with the Department of Labor Standard Occupational Classification for the following:

### SOC: 21-1012 Educational, Guidance, and Career Counselors and Advisors

Educational, Guidance, and Career Counselors and Advisors help students and individuals make informed decisions about their education, career pathways, and personal development. They provide guidance that supports academic success, career planning, and personal growth, helping individuals identify their strengths, interests, and goals.

### SOC 43-0000 Office and Administrative Support Occupations

Office and Administrative Support Occupations include professionals who perform clerical, organizational, and administrative tasks that help businesses and organizations operate efficiently. These workers manage information, coordinate office activities, maintain records, and support communication within organizations.

### SOC: 15-1212 Information Security Analysts

Plan, implement, upgrade, or monitor security measures to protect computer networks and information. Assess system vulnerabilities for security risks and propose and implement risk mitigation strategies. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.

## Topics

### **Lesson 1: Computing Fundamentals**

What Is a Computer?  
How Are Computers Used?  
Types of Computers  
Computer Systems  
Input Devices  
Output Devices  
What Is a Network?

### **Lesson 2: Communication Fundamentals**

What Is the Internet?  
Application software  
How Data Travels  
Connecting to the Internet  
What Is the World Wide Web?  
Introduction to Email  
Sending and Receiving Email Messages  
Social Networking and My Privacy  
Email Etiquette

### **Lesson 3: Application Fundamentals**

What Is a Word Processor?  
Storing Your Documents on the Cloud  
Getting Started with Word Processing  
Formatting Documents in a Word Processor  
Spreadsheet Basics  
Creating and Managing Spreadsheet Data  
Using Common Spreadsheet Formulas  
Data Storage Devices

### **Lesson 4: CyberSecurity Fundamentals**

Managing Online Risks  
Copyright and Fair Use  
Securing Your Computer