



Information Technology

General Assessment Information

Blueprint Contents

General Assessment Information
Written Assessment Information

Specific Competencies Covered in the Test
Sample Written Items

Test Type: This assessment measures general knowledge of the Information Technology industry, and the common processes, terminology, and careers in the industry. The assessment is customized to correspond to the content of the Ready for Industry® curriculum from eDynamic Learning. This assessment offers a written (multiple-choice) assessment and can be used at the secondary level, post-secondary level, workforce development centers and businesses. This assessment is delivered online.

Revision Team: The assessment content is based on input from secondary, post-secondary, and business/industry representatives from the state of Tennessee, California, Georgia.



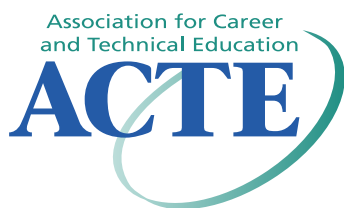
11.0101) Computer and Information
Sciences, General.



Career Cluster -
Information Technology



15-1299.00 - Computer Occupations, All
Other



The Association for Career and Technical Education (ACTE), the leading professional organization for career and technical educators, commends all students who participate in career and technical education programs and choose to validate their educational attainment through rigorous technical assessments. In taking this assessment you demonstrate to your school, your parents and guardians, your future employers and yourself that you understand the concepts and knowledge needed to succeed in the workplace. Good Luck!

Written Assessment

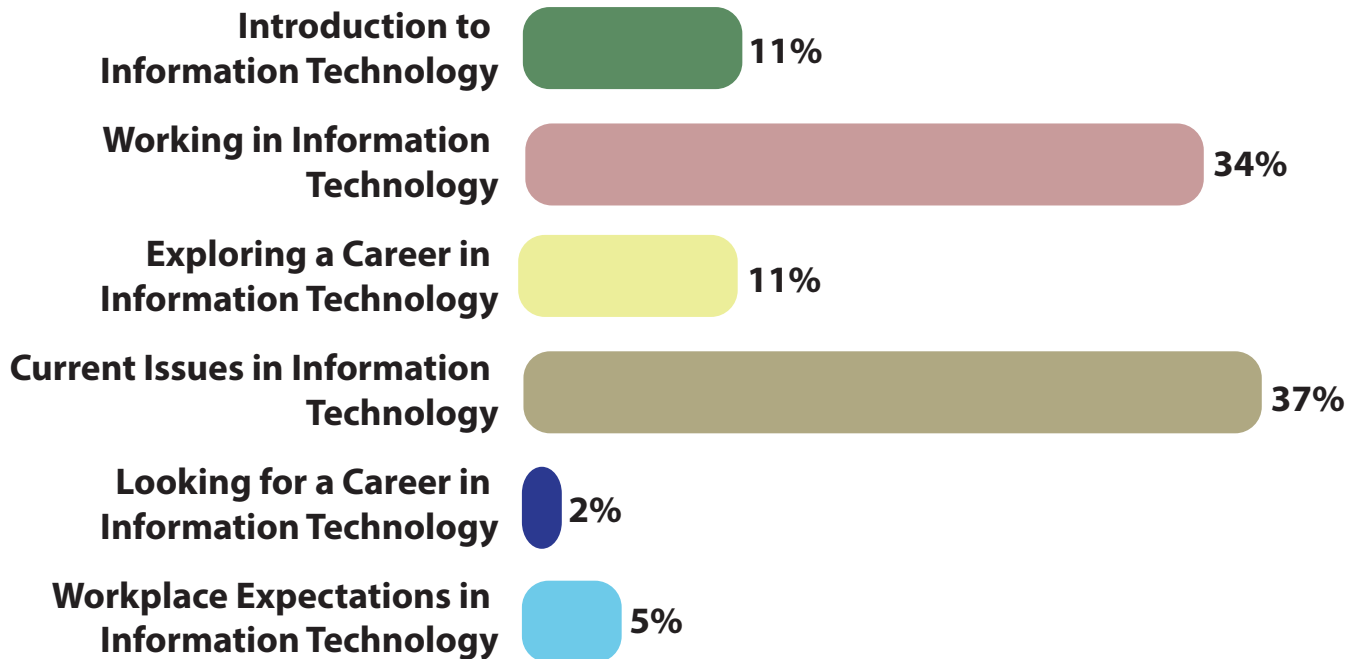
This written assessment consists of questions to measure an individual's factual theoretical knowledge.

Administration Time: 1 hour

Number of Questions: 56

Number of Sessions: This assessment may be administered in three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Introduction to Information Technology

- Define information technology and explain its importance
- Discuss personal computing in IT
- Describe networking, clouds, and the internet
- Identify industrial computing applications

Working in Information Technology

- Describe data backup and recovery
- Identify SaaS and PaaS vs. internal platforms
- Describe user security profiles and identity theft protection
- Discuss information security policies
- Describe cyberattacks, response plans, and security management
- Describe major steps in web development
- Explain basic coding concepts
- Describe software development

Exploring a Career in Information Technology

- Describe the role of software developers
- Identify characteristics of a web developer's job
- Describe data management and cybersecurity jobs
- Discuss the key aspects of a cybersecurity job
- Describe jobs pertaining to hardware design and maintenance
- Discuss customer service and support jobs

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Specific Standards and Competencies (continued)

Current Issues in Information Technology

- Discuss data security, data privacy, and biometrics
- Describe cloud computing and software architecture
- Discuss big data and analytics
- Describe the Internet of Things (IoT)
- Discuss smart automation technology
- Describe Globalization and E-commerce
- Describe virtual and augmented reality
- Discuss blockchain technology
- Discuss 3D printing
- Identify Machine Learning (ML) and Artificial Intelligence (AI) concepts

Looking for a Career in Information Technology

- Discuss resume writing and preparing for an IT interview

Workplace Expectations in Information Technology

- Describe teamwork and employer expectations
- Discuss time management and self-management in IT

Sample Questions

What kind of network can be used to secure data when it travels over the internet?

- A. MAN
- B. VPN
- C. PAN
- D. SAN

Which is the final phase of a security incident response plan?

- A. post-incident recovery
- B. preparation
- C. containment and eradication
- D. detection and analysis

Which data management role includes the responsibility of ensuring that data is accurate, complete, consistent, and has integrity?

- A. Business Intelligence (BI) engineer
- B. data architect
- C. data quality engineer
- D. project manager

Which method of fraud analytics only looks at part of a dataset out of a large population for fraud?

- A. sampling
- B. ad-hoc
- C. repetitive analysis
- D. analytics techniques

Why shouldn't IT projects be completed at the last minute?

- A. Many people are relying on each other to get the work done.
- B. There are no actual due dates on IT assignments.
- C. IT projects have very flexible timelines and can be adjusted easily.
- D. IT professionals can pass work on to others.

