

uCertify

Course Outline

CIW Foundations



23 Apr 2026

1. Pre-Assessment
2. Exercises, Quizzes, Flashcards & Glossary
Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons
Syllabus
Chapter 1: Introduction to IT Business and Careers
Chapter 2: Internet Communication
Chapter 3: Introduction to Internet Technology
Chapter 4: Web Browsing
Chapter 5: Multimedia on the Web
Chapter 6: Databases and Web Search Engines
Chapter 7: Business Email and Personal Information Management
Chapter 8: Protecting Yourself Online
Chapter 9: Internet Services and Tools for Business
Chapter 10: IT Project and Program Management
Chapter 11: Markup Language and Site Development Essentials
Chapter 12: HTML5 Coding
Chapter 13: Cascading Style Sheets (CSS3) and Graphical Elements
Chapter 14: Hyperlinks
Chapter 15: HTML Tables
Chapter 16: Web Forms
Chapter 17: Video, Audio and Image Techniques
Chapter 18: Extending HTML
Chapter 19: GUI HTML Editors and Mobile Websites

Chapter 20: Website Development for Business

Chapter 21: Introduction to Networking

Chapter 22: Networking Components and Standards

Chapter 23: Connecting to the Internet

Chapter 24: Internet Services

Chapter 25: Hardware and Device Connectivity

Chapter 26: Network and Cloud Security Risks

Videos and How To

8. Practice Test

Here's what you get

Features

9. Live labs

Lab Tasks

Here's what you get

10. Post-Assessment

1. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

2. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

115
EXERCISES

3. Quiz

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

386
QUIZ

4. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

485
FLASHCARDS

5. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



6. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

7. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

8. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

9. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
 1. Best Postsecondary Learning Solution

- **2015**
 1. Best Education Solution
 2. Best Virtual Learning Solution
 3. Best Student Assessment Solution
 4. Best Postsecondary Learning Solution
 5. Best Career and Workforce Readiness Solution
 6. Best Instructional Solution in Other Curriculum Areas
 7. Best Corporate Learning/Workforce Development Solution

- **2016**
 1. Best Virtual Learning Solution
 2. Best Education Cloud-based Solution
 3. Best College and Career Readiness Solution
 4. Best Corporate / Workforce Learning Solution
 5. Best Postsecondary Learning Content Solution

6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

10. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction to IT Business and Careers

- Information Technology (IT)
- IT Job Roles
- IT Industry Career Opportunities
- Technical Concepts and Training
- Technology Adoption Models
- Business Modeling
- Data Modeling
- The Importance of Standards
- Optional Lab
- Lesson Summary

Chapter 2: Internet Communication

- Communicating via the Internet
- Modern Web Technologies
- Social Networking

- Messaging
- Blogging
- Communicating Effectively over the Internet
- Convergence and Unified Communications Technologies
- Optional Lab
- Lesson Summary

Chapter 3: Introduction to Internet Technology

- Internet Technology
- Overview of Networks
- Overview of the Internet
- Connecting to the Internet
- Internet Protocols
- Domain Name System (DNS)
- Cloud Computing
- Optional Labs
- Lesson Summary

Chapter 4: Web Browsing

- Introduction to Web Browsing
- Basic Functions of Web Browsers
- Installing a Web Browser
- Web Addresses
- How Browsers Work
- Browser Choices
- Browsing Techniques
- Browser Elements
- Configuring Web Browser Preferences
- Proxy Servers
- Troubleshooting Internet Client Problems
- Optional Lab
- Lesson Summary

Chapter 5: Multimedia on the Web

- Introduction to Multimedia on the Web
- Objects, Active Content, and Languages
- Objects and Security Issues

- HTML5 vs. Plug-ins
- Introduction to Plug-in Technology
- Legacy Plug-ins
- Firefox Add-Ons
- Types of Viewers
- Data Compression and Decompression
- Miscellaneous File Formats
- Downloading Files with a Browser
- Optional Lab
- Lesson Summary

Chapter 6: Databases and Web Search Engines

- Introduction to Data Searching Tools
- Overview of Databases
- Introduction to Web Search Engines
- Registering a Website with a Search Engine
- Types of Web Searches
- Basic Web Searching Techniques

- Boolean Operators
- Advanced Web Searching Techniques
- Using Web Searches to Perform Job Tasks
- Unexpected Web Search Results
- Web Search Strategies
- Evaluating Resources
- Organizing Internet Research
- Citing Copyrighted Online Resources
- Optional Labs
- Lesson Summary

Chapter 7: Business Email and Personal Information Management

- Introduction to Business Email
- How Email Works
- Email Configuration Requirements
- Email Message Components
- Creating and Sending Email Messages
- Receiving and Viewing Email Messages

- Email in the Workplace
- Email Problems and Solutions
- Personal Information Management (PIM)
- Optional Lab
- Lesson Summary

Chapter 8: Protecting Yourself Online

- Introduction to Protecting Yourself Online
- The Right to Be Forgotten
- Spam
- Cookies
- Configuring Browser Security
- Authentication
- Encryption
- Malware (Malicious Software)
- Virus Detection and Prevention
- Spyware and Virus Removal
- Updates and Patches

- Locking Your Computer
- Typosquatting
- Firewalls
- Security-Related Ethical and Legal Issues
- Optional Lab
- Lesson Summary

Chapter 9: Internet Services and Tools for Business

- Internet Resource Tools
- Mass Email and Texting Services
- List Servers
- File Transfer Protocol (FTP)
- Managing Downloaded Files
- Virtual Network Computing (VNC)
- Remote Desktop Connection
- Peer-to-Peer Networks
- Troubleshooting Using TCP/IP Tools
- Open-Source Development

- Proprietary Software and EULAs
- Software Patents
- Optional Lab
- Lesson Summary

Chapter 10: IT Project and Program Management

- Overview of IT Project and Program Management
- Resources for Technical Data
- Project Management Fundamentals
- Project Management Skills
- Project Management Phases
- The Project Triangle
- Project Management Software
- Creating Project Schedules
- Documenting Projects
- Planning and Scheduling Meetings
- Browsers in the Business World
- Reviewing Projects

- Quality Assurance
- Business Implications of IT Projects
- Project Management Institute (PMI)
- Program Management Concepts
- Optional Lab
- Lesson Summary

Chapter 11: Markup Language and Site Development Essentials

- Creating Webpages
- Mobile and Cloud Issues
- Text Editors and Markup Languages
- Graphical User Interface (GUI) Editors
- History of Markup Languages
- The HTML Web Development Trifecta: HTML5, CSS3 and JavaScript
- Website Development Principles
- Hosting and Web Service Providers
- The uCorp Website
- Lesson Summary

- Optional Labs

Chapter 12: HTML5 Coding

- Introduction to Using HTML
- Elements and Markup Tags
- Document Structure Tags
- Website File Structure
- Preparing Your Development Environment
- Paragraph Formatting and Block-Level Elements
- Text-Level Elements
- Lists
- Good Coding Practice
- Optional Lab
- Lesson Summary

Chapter 13: Cascading Style Sheets (CSS3) and Graphical Elements

- Cascading Style Sheets (CSS3)
- Separating Content in HTML

- Images in Webpages
- HTML Entities
- Specifying Colors
- Page Colors and Backgrounds
- Specifying Font Information
- Web Design Issues
- Optional Lab
- Lesson Summary

Chapter 14: Hyperlinks

- Introduction to Hyperlinks
- The Anchor Element
- Creating Local Hyperlinks
- Creating External Hyperlinks
- Using Images as Hyperlinks
- Creating Internal Links
- Managing Hyperlinks
- Optional Lab

- Lesson Summary

Chapter 15: HTML Tables

- Introduction to HTML Tables
- CSS3 Properties for All Table Elements
- Table and Data Alignment Options
- Height and Width of Table Elements
- Column and Row Spanning
- HTML Tables vs. CSS3 Page Structure
- Lesson Summary

Chapter 16: Web Forms

- Introduction to Web Forms
- Web Forms and CGI
- HTML5 and Forms
- Basic Tags for Creating Web Forms
- Web Form Fields
- Optional Lab
- Lesson Summary

Chapter 17: Video, Audio and Image Techniques

- Introduction to Web Video, Audio and Image Techniques
- The <video> Element
- The <iframe> Element
- The <audio> Element
- Graphic Types
- Image Maps
- Image Transparency
- Image Interlacing
- Animation
- Creating and Managing Images
- Lesson Summary

Chapter 18: Extending HTML

- Extending HTML
- Server-Side and Client-Side Languages
- Server-Side Languages

- Client-Side Languages
- Dynamic HTML (DHTML)
- Document Object Model (DOM)
- HTML5 APIs
- Canvas
- Offline Web Application
- Geolocation
- Drag-and-Drop Functionality
- Web Application Frameworks
- Connecting to a Database
- Optional Lab
- Lesson Summary

Chapter 19: GUI HTML Editors and Mobile Websites

- Introduction to GUI HTML Editors
- Types of GUI Editors
- GUI HTML Editor Functionality
- Creating Webpages with a GUI Editor

- HTML Text Editors vs. GUI Editors
- Previewing Pages and Validating Code
- Website Publishing
- Developing Webpages for Mobile Devices
- Mobile Apps vs. Dedicated Mobile Websites vs. Responsive Design Websites
- Optimizing a Website for Mobile Viewing
- Working with the Latest Web Technologies
- Optional Lab
- Lesson Summary

Chapter 20: Website Development for Business

- Developing a Business Website
- E-Commerce Considerations
- Internet Marketing and Search Engine Optimization (SEO)
- E-Commerce Payment Technologies
- Working in a Global Environment
- Databases and Webpages
- Optimizing the Impact of the Webpage

- Front-End Issues
- File Formats and Active Content
- Back-End Issues
- Bandwidth and Download Time
- Naming Webpage Files
- Optional Lab
- Lesson Summary

Chapter 21: Introduction to Networking

- Overview of Networks and Protocols
- Telephony and Convergence Networking
- Networking Evolution
- Client/Server Model
- Network Operations Center (NOC)
- Networking Categories
- Network Topologies
- Network Operating System
- Microsoft Windows Servers

- UNIX/Linux
- The Need for Protocols
- OSI Reference Model
- Data Encapsulation
- Packets
- OSI/RM Protocol Examples
- Transmission Control Protocol/Internet Protocol (TCP/IP)
- Binding Protocols
- Local Area Network (LAN)
- Wide Area Network (WAN)
- Internet Exchange Point (IXP)
- Lesson Summary

Chapter 22: Networking Components and Standards

- Overview of Networking Components
- Common Network Components
- Transmission Media
- Wireless Network Technologies

- Transmission Types
- IEEE LAN Standards
- Carrier Systems
- Virtualization
- Optional Lab
- Lesson Summary

Chapter 23: Connecting to the Internet

- Introduction to Connecting to the Internet
- Mobile Computing
- Mobile Devices and Cloud Computing
- Configuring a Wireless Network
- Fourth-Generation (4G) Wireless
- TCP/IP
- Internet Architecture
- Internet Protocols
- Demultiplexing
- Introduction to Routing

- Routing Protocols
- Port Numbers
- Internet Protocol Version 4 (IPv4)
- Internet Protocol Version 6 (IPv6)
- Configuring TCP/IP
- Diagnostic Tools for Internet Troubleshooting
- Optional Labs
- Lesson Summary

Chapter 24: Internet Services

- Overview of Internet Services
- Cloud Services
- Internet Servers
- Choosing Web Server Products
- Content Management System (CMS)
- Optional Lab
- Lesson Summary

Chapter 25: Hardware and Device Connectivity

- Introduction to Hardware and Device Connectivity
- Motherboard
- Storage Devices
- Network Interface Card (NIC)
- Optical Discs
- Device Connectivity
- System Management
- Preventive Maintenance
- Software Troubleshooting
- Optional Lab
- Lesson Summary

Chapter 26: Network and Cloud Security Risks

- Importance of Network Security
- Bring Your Own Device (BYOD)
- Cloud Security Threats
- Cloud Disaster Recovery
- Malware (Malicious Software)

- Overview of Network Attack Types
- Defeating Network Attacks
- Authentication
- Encryption
- Firewalls
- Security Zones
- Virtual Private Network (VPN)
- Security Audit
- Other Security Threats
- Lesson Summary

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

65

VIDEOS

04:30

HOURS

11. Practice Test

Here's what you get

90
PRE-ASSESSMENTS
QUESTIONS

3
FULL LENGTH TESTS

593
POST-ASSESSMENTS
QUESTIONS

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

12. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations

- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

HTML5 Coding

- Creating a Simple HTML5 Page
- Creating Paragraph Breaks and Line Breaks With HTML5
- Using Headings in HTML5
- Indenting and Centering Text With HTML5
- Using Text-Level Phrasing Elements in HTML5
- Creating Lists With HTML5
- Documenting and Commenting on the HTML5 Code

Cascading Style Sheets (CSS3) and Graphical Elements

- Using an External Style Sheet With HTML5
- Assigning Inline CSS Attribute Values to the <hr> Tag in HTML5
- Incorporating Images in an HTML5 Page
- Changing Page Colors and Backgrounds With HTML5
- Formatting Text With CSS3

Hyperlinks

- Creating Local Text Hyperlinks in HTML5
- Creating External Hyperlinks
- Using Images as Hyperlinks
- Using Internal Hyperlinks

HTML Tables

- Creating HTML5 Tables to Organize Content

Web Forms

- Creating a Simple Web Form in HTML5
- Adding a Radio Button Group to an HTML5 Web Form
- Adding Check boxes to an HTML5 Web Form
- Adding a Single-Option Drop-Down List to an HTML5 Web Form
- Adding a Multiple-Option Select List to an HTML5 Web Form
- Adding a Scrolling Text Area Box to an HTML5 Web Form

Video, Audio and Image Techniques

- Adding a Video to an HTML5 Webpage
- Adding an iframe to an HTML5 Webpage
- Adding Audio to an HTML5 Webpage
- Defining a Client-Side Image Map

Extending HTML

- Using JavaScript to Detect the Browser Type
- Using Simple JavaScript to Create an Interactive Webpage
- Experimenting With the HTML5 Canvas API
- Creating an Offline Web Application
- Experimenting With the Geolocation API
- Adding Drag-and-Drop Functionality to a Webpage

GUI HTML Editors and Mobile Websites

- Creating an HTML Table With a GUI Editor
- Creating External Hyperlinks With a GUI Editor
- Creating Bulleted and Numbered Lists With a GUI Editor
- Changing Font and Background Color With a GUI Editor
- Adding an Image to a Webpage With a GUI Editor

- Creating a Webpage With a GUI Editor

Networking Components and Standards

- Viewing the MAC Address on Your System
- Installing VirtualBox and Creating a VM

Connecting to the Internet

- Configuring Different Classes of IP Addresses
- Adding a Public IPv6 Address
- Using the netstat Command
- Using the tracert Command
- Using the arp Command
- Testing Connectivity Using the ping Command
- Using the ipconfig Command
- Using the ifconfig Command

Internet Services

- Using the nslookup Utility
- Sharing a Folder

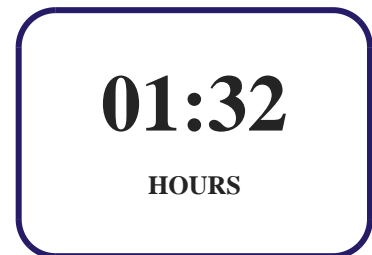
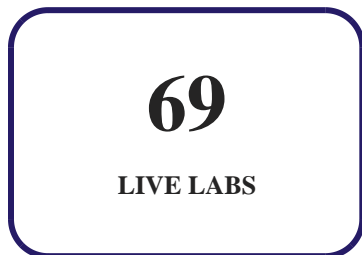
Hardware and Device Connectivity

- Managing NTFS Permissions
- Converting a FAT32 Partition to NTFS Using PowerShell
- Converting a FAT32 Partition to NTFS Using Disk Management
- Capturing Packets Using Wireshark
- Creating a Partition Using Disk Management
- Formatting a Logical Drive
- Using the chkdsk Command
- Running the Disk Defragmenter
- Backing Up and Restoring Data in Windows

Network and Cloud Security Risks

- Using the Netcraft Toolbar
- Monitoring the Denial of Service (DoS) Attack
- Detecting a Virus in a Folder
- Setting Password Policies
- Using the MD5 Hashing Algorithm
- Using OpenSSL to Create a Public/Private Key Pair
- Applying Symmetric-Key Encryption
- Turning Off Windows Firewall Settings
- Creating a NAT Virtual Network

Here's what you get



13. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

You can't stay away! Get

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