

# Learning Portfolio Overview

Cisco Networking Academy

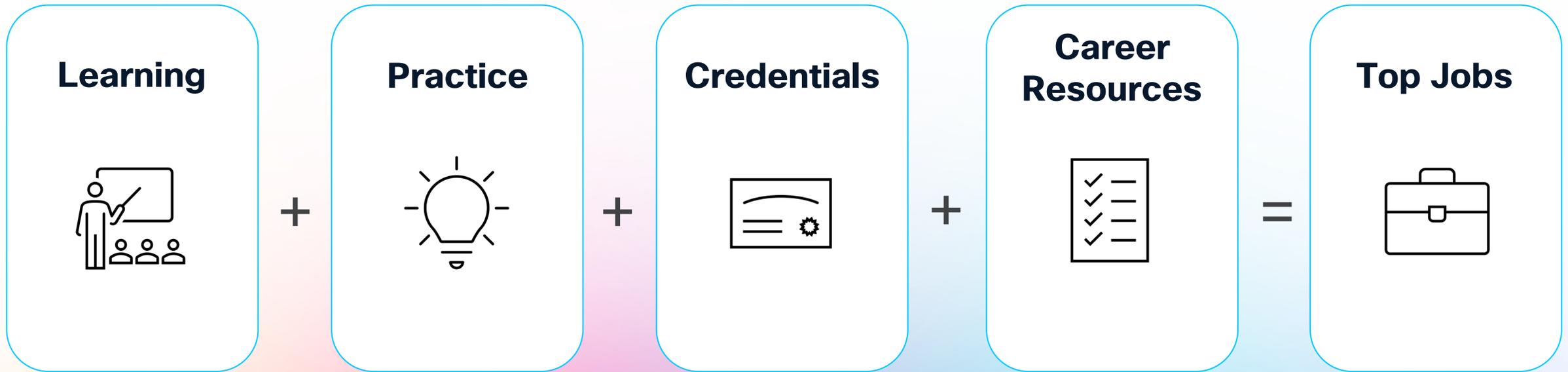


Oct 2025

# Table of Contents

- 01 Introduction
- 02 Portfolio Summary
- 03 Course Requirements & Languages
- 04 Learning Offerings By Subject

# Empowering all people with career possibilities



Cisco Networking Academy offers top-notch, practical curriculum designed with the end in mind: the skills required for success in a job role.

# Benefits for educators

- ✓ **Stay at the forefront** with certification-aligned curricula that prepares learners for real job roles and evolves as new technology emerges
- ✓ **Save time** with high quality, pre-built courses and teaching resources
- ✓ **Customize content for your needs** with flexibility for remote, in-classroom, or hybrid teaching
- ✓ **Grow your career** with professional development opportunities and a community of peers around the globe
- ✓ **Engage your learners** with interactive experiences and real-world practice, plus support their trajectory with career resources and job matching services

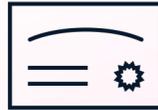
# Types of learning offerings



## Module

A short learning component focused on a specific learning objective.

Modules can be used on their own or as a supplement to a Course or Career Path.



## Course

A series of lessons designed to meet a set of learning objectives about a subject.

Courses include formative assessments and a final exam. Most courses have a digital badge.



## Career Path

A clear progression of courses or modules to prepare learners with the skills and knowledge needed for a specific job role and industry certification.

Career Paths are designed with the end in mind: the skills required for success in a job role.



## Learning Collection

A group of courses or modules to build knowledge on a topic. Learners gain transferable skills for a variety of job roles.

Learning Collections can complement a Career Path to develop additional breadth of knowledge or stand on their own for delving into a topic.

# Flexible course delivery options



## Self-paced

- On-demand, engaging experiences
- Great for independent learners, learning guided by a mentor, or hybrid learning approaches



## Instructor-led

- Pre-built teaching content, activities, and labs
- Educators can customize and add their own content
- Great for in-class, virtual, or hybrid teaching

# Industry-recognized credentials to verify skills



## Digital Badges

Most Cisco Networking Academy courses or career paths include a digital badge.

These digital credentials verify that a learner has successfully completed the criteria to earn the badge.

Digital badges issued by Cisco are completely free and easy to share on a resume, website, or social media.



## Certifications

The Cisco Networking Academy portfolio prepares learners for industry certifications in cybersecurity, networking, programming, and even English for IT.

With progression paths starting from entry-level, learners get clear achievable milestones to help them get started and grow their tech career.

Exam discounts are available for select certifications for qualifying Cisco Networking Academy students.

# Portfolio Summary

# Cisco Networking Academy Portfolio

		Cybersecurity	Networking	AI & Data Science	Programming	Information Technology	Digital Literacy	Cisco Packet Tracer
Introductory		Introduction to Cybersecurity <i>Featured module: AI Security Nuggets</i>	Introduction to IoT and Digital Transformation	Introduction to Data Science  Introduction To Modern AI  AI Fundamentals with IBM SkillsBuild  AI with Intel Learning Collection  Apply AI: Analyze Customer Reviews		Computer Hardware Basics Operating System Basics Linux Unhatched Hardware & Upgrade Support IT Customer Support Basics IT Support Essentials Operating Systems Support Security & Connectivity Support	Digital Awareness Using Computer and Mobile Devices  Create Digital Content,  Communicate, and Collaborate Online Digital Safety and Security Awareness	Getting Started with Cisco Packet Tracer  Exploring Networking with Cisco Packet Tracer  Exploring Internet of Things with Cisco Packet Tracer
Intermediate	Aligned to Entry-level Certification	Cybersecurity Essentials Endpoint Security Network Defense Cyber Threat Management Industrial Cybersecurity Essentials	Networking Essentials Networking Basics Networking Devices and Initial Configuration Network Addressing and Basic Troubleshooting Network Support and Security Industrial IoT and Control Systems in Energy Industrial IoT and Control Systems in Manufacturing Industrial Networking Essentials	Data Science Essentials with Python	Python Essentials 1 JavaScript Essentials 1 C Essentials 1 C++ Essentials 1 CSS Essentials HTML Essentials	IT Essentials Linux Essentials		
		CyberOps Associate  Ethical Hacker	CCNA: Introduction to Networks CCNA: Switching, Routing, and Wireless Essentials  CCNA: Enterprise Networking, Security, & Automation DevNet Associate		Python Essentials 2 JavaScript Essentials 2  C Essentials 2 C Advanced C++ Essentials 2 C++ Advanced	Linux 1 Linux 2		
		Network Security		Data Analytics Essentials				
Professional			CCNP Enterprise Core Networking CCNP Enterprise Advance Routing					

Professional Skills
<p><b>Core Skills</b></p> <ul style="list-style-type: none"> <li>Creating Compelling Reports</li> <li>Engaging Stakeholders for Success</li> </ul> <p><b>English for IT</b></p> <ul style="list-style-type: none"> <li>English for IT 1 and 2</li> </ul> <p><b>Entrepreneurship</b></p> <ul style="list-style-type: none"> <li>Discovering Entrepreneurship</li> <li>Launching a Business Venture</li> <li>Managing a Business Venture</li> </ul> <p><b>Career Resources</b></p> <ul style="list-style-type: none"> <li>Career Preparation Workshop</li> </ul>

Practice Tools
<p><b>Labs</b></p> <ul style="list-style-type: none"> <li>Cisco Packet Tracer</li> <li>Virtual machines</li> <li>Remote labs</li> <li>Physical equipment</li> </ul> <p><b>Interactive Learning</b></p> <ul style="list-style-type: none"> <li>Built-in web widgets</li> <li>Interactive branching activities</li> </ul> <p><b>Assessments</b></p> <ul style="list-style-type: none"> <li>Adaptive assessments powered by AI</li> <li>Formative quizzes and exams</li> <li>Summative exams</li> </ul>

# Course Requirements & Languages

# Networking

 Self-paced  Instructor-led

Learning Offerings	Outcomes		Requirements			Language Availability																		
	Aligns to Certification or Certificate	Digital Badge	ASC Alignment	Instructor Training	Physical Equipment	Arabic	Chinese-Simplified	Czech	Dutch	English	French	German	Greek	Hungarian	Indonesian	Italian	Japanese	Korean	Polish	Portuguese-Brazil	Romanian	Spanish	Turkish	Ukrainian
Introduction to IoT and Digital Transformation		✓				 	 		 	 	 	 	 	 	 	 	 	 	 	 	 	 	 	
Networking Essentials	✓	✓	✓			 	 			 	 								 		 			
Networking Basics	✓	✓				 				 	 	 							 	 	 		 	
Networking Devices and Initial Configuration		✓					 				 	 								 		 		 
Network Addressing and Basic Troubleshooting		✓					 				 	 								 		 		 
Network Support and Security		✓					 				 	 								 		 		 
Network Technician Career Path Exam	✓	✓								 	 								 		 			



# Cybersecurity

 Self-paced
  Instructor-led

Learning Offerings	Outcomes		Requirements			Language Availability																		
	Aligns to Certification or Certificate	Digital Badge	ASC Alignment	Instructor Training	Physical Equipment	Arabic	Chinese-Simplified	Czech	Dutch	English	French	German	Greek	Indonesian	Italian	Japanese	Korean	Polish	Portuguese-Brazil	Romanian	Spanish	Thai	Turkish	Ukrainian
Introduction to Cybersecurity		✓				 	 		 	 	 	 	 	 	 	 	 	 	 	 	 	 		
Cybersecurity Essentials	✓	✓								 	 							 	 	 		 	 	
Endpoint Security	✓	✓				 				 	 	 		 	 	 	 		 		 		 	
Network Defense		✓				 				 	 			 		 	 		 		 		 	
Cyber Threat Management		✓				 				 	 					 			 		 			 
Junior Cybersecurity Analyst Career Path Exam	✓	✓				 				 	 				 			 		 			 	
CyberOps Associate	✓	✓	✓	✓		 	 			 	 								 		 		 	
Network Security		✓	✓	✓	✓	 				 								 						

# Cybersecurity

 Self-paced
  Instructor-led

Learning Offerings	Outcomes		Requirements			Language Availability																			
	Aligns to Certification or Certificate	Digital Badge	ASC Alignment	Instructor Training	Physical Equipment	Arabic	Chinese-Traditional	Czech	Dutch	English	French	German	Hungarian	Indonesian	Italian	Japanese	Korean	Polish	Portuguese-Brazil	Romanian	Spanish	Thai	Turkish	Ukrainian	
Industrial Cybersecurity Essentials		✓		✓																					
Ethical Hacker	✓	✓																							
						✓				✓	✓								✓		✓				











# Digital Literacy

 Self-paced
  Instructor-led

Learning Offerings	Outcomes		Requirements			Language Availability																			
	Aligns to Certification or Certificate	Digital Badge	ASC Alignment	Instructor Training	Physical Equipment	Arabic	Czech	Dutch	English	French	German	Greek	Hungarian	Indonesian	Italian	Japanese	Korean	Polish	Portuguese-Brazil	Romanian	Spanish	Turkish	Ukrainian	Welsh	
Digital Awareness		✓																							
Using Computer and Mobile Devices		✓																							
Create Digital Content, Communicate, and Collaborate Online		✓																							
Digital Safety and Security Awareness		✓																							



# Cisco Packet Tracer

 Self-paced
  Instructor-led

Learning Offerings	Outcomes		Requirements			Language Availability																			
	Aligns to Certification or Certificate	Digital Badge	ASC Alignment	Instructor Training	Physical Equipment	Arabic	Chinese - Simplified	Czech	Dutch	English	French	German	Hungarian	Indonesian	Italian	Japanese	Korean	Polish	Portuguese-Brazil	Romanian	Spanish	Turkish	Ukrainian		
Getting Started with Cisco Packet Tracer		✓																							
Exploring Internet of Things with Cisco Packet Tracer																									
Exploring Networking with Cisco Packet Tracer																									



# Networking

## Course Overview

The course provides learners with an engaging, exploratory view of the Internet of Things and highlights how Digital Transformation impacts organizations, businesses, governments, industries, and our daily lives.

## Benefits

Learners discover how IoT, along with emerging technologies such as data analytics, artificial intelligence and cybersecurity, are digitally transforming industries and expanding career opportunities. Learners understand the importance of Intent-Based Networking using a software-driven approach and machine learning to be able to connect and secure tens of billions of new devices with ease.

- ✓ Develops digital basics
- ✓ Explores career opportunities in the new emerging technologies landscape

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Instructor-led or Self-Paced

### Learning Component Highlights:

- 6 modules
- 16 practice lab activities
- 7 Cisco Packet Tracer activities
- 12 videos
- Knowledge checks and module quizzes
- Final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Networking Basics



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

Networking Essentials provides learners with a broad foundational understanding of networking. It is suitable for anyone interested in a career in IT, or a related career. This course provides an engaging, self-paced learning experience using Packet Tracer simulation, interactive activities, and learning everyday devices found at home.

## Benefits

Learners develop a foundational understanding of the high-level network architecture and how a network operates.

- ✓ Gain the skills needed for entry-level job, internship, and apprenticeship roles, such as Network Support Technician, Entry-level Help Desk Technician, and IT Support Specialist

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

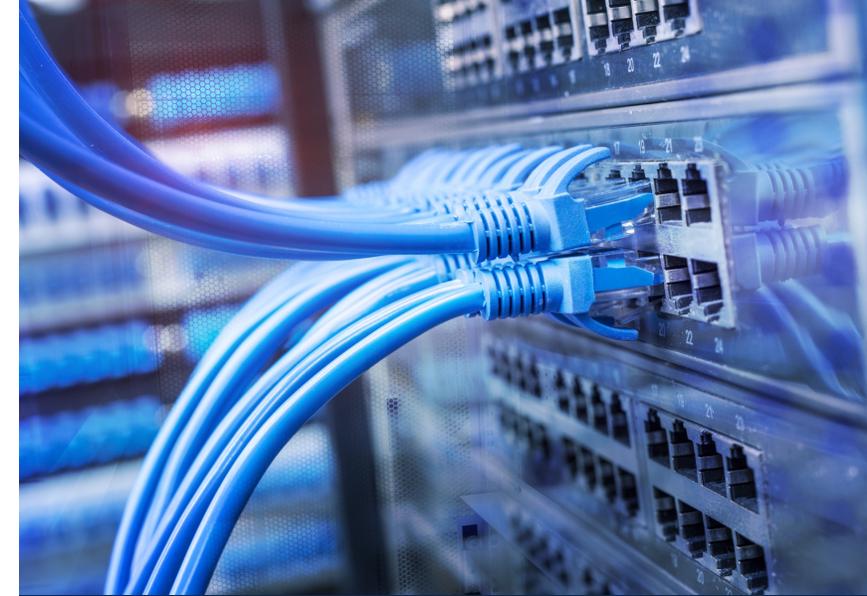
**Learning Component Highlights:**

- 39 modules
- 48 practice labs
- 160+ interactive activities, videos, & quizzes
- 15 module exams
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Aligned:** Cisco Certified Support Technician (CCST) Networking

**Recommended next certification:**  
Cisco Certified Network Associate (CCNA) or  
CyberOps Associate



## Requirements

- ASC Alignment: Required
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This course covers the foundation of networking and network devices, media, and protocols. The learner will observe data flowing through a network and basic device configuration to connect to networks.

## Benefits

Teaching your students basic networking concepts is essential for developing IT skills and prepares them for a wide variety of IT career paths.

- ✓ Configure a wireless router and wireless host to connect to the internet
- ✓ Teach how protocols, devices, and media enable communication on Ethernet networks
- ✓ Demonstrate how IP addresses enable network communication
- ✓ Create a simple LAN
- ✓ Use application layer services to accomplish real-world tasks.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 22 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led and Self-paced

### Learning Component Highlights:

- 17 modules and 13 practice labs
- Interactive activities and quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** This course is part of the Junior Cybersecurity Analyst Career Path and Network Technician Career Path which align to the CCST Cybersecurity and CCST Networking Certifications.

**Recommended Next Course:**  
Networking Devices and Initial Configuration



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This course teaches intermediate knowledge and skills for networking by covering basic concepts and skills needed to build a home office network and a small office network.

## Benefits

By teaching the characteristics and benefits of Cloud and Virtualization technologies, your students develop skills to calculate an IP addressing scheme and configure Cisco devices to create a small network.

- ✓ Teach the characteristics of Virtualization and Cloud services.
- ✓ Explain how Ethernet operates in a switched network.
- ✓ Show how routers use network layer protocols and services.
- ✓ Demonstrate how the TCP protocol guarantees data delivery.
- ✓ Configure a simple computer network using Cisco devices.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 22 hours

**Prerequisites:** Networking Basics or equivalent knowledge

**Course Delivery:** Instructor-led and Self-paced

**Learning Component Highlights:**

- 12 modules and 17 practice labs
- Interactive activities and quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** This course is part of the Junior Cybersecurity Analyst Career Path and Network Technician Career Path which align to the CCST Cybersecurity and CCST Networking Certifications.

**Recommended Next Course:**  
Network Addressing and Basic Troubleshooting



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required



## Course Overview

This course examines the Physical layer in depth, topologies at the Data Link layer, and basic routing at the Network layer. It dives deep into static and dynamic IPv4 and IPv6 addressing and address resolution.

## Benefits

Teach your students the components and functionality of Cisco switches and routers, troubleshooting methodologies for some of the most common networking issues, and an overview of providing customer support preparing them for a wide variety of IT careers paths.

- ✓ Explain the features and functions of the physical, data link, and network layers.
- ✓ Develop a networking scheme for a small network based on stated requirements.
- ✓ Explain the operation of Cisco switches and routers.
- ✓ Teach basic troubleshooting for network connectivity issues.

## Course Details

**Target Audience:** Secondary school and college/university students, general audience

**Estimated Time to Completion:** 14 hours

**Prerequisites:** Networking Devices and Initial Configuration or equivalent knowledge

**Course Delivery:** Instructor-led and Self-paced

### Learning Component Highlights:

- 8 modules and 8 practice labs
- Interactive activities and quizzes
- 1 final test

**Course Recognitions:** This course is part of the Network Technician Career Path which aligns to the CCST Networking Certification.

**Recommended Next Course:**  
Network Support and Security

## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This course covers general IT and Network Support, delves into Cybersecurity Threats, Vulnerabilities, and Attacks. The learner will observe essential configuration steps to ensure secure user access on a network.

## Benefits

This course builds learners' networking knowledge and can lead to exciting career opportunities in technology.

- ✓ Teach effective troubleshooting methodologies and help desk best practices.
- ✓ Explain common threats, vulnerabilities, and attacks on end points.
- ✓ Show how to configure secure user access on a network.

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 12 hours

**Prerequisites:** Network Addressing and Basic Troubleshooting course or equivalent knowledge

**Course Delivery:** Instructor-led and Self-paced

**Learning Component Highlights:**

- 3 modules and 10 practice labs
- Interactive activities and quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** This course is part of the Network Technician Career Path which aligns to the Cisco Certified Support Technician (CCST) Networking certification.

**Recommended Next Course:**

CCNA: Introduction to Networks



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

The first course in the CCNA curriculum introduces the architectures, models, protocols, and networking elements that connect users, devices, applications and data through the Internet and across modern computer networks - including IP addressing and Ethernet fundamentals.

## Benefits

Learn to build simple local area networks (LAN) that integrate IP addressing schemes, foundational network security, and perform basic configurations for routers and switches.

- ✓ Develop skills for entry-level networking jobs
- ✓ Prepare for CCNA certification exam
- ✓ Fulfill prerequisites to pursue more specialized networking skills

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 17 modules and 24 practice labs
- 31 Cisco Packet Tracer activities
- 120+ interactive activities, videos, & quizzes
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Aligned:** Cisco Certified Networking Associate

### Recommended Next Course:

CCNA: Switching, Routing, and Wireless Essentials (SRWE)



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

# CCNA: Switching, Routing, and Wireless Essentials (SRWE)

## Course Overview

The second course in the CCNA curriculum focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLAN) and security concepts.

## Benefits

Students learn key switching and routing concepts. They can perform basic network configuration and troubleshooting, identify and mitigate local area network (LAN) security threats, and configure and secure a basic WLAN.

- ✓ Develop skills for entry-level networking jobs
- ✓ Prepare for CCNA certification exam
- ✓ Fulfill prerequisites to pursue more specialized networking skills

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 16 modules and 14 practice labs
- 31 Cisco Packet Tracer activities
- 70+ interactive activities, videos, & quizzes
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Aligned:** Cisco Certified Networking Associate

### Recommended Next Course:

CCNA: Enterprise Networking, Security, and Automation (ENSA)



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

# CCNA: Enterprise Networking, Security, and Automation (ENSA)

## Course Overview

The final course in the CCNA series covers the architecture, security, and operation of an enterprise network, along with introducing the new ways in which network engineers interact with programmable infrastructure.

## Benefits

Gain skills to configure and troubleshoot enterprise networks, learn to identify and protect against cybersecurity threats, and discover key concepts of software-defined networking, including controller-based architectures and application programming interfaces (APIs).

- ✓ Develop skills for entry-level networking jobs
- ✓ Prepare for CCNA certification exam
- ✓ Fulfill prerequisites to pursue more specialized networking skills

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 14 modules and 12 practice labs
- 29 Cisco Packet Tracer activities
- 100+ interactive activities, videos, & quizzes
- 1 practice certification exam

**Course Recognitions:** Digital Badge

**Certification Aligned:** Cisco Certified Networking Associate

**Recommended Next Course:**  
CCNP Enterprise: Core Networking (ENCOR)



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

# CCNP Enterprise: Core Networking (ENCOR)

## Course Overview

This first course in the 2-course CCNP Enterprise series covers switching, routing, wireless, and related security topics, along with the technologies that support software-defined, programmable networks.

## Benefits

Gain practical, hands-on experience and skills needed to configure, operate and troubleshoot large scale enterprise networks. Implement basic Linux security.

- ✓ Develop skills for professional-level networking roles
- ✓ Prepare for the Cisco Enterprise Network Core Technologies exam (350-401 ENCOR) to earn an Enterprise Core Specialist certification
- ✓ Completion of both CCNP Enterprise courses prepares for CCNP Enterprise certification

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Recommended Preparation:** CCNA or equivalent

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 29 chapters and 41 practice labs
- 24 Cisco Packet Tracer activities (optional)
- 35+ interactive activities, videos, & quizzes
- 1 practice certification exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** Cisco Certified Networking Professional

**Recommended Next Course:** CCNP Enterprise: Advance Routing (ENARSI)



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

# CCNP Enterprise: Advanced Routing (ENARSI)

## Course Overview

This final course in the 2-course CCNP Enterprise series focuses on implementation and troubleshooting of advanced routing and redistribution for Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), and Border Gateway Protocol (BGP) along with VPN technologies, infrastructure security and management tools used in enterprise networks.

## Benefits

Gain hands-on experience needed to configure, operate and troubleshoot large scale enterprise networks. Implement basic Linux security.

- ✓ Develop skills for professional-level networking roles
- ✓ Prepare for the Cisco Enterprise Network Core Technologies exam (350-401 ENCOR) to earn an Enterprise Core Specialist certification
- ✓ Completion of both CCNP Enterprise courses prepares for CCNP Enterprise certification

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Recommended Preparation:** CCNA or equivalent

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- 23 chapters and 40 practice labs
- 20 Cisco Packet Tracer activities (optional)
- 25+ videos & quizzes, 2 Skills Assessments
- 1 practice certification exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** Cisco Certified Networking Professional

**Recommended Next Course:** DevNet Associate, CyberOps Associate



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

## Course Overview

This course introduces the methodologies and tools of modern software development, applied to the IT and Network operations. It covers a 360° view of the domain including microservices, testing, containers and DevOps, as well as securely automating infrastructures with Application Programming Interfaces (APIs).

## Benefits

Gain practical, relevant, hands-on lab experience, including programming in Python, using GIT and common data formats (JSON, XML and YAML), deploying applications as containers, using Continuous Integration/Continuous Deployment (CI/CD) pipelines, and automating infrastructure using code.

- ✓ Develop skills for entry-level software development and infrastructure automation jobs
- ✓ Prepare for DevNet Associate certification exam

## Course Details

**Target Audience:** Secondary vocational students, 2-year and 4-year college students and participants of coding bootcamps

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Recommended Preparation:** Object-oriented coding skills, equivalent to: PCAP: Programming Essentials in Python Fundamental skills of networking, equivalent to: CCNA: Introduction to Networks

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- 8 modules and 23 practice labs
- 5 Cisco Packet Tracer activities
- 6 videos, 8 quizzes, 8 module exams
- 1 final exam, 1 practice certification exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** Cisco Certified DevNet Associate

**Recommended Next Course:** CCNA, CCNP Enterprise, or CyberOps Associate



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Not Required

## Course Overview

Introduce foundational networking concepts essential for modern industrial infrastructures, focusing on IT and OT integration. Prepare learners for entry-level careers in operational technology (OT), with practice using Cisco Packet Tracer 9.0.0, to simulate real-world scenarios with industrial devices.

## Benefits

Equip your students with the confidence and skills needed to get started in connecting industrial devices. This curriculum, co-designed with industry experts, ensures learners gain relevant skills that meet current industry demands.

- ✓ Discover the benefits and key considerations of IT and OT integration.
- ✓ Teach fundamental networking concepts tailored for industrial environments.
- ✓ Understand Ethernet network communication and IP addressing.
- ✓ Explore key industrial protocols including, Ethernet/IP, PROFINET, and Modbus.
- ✓ Build a simple, simulated Industrial Automation Control Systems (IACS) network using Cisco devices.

## Course Details

**Target Audience:** High school, secondary and general audience

**Estimated Time to Completion:** 35 hours

**Prerequisites:** Basic computer skills, familiarity with operating systems, internet usage and a basic understanding of industrial components such as Programmable Logic Controller (PLC).

**Course Delivery:** Self-paced (exclusively through participating academies) and Instructor-led

### Learning Component Highlights:

- 17 learning modules
- 22 Cisco Packet Tracer activities
- 3 interactive labs
- 1 per-module Glossary of Terms
- 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Additional courses coming soon.



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Industrial IoT and Control Systems in Manufacturing

## Course Overview

Explore how Industrial Control Systems (ICS) and Industrial Internet of Things (IIoT) technologies drive smart manufacturing. Learners will develop skills for modern production by simulating automated processes, PLC programming, and networked manufacturing systems using Cisco Packet Tracer 9.0.0.

## Benefits

Equip your students with the confidence and skills to support and optimize manufacturing environments. This curriculum, co-designed with industry experts, ensures learners gain relevant skills that meet current industry demands.

- ✓ Discover how Industrial Control Systems (ICS) enable efficient, reliable and safe operations.
- ✓ Teach high availability solutions and time synchronization using the Precision Time Protocol (PTP).
- ✓ Understand how Industrial Internet of Things (IIoT) drives automation and connectivity.
- ✓ Practice with 12 Packet Tracer activities including Programmable Logic Controllers (PLCs) using Ladder Logic.

## Course Details

**Target Audience:** High school, secondary, and post-secondary institutions (especially those with programs in industrial automation) and a general audience.

**Estimated Time to Completion:** 15 hours

**Prerequisites:** Industrial Networking Essentials or equivalent knowledge

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 6 learning modules
- 12 Cisco Packet Tracer activities
- 2 interactive labs
- 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Industrial Cybersecurity Essentials



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Industrial IoT and Control Systems in Energy

## Course Overview

Explore Industrial IoT and Control Systems to meet modern energy network requirements within Smart Grid environments. Gain a comprehensive overview of Smart Grid systems and process automation and simulate real-world industrial scenarios using Cisco Packet Tracer 9.0.0.

## Benefits

Equip your students with foundational Industrial IoT and Control systems knowledge for modern energy solutions. This course, co-designed with industry experts, ensures learners gain relevant skills that meet current industry demands.

- ✓ Discover the benefits and key roles of Industrial Control Systems (ICS) and Smart Grid technologies.
- ✓ Teach process automation and Supervisory Control and Data Acquisition (SCADA) architectures for electric power systems.
- ✓ Teach high availability solutions and time synchronization using the Precision Time Protocol (PTP).
- ✓ Practice on a simulated Smart Grid network with 14 Cisco Packet Tracer activities.

## Course Details

**Target Audience:** High school, secondary, and post-secondary institutions (especially those with programs in the energy sector) and a general audience.

**Estimated Time to Completion:** 15 hours

**Prerequisites:** Industrial Networking Essentials or equivalent knowledge

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- 6 learning modules
- 14 Cisco Packet Tracer activities
- 1 interactive lab
- 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Industrial Cybersecurity Essentials



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Cybersecurity

## Course Overview

This course explores cyber trends, threats, and staying safe in cyberspace, and protecting personal and company data.

## Benefits

Today's interconnected world makes everyone more susceptible to cyber-attacks. Teach how to protect personal data and privacy online, in social media, and why more and more IT jobs require cybersecurity awareness and understanding.

- ✓ Builds cybersecurity understanding for a secure and safe digital life
- ✓ Explores many career possibilities cybersecurity skills offers

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

**Learning Component Highlights:**

- ✓ 5 modules and 7 practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Networking Essentials or Cybersecurity Essentials



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

A course designed for learners interested in pursuing a career in cybersecurity. It prepares for a Junior Cybersecurity Analyst role by equipping learners with job skills across three domains: Endpoint Security, Network Defense, and Cyber Threat Management.

## Benefits

Cybersecurity skills are heavily sought in the job market. Students can apply for entry-level junior cybersecurity analyst roles or continue learning toward associate and professional positions.

- ✓ Gain the skills needed for entry-level job, internship, and apprenticeship roles, such as Junior Cybersecurity Analyst, Cybersecurity Technician, Cybersecurity Specialist, and Tier 1 Help Desk Support.

## Course Details

**Target Audience:** High school, secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 70 Hours

**Prerequisites:** Foundational understanding of networking and network device configuration

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- ✓ 27 modules and 75 practice activities
- ✓ Interactive activities and quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** CCST Cybersecurity

**Recommended Next Course:** CyberOps Associate



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course covers how to assess the network, operating systems, and endpoints for vulnerabilities, and how to secure the network. It also covers skills to maintain the integrity, confidentiality, and availability in the network and data.

## Benefits

The demand for security professionals continues to grow. Teach the foundational knowledge used in the workplace as a Cybersecurity Technician.

- ✓ Develop a cybersecurity foundation
- ✓ Offer the next step in exploring the many career possibilities in cybersecurity
- ✓ Build skills securing a network all the way to the edge, including hardware, software, and media

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling to find a job in cyber

**Estimated Time to Completion:** 27 hours

**Recommended Preparation:** Introduction to Cybersecurity

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- ✓ 10 modules
- ✓ 31 Labs and Cisco Packet Tracer activities
- ✓ 40+ interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** CCST Cybersecurity

**Recommended Next Course:** Network Defense



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course covers different methods to monitor the network and how to evaluate security alerts. It delves into tools and techniques used to protect the network, including access control, firewalls, cloud security, and cryptography.

## Benefits

The demand for security professionals continues to grow. Gain the intermediate knowledge used in the workplace as a Cybersecurity Technician.

- ✓ Builds a cybersecurity foundation
- ✓ Explores the many career possibilities in cybersecurity
- ✓ Develops skills to create a layered defense-in-depth cybersecurity strategy

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling to find a job in cyber

**Estimated Time to Completion:** 27 hours

**Recommended Preparation:** Introduction to Cybersecurity and Endpoint Security

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- ✓ 11 modules
- ✓ 29 Labs and Cisco Packet Tracer activities
- ✓ 58 + interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** CCST Cybersecurity

**Recommended Next Course:** Cyber Threat Management



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course explores governance in cybersecurity and threat management. Learn to develop policies and ensure your organization complies with ethics standards and legal and regulatory frameworks.

## Benefits

The demand for security professionals continues to grow. Develop advanced knowledge you will use in the workplace as a Cybersecurity Technician.

- ✓ Builds a cybersecurity foundation
- ✓ Explores the many career possibilities in cybersecurity
- ✓ Develops skills for managing threats, such as how to assess a network for vulnerabilities, manage risks, and respond to security incidents

## Course Details

**Target Audience:** Secondary and 2-year college vocational students; Reskilling to find a job in cybersecurity.

**Estimated Time to Completion:** 16 hours

**Recommended Preparation:** Introduction to Cybersecurity, Endpoint Security, and Network Defense

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- ✓ 6 modules
- ✓ 16 Labs and Cisco Packet Tracer activities
- ✓ 28+ interactive activities & quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** CCST Cybersecurity Certification

**Recommended Next Course:** CyberOps Associate



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course introduces the core security concepts and skills needed to monitor, detect, analyze, and respond to cybercrime, cyberespionage, insider threats, advanced persistent threats, regulatory requirements, and other cybersecurity issues facing organizations.

## Benefits

Gain practical, hands-on skills needed to maintain and ensure security operational readiness of secure networked systems.

- ✓ Develop skills for entry-level security operations center (SOC) jobs
- ✓ Prepare for Cybersecurity Associate certification
- ✓ Pursue a career in cybersecurity operations, a rapidly-growing, exciting new area that spans all industries

## Course Details

**Target Audience:** Students enrolled in technology degree programs at higher education institutions; IT professionals who want to pursue a career in Security Operations

**Estimated Time to Completion:** 70 Hours

**Prerequisites:** None

**Recommended Preparation:** Introduction to Cybersecurity, Cybersecurity Essentials

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 28 chapters and 46+ practice labs
- 6 Cisco Packet Tracer activities
- 113 interactive activities, videos, & quizzes
- 1 practice certification exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** Cisco Certified Cybersecurity Associate

**Recommended Next Course:** Network Security, Ethical Hacker



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Not required

## Course Overview

This course introduces the core security concepts and skills needed to configure and troubleshoot computer networks and help ensure the integrity of devices and data.

## Benefits

Gain practical, hands-on skills to design, implement, and manage network security systems and ensure their integrity. Develop skills for entry-level security operations center (SOC) jobs

- ✓ Build expertise in network security and data protection
- ✓ Develop skills for entry-level network security specialist roles
- ✓ Gain industry in-demand skills aligned with the National Institute for Standards and Technology (NIST) Cybersecurity Framework

## Course Details

**Target Audience:** 2-year and 4-year college students in Networking or Engineering programs

**Estimated Time to Completion:** 70 Hours

**Prerequisites:** None

**Recommended Preparation:** Basic understanding of computer networks (CCNA: Introduction to Networks and CCNA: Switching, Routing, and Wireless Essentials, or equivalent)

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- ✓ 22 modules and 25 practice labs
- ✓ 22 Cisco Packet Tracer activities
- ✓ 87+ interactive activities, videos, and quizzes
- ✓ 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** CyberOps Associate



## Requirements

- ASC Alignment: Required
- Instructor Training: Required
- Physical Equipment: Required

## Course Overview

Introduce essential cybersecurity concepts for modern industrial infrastructures, focusing on securing Industrial Internet of Things (IIoT) and Industrial Control Systems (ICS). Prepare learners for entry-level careers in operational technology (OT), and to practice using Cisco Packet Tracer 9.0.0, to simulate real-world scenarios with industrial devices.

## Benefits

Equip your students with the confidence and skills needed safeguard industrial network systems. This curriculum, co-designed with industry experts, ensures learners gain relevant skills that meet current industry demands.

- ✓ Discover the importance of cybersecurity in an industrial context and how cyber-attack occur.
- ✓ Teach common Industrial Control Systems (ICS) vulnerabilities, threats, and strategies for mitigation.
- ✓ Investigate cybersecurity frameworks such as IEC 62443 and NIST SP 800-82r3.
- ✓ Practice with 11 labs, including select labs in the Kali Linux Virtual Machine as well as 6 Cisco Packet Tracer activities.

## Course Details

**Target Audience:** High school, secondary, and post-secondary institutions (especially those with programs in industrial automation or the energy sector) and a general audience.

**Estimated Time to Completion:** 25 hours

**Prerequisites:** Industrial Networking Essentials and either Industrial IoT and Control Systems in Energy or Industrial IoT and Control Systems in Manufacturing

**Course Delivery:** Instructor-led & Self-Paced Through an Academy

### Learning Component Highlights:

- 9 learning modules
- 6 Cisco Packet Tracer activities
- 11 interactive labs
- 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Ethical Hacker



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Ethical Hacker

## Course Overview

The Ethical Hacker course prepares learners with skills to proactively discover vulnerabilities before the cybercriminals do. Learners will become proficient in the art of scoping, executing, and reporting on vulnerability assessments, while recommending mitigation strategies.

## Benefits

Through the gamified narrative in the course and real-world inspired hands-on practice labs, students develop essential workforce readiness skills, laying a solid foundation in offensive security.

- ✓ Get job-ready for Offensive Security roles such as Ethical Hacker or Penetration Tester.
- ✓ Understand the mindset and tactics of cybercriminals to strengthen your defensive security skillset.
- ✓ Gain needed skills for implementing security controls and monitoring, analyzing, and responding to current security threats.

## Course Details

**Target Audience:** College/university students or vocational school students

**Estimated Time to Completion:** 70 hours

### Prerequisites:

- Entry-level cybersecurity knowledge: CCST Cybersecurity certification or Cybersecurity Essentials or Junior Cybersecurity Analyst Career Path, or equivalent
- Basic programming knowledge

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- ✓ 10 modules and 34 labs
- ✓ 86 interactive practice activities and quizzes
- ✓ 1 final exam
- ✓ 1 skills-based assessment

**Course Recognitions:** Digital badge

**Certification Alignment:** Cisco Certificate in Ethical Hacking

**Recommended Next Course:** CyberOps Associate, Network Security



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

# AI & Data Science

## Course Overview

This introductory course takes learners inside the world of data science. They will learn the basics in the fields of data science, data analytics and data engineering to better understand how machine learning is shaping the future of business, healthcare, education and more.

## Benefits

Data science professionals who can provide actionable insights for data-driven decisions are in high demand.

- ✓ Develops awareness of opportunities that data analytics enable.
- ✓ Explores career opportunities in the Data Science, Analytics, Engineering and Artificial Intelligence, and Machine Learning landscapes.

## Course Details

**Target Audience:** High-school, Secondary and 2-year college students, General audience

**Estimated Time to Completion:** 6 hours

**Recommended Preparation:** None

**Course Delivery:** Self-paced

### Learning Component Highlights:

- 4 modules
- 5 practice lab activities
- 1 interactive pivot table widget
- 14 videos
- Knowledge checks and modules quizzes
- Final Exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:**  
Data Analytics Essentials



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This interactive course covers the basics of AI through free AI-enabled apps. Topics include the basics of computer vision, machine translation, and chatbots. Students learn how chatbots work, gain tips for writing better prompts, and explore ways to apply chatbots for personal use and productivity.

## Benefits

AI-enabled apps are revolutionizing the way we work and learn, with millions worldwide using them to simplify everyday tasks. Teaching students practical AI skills can foster innovation and enhance their future AI readiness.

- ✓ Write effective chatbot prompts.
- ✓ Teach computer vision with a photo app.
- ✓ Apply machine translation using an online translation tool.
- ✓ Practice 16 prompting exercises, with 10+ popular chatbots and AI tools.
- ✓ Learn how chatbots are used in seven key-ways: *Expand, Synthesize, Transform, Evaluate, Chat, Take Actions, and Input Images and Text.*

## Course Details

**Target Audience:** High School, secondary or vocational school and college/university students and general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- 2 learning modules
- 50 lecture videos
- 16 chatbot prompting exercises
- 5 hours of engaging video content
- 1 hands-on, open-ended video project
- 1 final exam

**Course Recognitions:** Digital badge



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Data Analytics Essentials

## Course Overview

Learners will understand how to use the fundamental tools of a data analyst, and how to transform, organize and visualize data with spreadsheet tools such as Excel. They will learn how to query data from a relational database using SQL and how to improve their data presentations using powerful business intelligence tools like Tableau. By the end of the course, they will have an analytics portfolio complete with an analysis of popular datasets, showcasing their skills in Excel, SQL and Tableau.

## Benefits

Organizations all over the world recognize the value of analytics. This course teaches the tools of the trade.

- ✓ QL and spreadsheets are used in almost every organization globally
- ✓ Dashboarding, data visualizations and storytelling with data are highly sought after

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, college and university students studying IT or non-IT fields, career changers

**Estimated Time to Completion:** 30 hours

**Prerequisites:** None. Introduction to Data Science recommended

**Course Delivery:** Self-paced

**Learning Component Highlights:**

- 10 modules
- 23 practice labs
- 6 practice labs with localized widget
- 38 videos
- 56 practice opportunities
- 8 module exams
- 1 final exam

**Course Recognitions:** Digital Badge

**Recommended Next Course:**  
Python Essentials 1



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

Students will learn fundamental artificial intelligence (AI) concepts, including machine learning, deep learning, natural language processing (NLP), and computer vision. Students apply these concepts with a comprehensive machine learning project within IBM Watson Studio.

## Benefits

AI's impact on the tech workforce is reshaping industries at an unprecedented pace. Equip your students with fundamental AI concepts and hands-on practice with the latest tools and technologies and enhance their readiness to thrive and compete in the world of AI.

- ✓ Students build and test an AI machine learning model using IBM Watson Studio and learn how to save it as a Jupyter Notebook.
- ✓ Students learn key AI concepts like generative AI, deep learning, and neural networks.
- ✓ Students explore the AI job market's rapid growth, hear how real AI professionals got their start, and learn the skills needed for an AI-driven career.

## Course Details

**Target Audience:** High school, secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 10 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

### Learning Component Highlights:

- 6 learning modules and 25 quizzes
- Many interactive practice activities and simulations
- 5 module final assessments
- 1 AI machine learning project

**Recommended Next Course:** Introduction to Cybersecurity



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with

**IBM SkillsBuild**

# Apply AI: Analyze Customer Reviews

## Course Overview

This interactive course shows how to perform thematic analysis on text data to extract insights for data-backed decision making. Students also explore choosing the right AI or non-AI tool for the task; improving AI reliability and understand human in the loop.

## Benefits

Organizations everywhere rely on customer feedback to guide decisions. Learning how to analyze this feedback is a valuable skills in any job role. Thematic analysis with the help of AI empowers learners to understand their data and share actionable insights with their team.

- ✓ Learn how to apply and practice thematic analysis with 12 interactive exercises.
- ✓ Choose the right AI or non-AI tool for your task: a large language model, chatbot that writes and runs code, a spreadsheet app, or a text editor.
- ✓ Reframe prompt instructions and prepare your data to achieve more reliable results from an LLM..
- ✓ Understand the "human in the loop" process: using AI to assist with, but not to replace, human decision-making.

## Course Details

**Target Audience:** High School, secondary or vocational school and college/university students and general audience

**Estimated Time to Completion:** 6 hours

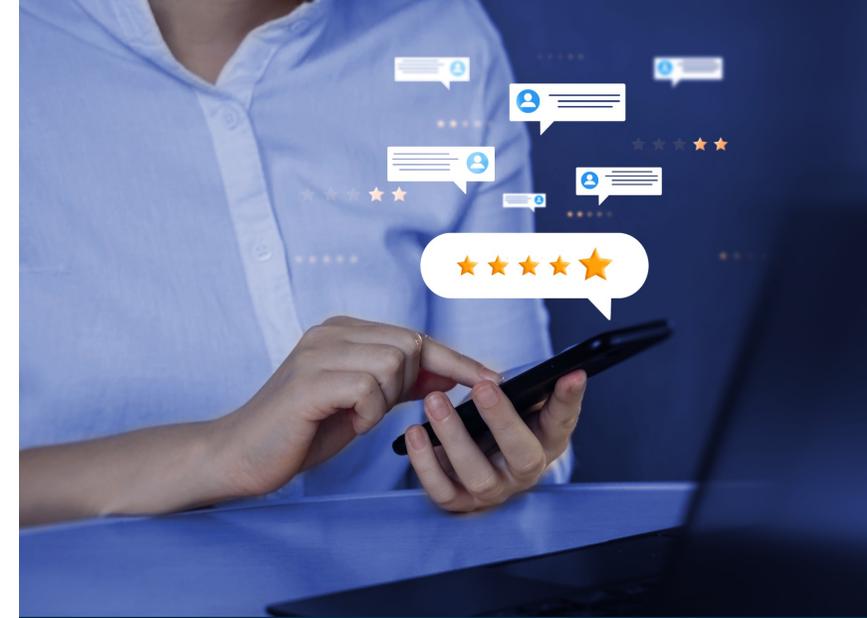
**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- 1 learning module
- 48 lecture videos
- 12 thematic analysis exercises
- 3 hours of engaging video content
- 1 final exam

**Course Recognitions:** Digital badge



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

Data Science Essentials with Python is a fully interactive, project-based introduction to the data-science workflow. Learners move from writing their very first Python statements to cleaning, analyzing, visualizing and storytelling with real-world datasets, using industry-standard tools such as **Pandas** and **Matplotlib** across six themed chapters and dozens of hands-on projects.

## Benefits

- ✓ **Code & data fluency from scratch** – pick up Python syntax plus the core methods for manipulating DataFrames.
- ✓ **Immediate, authentic practice** – every chapter ends with guided and open-ended projects that mirror real analytics tasks.
- ✓ **Visualization confidence** – build bar, scatter and multi-line plots that communicate insights clearly.
- ✓ **Introduction to statistical modeling** – fit and interpret simple linear models and test data-driven hypotheses.
- ✓ **Portfolio-ready work** – finish with complete notebooks you can share with instructors or employers.

## Course Details

**Target Audience:** Aspiring data scientists, university & advanced high-school STEM/business students, and professionals who need a modern entry point to working with data.

**Estimated Time to Completion:** ~40–50 hours (mix of self-paced content, instructor demos, and project work).

### Prerequisites:

No formal prerequisites; prior exposure to Python via Python Essentials 1 can be helpful

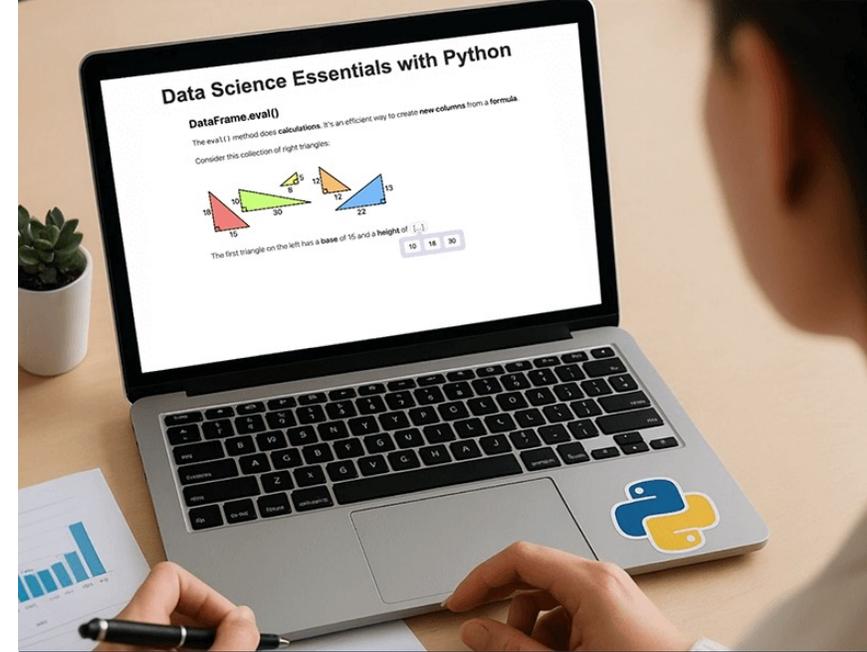
**Course Delivery:** Instructor-led, Self-paced

### Learning Component Highlights:

- Integrated AI assistant to guide you
- Game based learning
- Interactive visual feedback
- 6 course chapters
- 15 guided projects, 5 open-ended projects
- Final Exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Introduction to Modern AI



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

# Information Technology

## Course Overview

This course teaches the fundamentals of computers and mobile devices by covering the basic concepts and skills needed to install components to build, repair, or upgrade personal computers.

## Benefits

This course provides the learner with an engaging, foundational view of computers and mobile devices, including desktop and laptop computers, and other mobile devices such as tablets and mobile phones.

- ✓ Install components to build, repair, or upgrade personal computers.
- ✓ Explain the features and functions of laptops.
- ✓ Explain the features and functions of other mobile devices.

## Course Details

**Target Audience:** Secondary, vocational, career technical school and immediate post-secondary students, general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced

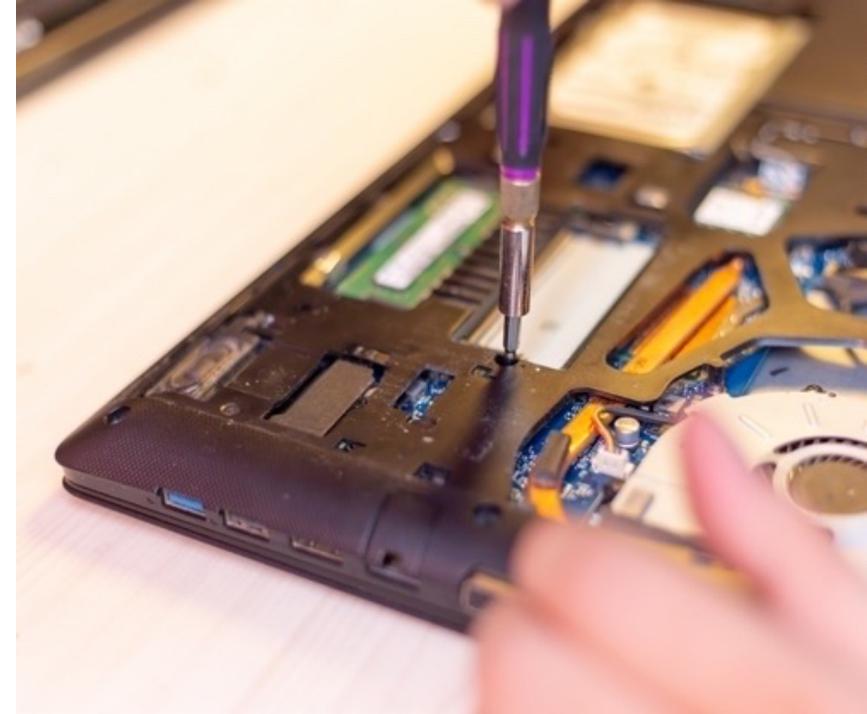
### Learning Component Highlights:

- 3 modules
- Practice items, labs and quizzes
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Operating Systems Basics, Networking Basics



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course teaches the fundamentals of operating systems by covering the basic concepts and skills needed to explain the purpose and characteristics of operating systems, implement basic operating system security, and explain how to configure mobile device network connectivity.

## Benefits

This course provides the learner with an engaging, foundational view of operating systems and mobile device connectivity, including Windows, Linux, Android, and iOS.

- ✓ Use Windows administrative tools.
- ✓ Implement basic Linux security.
- ✓ Explain how to configure network connectivity and email on mobile devices.
- ✓ Explain the purpose and characteristics of mobile operating systems.

## Course Details

**Target Audience:** Secondary, vocational, career technical school and immediate post-secondary students, general audience

**Estimated Time to Completion:** 12 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Self-Paced

### Learning Component Highlights:

- 8 modules and 18 practice labs
- Checkpoints and quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Networking Basics



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This introductory course provides a brief overview of the Linux operating system, including basic installation and configuration of Linux software and the Linux command line. This eight-hour course lays foundational groundwork to progress to additional Linux courses and certifications.

## Benefits

The course equips students with foundational Linux skills, essential for various IT roles.

- ✓ Quickly introduces students to the fundamentals of the Linux operating system.
- ✓ Engages students with practical, hands-on exercises.
- ✓ Lays the groundwork for further Linux education and certification pathways.

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 8 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

**Learning Component Highlights:**

- 22 Sections
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** None

**Recommended Next Course:** Linux Essentials or Linux 1



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

This course provides a fast-track to Linux proficiency, with practical command line and virtual machine training. Completing the course prepares students for the Linux Professional Institute Linux Essentials certificate, enhancing students' employability and serving as a gateway to professional certifications.

## Benefits

The course equips students with comprehensive Linux knowledge, essential for various IT roles and modern technological advancements.

- ✓ Provides foundational Linux knowledge crucial for IT careers
- ✓ Offers hands-on command line and virtual machine experience
- ✓ Prepares for Linux Essentials certification, boosting your students' job marketability.

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led & Self-paced

**Learning Component Highlights:**

- 18 modules
- 18 practice labs
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** Linux Professional Institute Linux Essentials

**Recommended Next Course:** Linux 1



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

IT Essentials covers fundamental computer and career skills for entry-level IT jobs. Students apply skills and procedures to install, configure, and troubleshoot computers, mobile devices, and software.

## Benefits

Learn the fundamentals of connecting computers to networks. Plus, you'll enjoy working with Cisco Networking Academy's advanced simulation tools with hands-on labs to hone your troubleshooting skills and immediately practice what you learn!

- ✓ Develop skills for entry-level technical support roles
- ✓ Prepare for CompTIA A+ certification exam
- ✓ Build your foundation for CCNA-level courses

## Course Details

**Target Audience:** Secondary and 2-year college vocational students

**Estimated Time to Completion:** 70 Hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 14 chapters and 99 practice labs
- Cisco Packet Tracer, virtual laptop, and virtual desktop learning tools
- 29+ interactive activities
- 18+ assessments throughout the course
- 1 final and 2 practice certification exams

**Course Recognitions:** Digital Badge

**Certification Alignment:** CompTIA A+ Certification

**Recommended Next Course:** CCNA: Introduction to Networking (ITN)



## Requirements

- ASC Alignment: Required
- Instructor Training: Optional
- Physical Equipment: Not Required

## Course Overview

This comprehensive course provides a path towards expertise in Linux, the operating system at the core of today's digital industries. Topics include system administration, software development, network engineering, and cybersecurity skills with direct, hands-on experience. This course is designed to prepare for Exam 101 of the LPIC-1 certification. To obtain the LPIC-1 certification, students must pass Exam 101 and 102.

## Benefits

The course build hands-on Linux skills and networking experience, paving the way for LPIC-1 certification and IT career advancement.

- ✓ Equips students with practical Linux skills for system administration and various IT roles.
- ✓ Provides hands-on labs for real-world command line and networking experience.
- ✓ Prepare for LPIC-1 certification, enhancing career opportunities in technology.

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 70 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led & Self-paced

**Learning Component Highlights:**

- 6 modules
- 23 practice labs
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** Linux Professional Institute LPIC-1 (Exam 101)

**Recommended Next Course:** Linux 2



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

This course builds on Linux 1 to deepen Linux expertise. Topics include shell scripting, user interfaces, system services, networking, and security, equipping students for entry-level tech roles and further specialization. Linux 2 is the second course in a series that leads to LPIC-1 certification. To obtain the Linux Professional Institute LPIC-1 Certification, students must pass Exam 101 and 102. This course is designed to prepare students for Exam 102.

## Benefits

The course prepares students for advanced Linux use and the LPIC-1 Exam.

- ✓ Advances students' command line proficiency and introduces shell scripting and system services.
- ✓ Covers essential topics like networking and security to prepare for the LPIC-1 Exam 102.
- ✓ Opens pathways to careers in cloud computing, cybersecurity, and other tech fields.

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 70 hours

**Prerequisites:** Linux 1

**Course Delivery:** Instructor-led & Self-paced

### Learning Component Highlights:

- 6 modules
- 18 practice labs
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** Linux Professional Institute LPIC-1 (Exam 102)



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

This course prepares learners for entry-level IT support roles. It covers important help desk and customer service skills, including how to effectively communicate with customers, troubleshoot technical issues, and utilize remote tools. The course combines lectures with practical exercises, so that learners gain both theoretical knowledge and hands-on experience.

## Benefits

- ✓ **Career-Ready Skills:** Learners will develop IT support skills, preparing them for entry-level positions.
- ✓ **Hands-On Learning:** Learners go through practical exercises and simulations that reinforce theoretical knowledge.
- ✓ **Comprehensive Curriculum:** This is the first course in a learning path that is aligned to the CCST IT Support certification.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 4 Hours

**Prerequisites:** None

**Course Delivery:** Instructor-led and Self-paced

**Learning Component Highlights:**

- 2 modules
- Interactive Check Your Understanding activities
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** This course is part of the IT Support Specialist Career Path (coming soon) which aligns to the CCST IT Support Certification.

**Recommended Next Course:** Operating Systems Support (coming soon)



## Requirements

- **ASC Alignment:** Recommended
- **Instructor Training:** Optional
- **Physical Equipment:** Not required

## Course Overview

This course blends theoretical knowledge and practical application to prepare your learners for entry-level IT support roles. As an educator, you'll guide learners through modules that cover troubleshooting for Windows, macOS, and mobile operating systems, and introduce key concepts in virtualization and cloud computing. Help your learners develop the expertise to succeed in customer service and technical support.

## Benefits

- ✓ **Entry-Level Job Readiness:** Learners will develop the technical and customer service skills employers seek.
- ✓ **Virtualization and Cloud:** Learners will explore concepts in virtualization and cloud services critical for modern IT environments.
- ✓ **Troubleshooting Skills:** Learners will diagnose and fix issues across Windows, macOS, and mobile systems for real-world application.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 10 hours

**Prerequisites:** IT Customer Support Basics

**Course Delivery:** Instructor-led and Self-paced

### Learning Component Highlights:

- Practical exercises and simulations to reinforce understanding
- 3 modules
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** This course is part of the IT Support Specialist Career Path (coming soon) which aligns to the CCST IT Support Certification.

**Recommended Next Course:** Security and Connectivity Support (coming soon)



## Requirements

- **ASC Alignment:** Recommended
- **Instructor Training:** Optional
- **Physical Equipment:** Not required

## Course Overview

This course prepares learners for modern front-line IT support roles. They will diagnose and resolve common issues—from peripheral and shared resource problems to wired and wireless network connectivity—using command-line tools. They will also build a foundation in cybersecurity awareness, covering threat identification, social engineering tactics, and data protection policies. As the third course in the IT Support Specialist Career Path, it prepares students for key objectives of the CCST IT Support certification.

## Benefits

- ✓ Job-Ready Technical Skills: Diagnose and resolve connectivity issues, such as troubleshooting network access.
- ✓ Foundation in Modern Cybersecurity: Recognize social engineering tactics and apply best practices to protect sensitive data.
- ✓ Prepare for an IT Career: Develop skills that align with the Cisco CCST-IT Support certification.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 10 hours

**Prerequisites:**  
IT Customer Support Basics  
Operating Systems Support

**Course Delivery:** Instructor-led and Self-paced

**Learning Component Highlights:**

- 3 modules
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** This course is part of the IT Support Specialist Career Path, which aligns to the CCST IT Support Certification.

**Recommended Next Course:** Hardware and Upgrade Support



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course prepares learners to diagnose, repair, and upgrade computer hardware. Students will progress from fundamental safety procedures and component identification to advanced troubleshooting techniques and performing upgrades like installing RAM and storage devices. As the final course in the IT Support Specialist Career Path, it directly aligns with key objectives of the CCST IT Support certification.

## Benefits

- ✓ **Gain Job-Ready Skills:** Students will learn hardware troubleshooting, repair, and how to perform PC upgrades.
- ✓ **Prepare for Your Career:** Students can prepare for the CCST IT Support certification and pursue an entry-level role in IT.
- ✓ **Build Technical Confidence:** Students will diagnose and solve common hardware problems on their own.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:**

IT Customer Support Basics  
Operating Systems Support  
Security and Connectivity Support

**Course Delivery:** Instructor-led and Self-paced

**Learning Component Highlights:**

- 2 modules
- Interactive activities and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** This course is part of the IT Support Specialist Career Path, which aligns to the CCST IT Support Certification.

**Recommended Next Course:** Networking Basics or Introduction to Networks



## Requirements

- **ASC Alignment:** Recommended
- **Instructor Training:** Optional
- **Physical Equipment:** Not required

## Course Overview

This course is designed to prepare learners for entry-level IT support roles. They will gain practical experience with computer hardware, popular operating systems like Windows and macOS, and network troubleshooting. This course aligns with the Cisco Certified Support Technician (CCST) IT Support certification, validating learners' skills for employers. With no prerequisites, it's the perfect first step for anyone looking to enter the IT field.

## Benefits

- ✓ **Build Job-Ready Skills:** Go beyond theory with hands-on labs to build, troubleshoot, and manage computer systems and networks.
- ✓ **Prepare for Certification:** Gain the knowledge and confidence to pass the Cisco CCST IT Support exam and earn an industry-recognized credential.
- ✓ **Begin Your IT Journey:** Start your tech career with no prior experience.

## Course Details

**Target Audience:** Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 56 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

**Learning Component Highlights:** [Bullet list. Examples below. Use what is relevant.]

- 10 modules
- 103 labs
- 82 videos
- 40 Check Your Understandings and quizzes
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** Cisco Certified Support Technician (CCST) IT Support

**Recommended Next Course:** Networking Basics or Introduction to Networks



## Requirements

- **ASC Alignment:** Recommended
- **Instructor Training:** Optional
- **Physical Equipment:** Not required

# Programming

## Course Overview

This course teaches in-demand skills including how to design, develop, and improve computer programs using Python.

## Benefits

Learning Python opens opportunities in fields like data science, machine learning, web development, and automation, increasing your students' employability. With Python, learners can create their own software apps which fosters their creativity, critical thinking, and hands-on learning.

- ✓ Explores the world of computer programming and the careers it offers
- ✓ Develops coding skills using Python
- ✓ Teaches about data types, variables, I/O operations, control flow and functions

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 30 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- 4 modules and 30 practice labs
- Interactive activities & quizzes
- 1 final project
- 1 final test

**Course Recognitions:** Digital badge

**Certification Alignment:** PCEP: Certified Entry-Level Python Programmer

**Recommended Next Course:** Python Essentials 2



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with



## Course Overview

This course is designed for learners who are already familiar with the essentials of Python, universal computer programming concepts like data types, containers, functions, conditions and loops, and the basics of procedural, structural, and functional programming.

## Benefits

Used by startups and tech giants like Google, Facebook, Netflix, and more, Python with user-friendly, easy-to-read code offers endless possibilities for creating small and large-scale software projects.

- ✓ Explore the world of programming
- ✓ Design, develop, and improve multi-module computer applications coded in Python
- ✓ Analyze and model real-life problems in Object-Oriented Programming categories
- ✓ Create and develop a programming portfolio

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 40 hours

**Prerequisites:** Python Essentials 1, PCEP certification, or equivalent

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- 4 modules and 21 practice labs
- Interactive activities & quizzes
- 1 final exam
- PCAP certification voucher discount

**Course Recognitions:** Digital badge

**Certification Alignment:** PCAP - Certified Associate in Python Programming certification

**Recommended Next Course:** DevNet Associate

## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

Students will learn how interactive web and mobile apps are created with JavaScript programming – and how to design, write, debug, and run their own programs.

## Benefits

JavaScript is a ubiquitous language used across the internet, with billions of lines of code available for reuse and learning from examples. With its easy-to-use interpreter and debugger already installed on internet browsers, running and experimenting with code is fast and effortless, allowing students to learn the language quickly and build a solid foundation for learning other programming languages.

- ✓ Students develop fundamental programming knowledge
- ✓ Students prepare for JSE certification exam to earn an industry-recognized certificate
- ✓ Students can pursue more specialized networking and software development skills for a career in tech

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 40 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led or Self-paced

### Learning Component Highlights:

- 6 modules and 30+ practice and lab activities
- Interactive quizzes
- 1 final test

**Course Recognitions:** Digital badge

**Certification Aligned:** JSE: Certified Entry-Level JavaScript Programmer

**Recommended Next Course:** JavaScript Essentials 2



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

Students will learn how to analyze and model real-world problems using object-oriented programming and explore more intricate aspects of JavaScript such as asynchronous programming and functions.

## Benefits

JavaScript powers our online experiences. In fact, just about every website around the globe utilizes JavaScript to provide the best user experience possible. Given the global reach of JavaScript, learning the foundations of the language can help your students jumpstart their professional career in tech.

- ✓ Students develop fundamental JavaScript concepts and skills that can be leveraged throughout their career
- ✓ Students prepare for JSA certification exam to earn an industry-recognized certificate
- ✓ Students can highlight their new skills and certificate to apply for tech roles

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, career changers

**Estimated Time to Completion:** 50 Hours

**Prerequisites:** JavaScript Essentials 1, or similar knowledge, is recommended

**Course Delivery:** Instructor-led or Self-paced

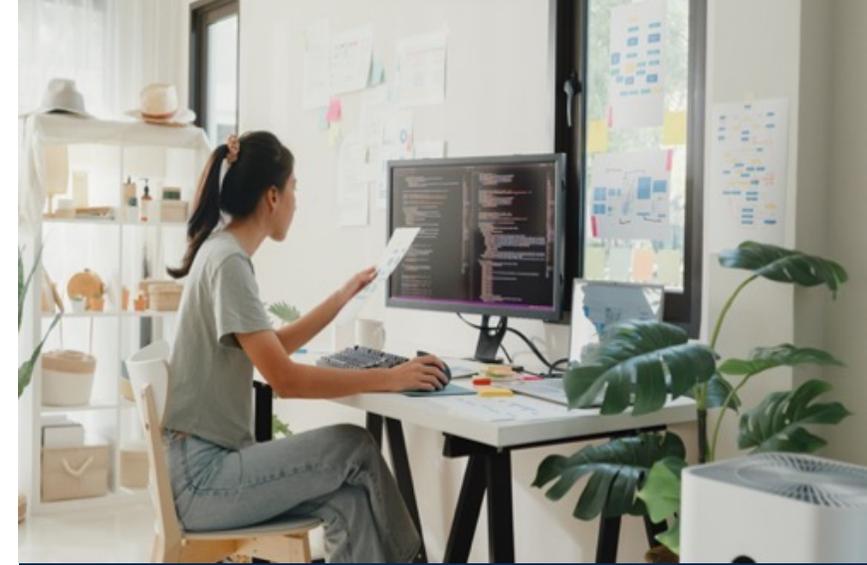
### Learning Component Highlights:

- 4 modules and 20+ practice and lab activities
- 1 final test

**Course Recognitions:** Digital badge

**Certification Alignment:** JSA – Certified Associate JavaScript Programmer

**Recommended Next Course:** DevNet Associate



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

This beginner course introduces the basics of programming in the C++ language and the fundamental notions and techniques used in object-oriented programming.

## Benefits

Learning to program in C++ will enhance your students critical thinking and logic skills. The C++ language provides a balanced mix of high-level and low-level language features. As a result, your students will gain a deep understanding of how software interacts with hardware, how data is stored and manipulated in memory, and how operating systems and other system software work.

- ✓ Learn the fundamentals of C++ and prepare for CPE certification
- ✓ Develop analytical skills using C++
- ✓ Explore data types, variables, operators, and more

## Course Details

**Target Audience:** Secondary, 2-year and 4-year college students

**Estimated Time to Completion:** 42 hours

**Prerequisites:** None

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 4 modules of interactive instructional content
- Practice labs
- Chapter and final exams

**Course Recognitions:** Certificate of Completion

**Certification Alignment:** CPE – C++ Certified Entry-Level Programmer Certification

**Recommended Next Course:** C++ Essentials 2



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with  
The C++ Institute

 C++ Institute  
Open Education & Development Group

# C++ Essentials 2

## Course Overview

Learners will build on their knowledge from C++ Essentials 1. They will learn the contrast between procedural and object-oriented programming (OOP) methodologies, class structures, inheritance, polymorphism, and more.

## Benefits

C++ is a pivotal language for real-time systems and for developing applications where performance is key, such as video games, simulations, or financial trading platforms. Learning C++ can expose your students to exciting projects and new career opportunities.

## Prepare for Careers

- ✓ Deepen your understanding of C++ and prepare for CPA certification
- ✓ Develop analytical and logical skills using C++
- ✓ Learn about object-oriented programming

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 42 hours

**Prerequisites:** C++ Essentials 1

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- ✓ 4 modules and practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** CPA – C++ Certified Associate Programmer certification.

**Recommended Next Course:**  
C++ Advanced



## Requirements

- ASC Alignment: Recommended
- Instructor Training Required: No
- Physical Equipment Required: No

Developed in collaboration with  
The C++ Institute

 C++ Institute  
Open Education & Development Group

## Course Overview

This advanced course teaches intermediate to advanced coding such as C++ template mechanism, understanding and using property template classes and methods, and the C++ STL library including solving common programming problems and the IO part.

## Benefits

Developing advanced C++ skills can set your students apart from their peers. They'll be better suited for roles that require specialized knowledge, such as systems programming, embedded systems development, and game development. This course is also a steppingstone for your students to become leaders in software.

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CPP certification exam
- ✓ Set yourself up to succeed in jobs related to software development, network engineering, and system administration

## Course Details

**Target Audience:** 2-year and 4-year college and university students

**Estimated Time to Completion:** 70 hours

**Prerequisites:** CPA: Programming Essentials in C++ course, CPA certification, or equivalent  
**Recommended Preparation:** C++ Essentials 1 & 2

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 9 modules of interactive instructional content
- 65 practice labs
- Chapter and final exams

**Course Recognitions:** None

**Certification Alignment:** CPP: C++ Certified Professional Programmer



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with  
The C++ Institute

 **C++ Institute**  
Open Education & Development Group

## Course Overview

Students will learn the basics of the C programming language, including the syntax, semantics, and data types unique to C.

## Benefits

Getting started with the C language provides learners with a solid grounding in computer programming. For beginners, understanding C can also make it easier to learn other languages, which often borrow concepts and syntax from C. Additionally, C is widely used in system programming, embedded systems, and high-performance computing—which means programmers that know C are in demand across various industries.

- ✓ Build C programming skills and prepare for CLE C Certified Entry-Level Programmer certification
- ✓ Develop analytical toolkit using C
- ✓ Learn about variables, data types, flow control, and more

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 40 hours

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- 5 modules and practice labs
- Interactive activities & quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** CLE – C Certified Entry Level Programmer certification

**Recommended Next Course:** C Essentials 2



## Requirements

- ASC Alignment: Recommended
- Instructor Training Required: Optional
- Equipment Required: Not Required

*Developed in collaboration with  
The C++ Institute*

## Course Overview

This course is designed for learners to explore intermediate C concepts like functions and structures. They will also learn how to work with files and streams and use preprocessor directives and complex declarations.

## Benefits

As learners progress to intermediate C programming, they'll tackle more complex problems that require deeper logical thinking and optimization strategies. This level of problem-solving will sharpen your learners' analytical skills.

- ✓ Dive into intermediate C programming and prepare for CLA – C Programming Language Certified Associate certification
- ✓ Develop a programming mindset using C
- ✓ Explore functions, structures, file handling, and preprocessor directives

## Course Details

**Target Audience:** Secondary and 2-Year college students, general audience

**Estimated Time to Completion:** 30 hours

**Prerequisites:** C Essentials 1

**Course Delivery:** Instructor-led

**Learning Component Highlights:**

- 3 modules and practice labs
- Interactive activities & quizzes
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Aligned:** CLA – C Programming Language Certified Associate certification

**Recommended Next Course:** C Advanced



## Requirements

- ASC Alignment: Recommended
- Instructor Training Required: Optional
- Equipment Required: Not Required

*Developed in collaboration with  
The C++ Institute*

## Course Overview

This course is designed for learners to explore the evolution of C, variable parameter handling, memory and string manipulation, internationalization (I18N), processes and threads, advanced data type operations, and network socket programming.

## Benefits

With advanced C skills, your learners will write optimized code that runs faster and uses resources more efficiently, a skill that is valuable in performance-critical applications like gaming engines or scientific computations. Proficiency in C can also set your learners apart in the job market.

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CLP certification exam
- ✓ Explore programming challenges like portability issues and undefined behaviors

## Course Details

**Target Audience:** 2-year and 4-year college and university students

**Estimated Time to Completion:** 70 hours

**Prerequisites:** CLA: Programming Essentials in C course, CLA certification, or equivalent

**Recommended Preparation:** C Essentials 1 & 2

**Course Delivery:** Instructor-led

### Learning Component Highlights:

- 8 modules of interactive instructional content
- 18 practice labs
- Quizzes, chapter and final exams

**Course Recognitions:** None

**Certification Alignment:** CLP: C Certified Professional Programmer



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with  
The C++ Institute



## Course Overview

This course is designed for learners who want to build a strong foundation in CSS for web development. It covers the essentials of CSS, including selectors, properties, layout techniques, responsive design, animations, and accessibility best practices.

## Benefits

CSS is an essential tool for creating visually appealing, structured, and responsive web pages. Used by companies worldwide, mastering CSS enables learners to build professional, user-friendly, and adaptive web experiences.

- ✓ Explore the world of web design and front-end development
- ✓ Learn to style and layout web content using CSS
- ✓ Build responsive and accessible web pages
- ✓ Develop a portfolio of projects to showcase your design skills

## Course Details

**Target Audience:** Secondary and two-year college students, aspiring web developers, graduates of HTML Essentials, and anyone interested in the fundamentals of web design.

**Estimated Time to Completion:** 30-40 hours

### Prerequisites:

No prior programming experience is required, but familiarity with HTML basics is recommended. Completion of HTML Essentials or equivalent knowledge will be beneficial.

**Course Delivery:** Instructor-led, Self-paced

### Learning Component Highlights:

- 9 modules and 9 practice labs
- Interactive activities and module quizzes
- Final exam
- WDA™ certification voucher discount

**Course Recognitions:** Digital badge

**Certification Alignment:** WDA™ – Certified Associate Web Developer

**Recommended Next Course:**  
JavaScript Essentials 1



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with  
 JS INSTITUTE  
Open Education & Development Group

## Course Overview

This course is designed for learners who want to build a strong foundation in web development. It covers the essentials of HTML, including document structure, text formatting, hyperlinks, multimedia integration, forms, and accessibility best practices.

## Benefits

HTML is the backbone of the web, used by companies worldwide to create structured and accessible web content. Mastering HTML opens the door to front-end development, web design, and user experience roles.

- ✓ Explore the world of web development
- ✓ Learn to structure and organize web content using HTML
- ✓ Build interactive and accessible web pages
- ✓ Develop a portfolio of projects to showcase your skills

## Course Details

**Target Audience:** Secondary and two-year college students, aspiring web developers, and anyone interested in learning the fundamentals of HTML and web development.

**Estimated Time to Completion:** 30-40 hours

**Prerequisites:**  
No prior programming experience is required.

**Course Delivery:** Instructor-led, Self-paced

### Learning Component Highlights:

- 6 modules and 6 practice labs
- Interactive activities and module quizzes
- Final exam
- WDE™ certification voucher discount

**Course Recognitions:** Digital badge

**Certification Alignment:** WDE™ – Certified Entry-Level Web Developer, WDA™ – Certified Associate Web Developer (after CSS Essentials)

**Recommended Next Course:**  
CSS Essentials



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



# Digital Literacy

## Course Overview

Beginner friendly course designed to help students grasp the fundamentals of digital tools and technologies, their impact and benefits on society and work, and how to manage a digital identity.

## Benefits

Equip your students with the skills to navigate the digital landscape with confidence and make informed decisions that can enhance their personal and professional lives today.

- ✓ Identify common tasks that could be made easier using digital technologies
- ✓ Build skills to search the internet more effectively
- ✓ Learn how to send and read emails
- ✓ Practice creating secure passwords using Password Strength Checker
- ✓ Explore how-to videos to solve basic technical problems, such as slow performance, Wi-Fi or connectivity issues
- ✓ Get introduced to AI (Artificial Intelligence)

## Course Details

**Target Audience:** High school, secondary and general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- ✓ 6 learning modules and 25 exercises
- ✓ 3 interactive practice activities
- ✓ 20 videos
- ✓ 1 self-assessment quiz
- ✓ 1 final exam

**Course Recognitions:** Digital badge

**Recommended Next Course:** Using Computer and Mobile Devices



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with



# Using Computer and Mobile Devices

## Course Overview

This course covers basic skills in how to use computer and mobile devices, including some features, hardware, operating systems, and software to access online services.

## Benefits

Today, there are more mobile-phones than people in the world, highlighting the critical need for digital literacy. Teaching student's practical digital skills lays the groundwork for enhanced employability, earning potential, social inclusion and support for overall health and well-being.

- ✓ Practice using trackpad & mouse.
- ✓ Build confidence with file management on Windows, Android, and using the Cloud.
- ✓ App and Software Management
- ✓ Navigate device connectivity, including wired vs cellular, LAN, Wi-Fi, and Bluetooth.
- ✓ Resolve common technical issues and reduce the environmental impact.
- ✓ Explore Generative AI and IoT technologies.

## Course Details

**Target Audience:** High School, secondary or vocational school and college/university students and general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- ✓ 4 learning modules and 25 exercises
- ✓ 8 interactive practice activities
- ✓ 20 videos
- ✓ 7 problem-solving scenarios
- ✓ 1 final exam

**Course Recognitions:** Digital badge



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with



# Create Digital Content, Communicate, and Collaborate Online

## Course Overview

This course covers the skills needed to create digital documents and the advantages of using digital tools and technologies for effective collaboration and enhanced productivity in hybrid and remote work settings. Explore best practices for common video-conferencing and project management tools.

## Benefits

The future of work is here, transforming how and where we work, with nearly 1 in 5 in the worldwide working remotely. Teaching students the fundamentals of collaborative digital tools can boost teamwork, enhance productivity skills, and improve social interactions both inside and outside of the workplace.

- ✓ Teach remote collaboration using tools like Webex, Discord, Asana, Trello and digital whiteboards.
- ✓ Explore digital content types: audio, image, text, video, applications and their formats.
- ✓ Create, edit, and manage digital documents.
- ✓ Word processing tasks: text editing, formatting, layout tools and inserting elements.
- ✓ Email etiquette: when and how to use CC, BCC & Reply All, clarity, conciseness, and proper use of language and tone.

## Course Details

**Target Audience:** High School, secondary or vocational school and college/university students and general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- 23 videos
- 3 learning modules + 1 summary module
- 5 interactive "Try Me, Show Me" practice activities
- 9 Problem Solving Scenarios
- 1 final exam

**Course Recognitions:** Digital badge



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with



## Course Overview

This beginner friendly course equips students with the essential knowledge and skills to protect their digital lives. Students will learn to mitigate online threats, protect their data, and get tips to maintain a healthy digital lifestyle.

## Benefits

Empower your students to navigate the digital world safely and cultivate responsible digital citizenship. Equip them with skills to safeguard their digital presence in everyday online interactions.

- ✓ Identify and respond to online threats including phishing and malware.
- ✓ Practice running full computer scans, changing a PIN code in Windows, and updating router firmware.
- ✓ Explore deep fakes, misconceptions about the Dark Web, and safeguards to protect young users online
- ✓ Understand the risks digital technologies pose to our mental and physical health and well-being.
- ✓ Explore Eco-influence, highlighting digital literacy and environmental awareness.

## Course Details

**Target Audience:** High school, secondary and general audience

**Estimated Time to Completion:** 6 hours

**Prerequisites:** None

**Course Delivery:** Self-paced and Instructor-led

### Learning Component Highlights:

- 4 learning modules
- 21 videos with exercises
- 12 problem-solving tips
- 5 interactive practice activities
- 1 final exam

**Course Recognitions:** Digital badge

**Certification Alignment:** OpenEDG Digital Literacy certification

**Recommended Next Course:** Introduction to Cybersecurity



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

Developed in collaboration with



# Professional Skills

## Course Overview

The course teaches English language in the context of IT. It covers grammar, vocabulary, reading, and listening skills with some limited writing—focusing on essential terminology and phrases used in technology. The learner will gain upper-intermediate level language skills and prepare for the English for IT B2 / GSE 59-75 certification exam.

## Benefits

In a survey of 500 IT employers, 89% said they require employees to have at least some proficiency in English. (Source: Indeed, "Why English Proficiency is Important in the Tech Industry," 2020). Teaching students the essentials will help them land a job.

- ✓ Students learn to express themselves accurately and confidently with digestible grammar videos
- ✓ Teach how to incorporate idioms into everyday conversations
- ✓ Develop language skills in a fun and interactive way with exercises that deepen understanding.

## Course Details

**Target Audience:** Late-stage K12 and Higher Education students and IT professionals early in their careers

**Estimated Time to Completion:** 40-50 hours

**Prerequisites:** Learners should be at B1-level English (lower intermediated)  
**Recommended Preparation:** None

**Course Delivery:** Instructor Led or Self-Paced

### Learning Component Highlights:

- 11 listening videos, 29 grammar videos, 6 idiom videos, 3 interview videos
- 70+ grammar and vocabulary exercises

**Course Recognitions:** Digital Badge

**Certification Alignment:** Completing both courses align with the English for IT B2 / GSE 59-75 certification exam

**Recommended Next Course:** Career Preparation Workshop



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

Developed in collaboration with



## Course Overview

In this course, your students will learn to identify, prioritize, and engage with stakeholders. They will learn essential personal and social skills through practical, actionable learnings in the context of authentic work scenarios. This course emphasizes the critical role stakeholders play in every project and provides tools that enable students to effectively identify, prioritize and engage with stakeholders for success.

## Benefits

Teaching your students how to engage with stakeholders is critical to having a successful and long professional career.

- ✓ Help students gain stakeholder skills that are transferable to any industry
- ✓ Teach about common pitfalls when working with stakeholders
- ✓ Support your students in practicing stakeholder interview techniques

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, and career changers

**Estimated Time to Completion:** 3 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Instructor Led or Self-Paced

**Learning Component Highlights:**

- 3 modules
- 24 Interactive activities
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Creating Compelling Reports



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Creating Compelling Reports

## Course Overview

Learning to develop compelling reports is a superpower that will help your students stand out in their professional careers. In this course, your students will learn to captivate their audience and communicate important information. From analyzing data to presenting insights, students will receive hands-on training to learn to develop great reports.

## Benefits

This course will teach the skills to create impactful reports that drive team results. Learning to create compelling reports will also help your students gain visibility and recognition in their careers.

- ✓ Help students gain reporting skills that are transferable to any industry
- ✓ Teach students how to shape their reports by making key authoring decisions
- ✓ Support your students in implementing appropriate design choices based on report requirements

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, and career changers

**Estimated Time to Completion:** 4 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Instructor Led or Self-Paced

**Learning Component Highlights:**

- 4 modules
- 24 Interactive activities
- 1 final test

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Discovering Entrepreneurship



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Discovering Entrepreneurship

## Course Overview

This course covers entrepreneurship fundamentals, including the entrepreneurial perspective, identifying opportunities, and crafting your entrepreneurial story. Offering a solid foundation for anyone interested in developing entrepreneurial skills.

## Benefits

The demand for well-rounded candidates continues to grow. Teaching your students entrepreneurship fundamentals can help them develop a solutions-oriented approach to challenges in the workplace and in the global market.

- ✓ Develop skills for Entrepreneurial Specialist job roles
- ✓ Offer learners anywhere a launch point to analyzing entrepreneurial opportunity and creating successful strategies in the market
- ✓ Build entrepreneurial skills through cutting edge entrepreneur frameworks including lean canvas, real-world examples and extended branching activities

## Course Details

**Target Audience:** High School, Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 20 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Instructor Led or Self-Paced

### Learning Component Highlights:

- 15 modules & quizzes
- 4 extended branching activities
- Interactive activities & quizzes
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Launching a Business Venture



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

# Launching a Business Venture

## Course Overview

This course covers a comprehensive mix of entrepreneurial principles essential to launching a business venture. Gain a working knowledge of key business concepts, including lean startup, marketing tools and techniques, and sales and customer service.

## Benefits

Technology is evolving fast and continues to fuel startup development. Teaching your students key skills needed to launch tech-enabled ventures can help reshape the future of IT and drive economic growth.

- ✓ Teach with real-world scenarios and challenges entrepreneurs face
- ✓ Demystify the critical steps to advance a business idea from planning to launch
- ✓ Discover the secrets of successful business launches and the top reasons why ventures fail
- ✓ Develop a multi-disciplinary approach to problem-solving, transferable to any career

## Course Details

**Target Audience:** High School, Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 20 hours

**Prerequisites:** None

**Recommended Preparation:** Discovering Entrepreneurship

**Course Delivery:** Instructor Led or Self-Paced

### Learning Component Highlights:

- 16 modules & quizzes
- 70 practice activities
- 3 immersive interactive scenarios
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Managing a Business Venture



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

# Managing a Business Venture

## Course Overview

This course covers strategic business management and operational planning skills essential to managing a business venture. Gain in-depth knowledge of key concepts, including designing a startup plan, finance and accounting strategies, capital acquisition, and building your entrepreneurial dream team.

## Benefits

Cultivating a strong business acumen is a hot skill that can add value to any organization. Teaching your students critical management skills can open doors to a multitude of career opportunities and set the stage for entrepreneurial success.

- ✓ Teach accounting basics for entrepreneurs
- ✓ Identify business structure options to understand legal, tax and risk issues
- ✓ Demystify the art of networking to help students build and connect to professional networks
- ✓ Create a Dream Venture Document and explore the Cisco Global Problem Solver Challenge

## Course Details

**Target Audience:** High School, Secondary or vocational school and college/university students, general audience

**Estimated Time to Completion:** 20 hours

**Prerequisites:** None

**Recommended Preparation:** Discovering Entrepreneurship & Launching A Business Venture

**Course Delivery:** Instructor Led or Self-Paced

### Learning Component Highlights:

- 13 modules & quizzes
- 61 practice activities
- 3 in-depth branching interactives
- 10 Dream Venture Document exercises
- 1 final exam

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** None



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

In this course, students will dive into career planning, personality assessments, resume development, and interview preparation, equipping them with the tools for successful job hunting. The course also covers social media presence and mentorship, ensuring students stand out in today's digital world.

## Benefits

Students will develop crucial skills often overlooked in traditional curriculums, such as resume development, interview preparation, and career planning. These skills will enhance their employability and empower them to navigate the job market with confidence and stand out in a competitive environment.

- ✓ Craft your resume and prepare to confidently navigate job interviews
- ✓ Gain a better understanding of your career goals and plan your career trajectory
- ✓ Manage your social media presence for professional purposes

## Course Details

**Target Audience:** High school, secondary and 2-year college vocational students, IT and non-IT fields university students, and career changers

**Estimated Time to Completion:** 8 hours

**Prerequisites:** None  
**Recommended Preparation:** None

**Course Delivery:** Self-Paced

**Learning Component Highlights:**

- 8 modules
- 5 Interactive labs
- 1 final quiz

**Course Recognitions:** Digital Badge

**Certification Alignment:** None

**Recommended Next Course:** Engaging Stakeholders for Success



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not Required

# Cisco Packet Tracer

## Course Overview

This short on-ramp course introduces Cisco Packet Tracer, an innovative network simulation and visualization tool. Teaches how to download Cisco Packet Tracer, navigate the simulation environment, and practice building a network using everyday examples.

## Benefits

Provides valuable tips, best practices, and builds confidence using this powerful tool offered in many courses.

- ✓ Installs the powerful simulation and visualization tool.
- ✓ Practice networking, cybersecurity, and IoT skills by using Cisco Packet Tracer.

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 2 Hours

**Prerequisites:** None

**Recommended Preparation:** None

**Course Delivery:** Instructor-guided or Self-paced

### Learning Component Highlights:

- 2 modules
- 1 Cisco Packet Tracer Tutored Activity 1  
Cisco Packet Tracer Activity
- 1 assessment

**Course Recognitions:** None

**Certification Alignment:** None

**Recommended Next Course:** Exploring Networking with Cisco Packet Tracer, Exploring IoT with Cisco Packet Tracer



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

In this course, learners create and explore a small office network using Cisco Packet Tracer. Teach how to connect and configure devices in a network, including wireless devices, and how to manage and monitor a network.

## Benefits

Offers valuable tips and practices networking skills using Cisco Packet Tracer.

- ✓ Teach how to connect and configure devices in a small office network using Packet Tracer
- ✓ Show how packets travel across a network using Simulation Mode
- ✓ Explore how a network controller can be used to manage and configure a network

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 3 Hours

**Prerequisites:** Getting Started with Cisco Packet Tracer course

**Recommended Preparation:** None

**Course Delivery:** Instructor-guided or Self-paced

### Learning Component Highlights:

- 2 modules
- 1 Cisco Packet Tracer Tutored Activity (PTTA)
- 7 Cisco Packet Tracer Activity
- 1 assessment

**Course Recognitions:** None

**Certification Alignment:** None

**Recommended Next Course:** Exploring IoT with Cisco Packet Tracer



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

## Course Overview

This course teaches how to set up a smart home network using Cisco Packet Tracer, how to add IoT devices to a home network, and then connect, configure, and monitor them. Learners become more familiar with IoT devices and how they can be programmed. Learners will create their own IoT device and use it in a simulated smart home network.

## Benefits

- ✓ Practice IoT (Internet of Things) skills using Cisco Packet Tracer.
- ✓ Connect and monitor devices in a smart home network.
- ✓ Modify and monitor environment elements that may affect IoT devices.
- ✓ Create and modify an IoT Thing in Cisco Packet Tracer.

## Course Details

**Target Audience:** General audience

**Estimated Time to Completion:** 3 Hours

**Prerequisites:** : Getting Started with Cisco Packet Tracer course

**Recommended Preparation:** None

**Course Delivery:** Instructor-guided or Self-paced

**Learning Component Highlights:**

- 2 modules
- 6 Cisco Packet Tracer Activity
- 1 assessment

**Course Recognitions:** None

**Certification Alignment:** None

**Recommended Next Course:** Exploring Networking with Cisco Packet Tracer



## Requirements

- ASC Alignment: Recommended
- Instructor Training: Optional
- Physical Equipment: Not required

**Teach with us**  
**[netacad.com/educators](https://netacad.com/educators)**

