Networking Academy

Course Catalog

March 2023

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Networking
CISCO Academy
Empowering all people
with career possibilities

Networking Academy

Skills-to-Jobs Curriculum

A comprehensive portfolio

Networking

Gain hands-on, relevant networking skills

Programmable Infrastructure

Learn programming, infrastructure automation, and Internet of Things

Cybersecurity

Learn to secure and defend networks

Operating Systems and IT

Essential skills for the digital world

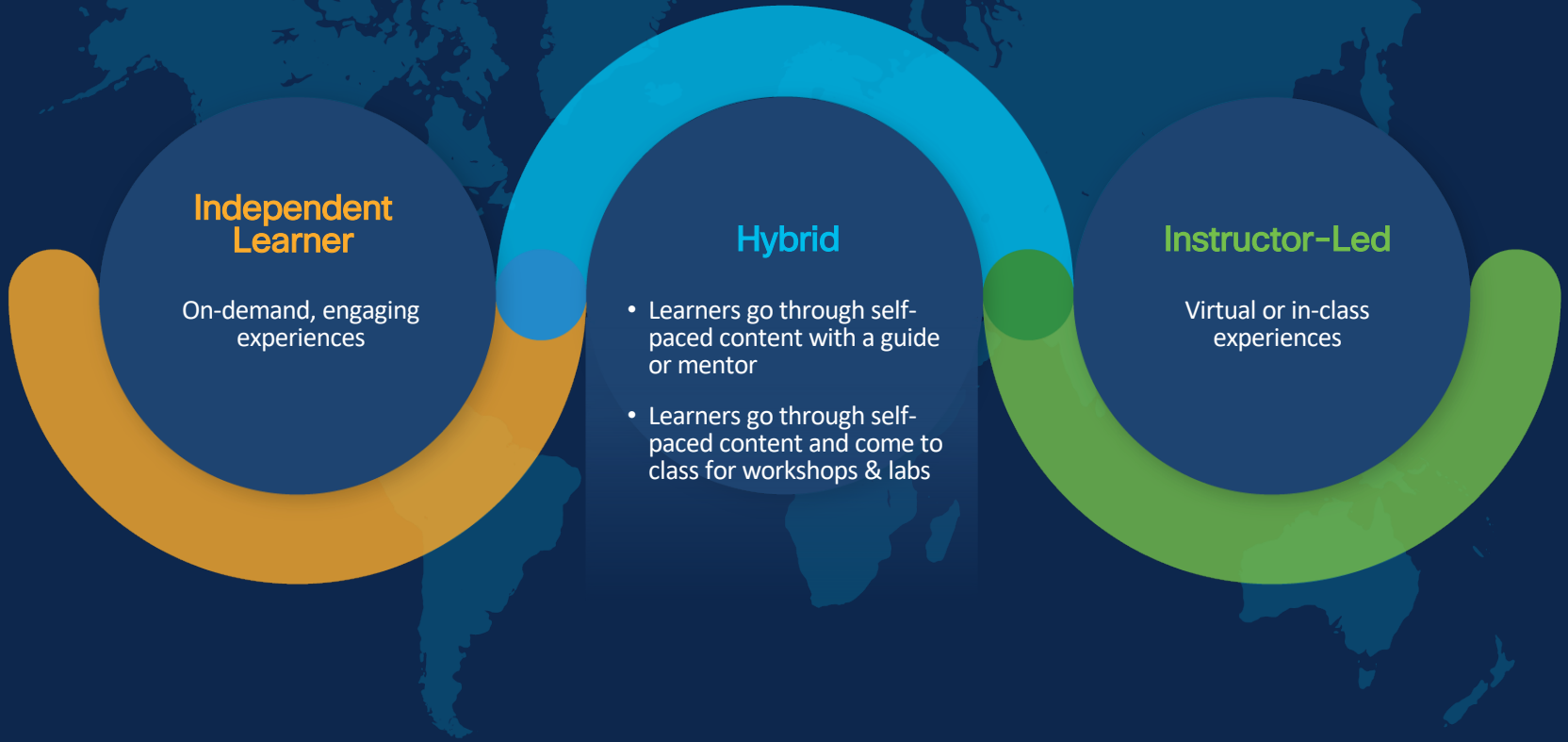
Programming

Learn to code in languages like Python, C, or C++

Practice

Interactive tools and experiences build real skills, not just knowledge

Flexible choices for learners and educators



Skills-to-Jobs Learning Platforms

More teaching & learning options to expand access for underserved and underrepresented communities and meet learners wherever they are

- Entry point for tech curious learners, with career pathways to entry-level certifications and job matching
- Free, mobile-friendly, self-paced courses
- Academies can leverage pre-built, engaging content to meet learners earlier in their learning journeys
- Greenfield innovation space where we are building out our new teaching & learning experience with interactive, adaptive, and game-based learning

- Entry point for learners pursuing tech careers, with courses aligned to entry- and associate-level certifications and job matching
- Free curriculum for academies to offer instructor-led courses
- Course progression from Skills for All prepares learners for instructor-led courses
- Existing teaching experience maintains continuity for educators as we build out our next-gen teaching & learning experience

Building towards a future experience

We are working to bring our two spaces into one seamless experience, combining the innovations developed on Skills for All with our rich partner and academy ecosystem.

Greenfield innovation space

Continuity for educators

1 Unified platform

(new netacad.com)

Curriculum Portfolio

Networking

Networking

Networking Essentials

- Networking Basics
- Networking Devices and Initial Configuration
- Network Addressing and Basic Troubleshooting

CCNA: Introduction to Networks

CCNA: Switching, Routing, and Wireless Essentials

CCNA: Enterprise Networking, Security, & Automation

CCNP Enterprise: Core Networking

CCNP Enterprise: Advanced Networking

Automation

DevNet Associate

Workshop: Experimenting with REST APIs

Workshop: Model-Driven Programmability

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- Endpoint Security
- Network Defense
- Cyber Threat Management

CyberOps Associate

Network Security

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Introduction to Data Science

Data Analytics Essentials

Operating Systems & IT

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Operating System Basics

IT Essentials

Linux Unhatched

Linux Essentials

Linux I

Linux II

Programming

PCAP: Programming Essentials in Python

- Python Essentials 1
- Python Essentials 2

JavaScript Essentials 1

CLA: Programming Essentials in C

CPA: Programming Essentials in C++

CLP: Advanced Programming in C

CPP: Advanced Programming in C++

Digital Literacy

Get Connected

Introduction to IoT and Digital Transformation

Practice

Cisco Packet Tracer

Getting Started with Cisco Packet Tracer

Exploring Networking with Cisco Packet Tracer

Exploring IoT with Cisco Packet Tracer

Additional Tools

Virtual labs

Remote accessible labs

Gamification

Physical equipment

Assessments

Curriculum Portfolio Details

Course	SkillsForAll.com		NetAcad.com		Aligns to Certification or Certificate	Digital Badge	Instructor Training Required	ASC Alignment Required	Physical Equipment Required
	Self-Paced	Instructor-Guided	Self-Paced	Instructor-Led					
NETWORKING									
Networking Essentials	✓	✓	✓	✓		✓	Optional		
Networking Basics	✓	✓				✓			
Networking Devices and Initial Configuration	✓	✓				✓			
Network Addressing and Basic Troubleshooting	✓	✓				✓			
CCNA: Introduction to Networks				✓		✓	✓	✓	✓ Packet Tracer option available
CCNA: Switching, Routing, and Wireless Essentials				✓	✓	✓	✓	✓	✓ Packet Tracer option available
CCNA: Enterprise Networking, Security & Automation				✓		✓	✓	✓	✓ Packet Tracer option available
CCNP Enterprise: Core Networking				✓	✓	✓	✓	✓	✓
CCNP Enterprise: Advanced Routing				✓	✓	✓	✓	✓	✓
DevNet Associate				✓	✓	✓	✓	✓	
Workshop: Experimenting with REST APIs				✓				✓	
Workshop: Model-Driven Programmability				✓		✓		✓	

Curriculum Portfolio Details

Course	SkillsForAll.com		NetAcad.com		Aligns to Certification or Certificate	Digital Badge	Instructor Training Required	ASC Alignment Required	Physical Equipment Required
	Self-Paced	Instructor-Guided	Self-Paced	Instructor-Led					
CYBERSECURITY									
Introduction to Cybersecurity	✓	✓	✓	✓		✓			
Cybersecurity Essentials	✓	✓	✓	✓		✓			
Endpoint Security	✓	✓				✓			
Network Defense	✓	✓			✓	✓			
Cyber Threat Management	✓	✓				✓			
CyberOps Associate				✓	✓	✓	✓	✓	
Network Security				✓		✓	✓	✓	✓
Cloud Security			✓		✓				

Curriculum Portfolio Details

Course	SkillsForAll.com		NetAcad.com		Aligns to Certification or Certificate	Digital Badge	Instructor Training Required	ASC Alignment Required	Physical Equipment Required
	Self-Paced	Instructor-Guided	Self-Paced	Instructor-Led					
DATA SCIENCE									
Introduction to Data Science	✓	✓				✓			
Data Analytics Essentials	✓	✓				✓			
OPERATING SYSTEMS & INFORMATION TECHNOLOGY (OS & IT)									
Computer Hardware Basics	✓	✓				✓			
Operating System Basics	✓	✓				✓			
IT Essentials				✓	✓	✓		✓	✓
NDG Linux Unhatched			✓						
NDG Linux Essentials			✓	✓	✓				
NDG Linux I			✓	✓	✓				
NDG Linux II			✓	✓	✓				

Networking Academy

Curriculum Portfolio Details

Course	SkillsForAll.com		NetAcad.com		Aligns to Certification or Certificate	Digital Badge	Instructor Training Required	ASC Alignment Required	Physical Equipment Required
	Self-Paced	Instructor-Guided	Self-Paced	Instructor-Led					
PROGRAMMING									
PCAP: Programming Essentials in Python			✓	✓	✓				
Python Essentials 1	✓	✓			✓	✓			
Python Essentials 2	✓	✓			✓	✓			
JavaScript Essentials 1			✓	✓	✓				
CLA: Programming Essentials in C				✓	✓				
CLP: Advanced Programming in C				✓	✓				
CPA: Programming Essentials in C++			✓	✓	✓				
CPP: Advanced Programming in C++				✓	✓				
DIGITAL LITERACY									
Get Connected			✓	✓					
Introduction to IoT and Digital Transformation	✓	✓				✓			
PRACTICE									
Getting Started with Cisco Packet Tracer	✓	✓							
Exploring Networks with Cisco Packet Tracer	✓	✓				✓			
Exploring IoT with Cisco Packet Tracer	✓	✓							

Language Availability

Skills for All Course Languages

	Arabic	Azerbaijani	Chinese-Simplified	Chinese-Traditional	Croatian	Dutch	English	French	Georgian	German	Greek	Hebrew	Hindi	Hungarian	Indonesian	Italian	Japanese	Kazakh	Korean	Polish	Portuguese-Brazil	Portuguese-Portugal	Romanian	Russian	Spanish	Turkish	Ukrainian
Introduction to Cybersecurity							✓	✓													✓				✓		✓
Networking Basics							✓																		✓		
Networking Devices and Initial Configuration							✓																		✓		
Endpoint Security							✓																		✓		
Network Defense							✓																		✓		
Cyber Threat Management							✓																		✓		
Introduction to IoT and Digital Transformation							✓																				
Getting Started with Cisco Packet Tracer							✓	✓													✓				✓		✓
Exploring Networking with Cisco Packet Tracer							✓																				
Exploring IoT with Cisco Packet Tracer							✓																				
Python Essentials 1							✓																				
Cybersecurity Essentials							✓																				
Networking Essentials							✓																				

NetAcad.com Course Languages

	Arabic	Azerbaijani	Chinese-Simplified	Chinese-Traditional	Croatian	Dutch	English	French	Georgian	German	Greek	Hebrew	Hindi	Hungarian	Indonesian	Italian	Japanese	Kazakh	Korean	Polish	Portuguese-Brazil	Portuguese-Portugal	Romanian	Russian	Spanish	Turkish	Ukrainian
NETWORKING																											
Networking Essentials (version 1.0)*	✓		✓					✓		✓							✓				✓			✓	✓		
CCNA: Introduction to Networks	✓		✓	✓			✓	✓		✓				✓		✓	✓			✓	✓			✓	✓	✓	✓
CCNA: Switching, Routing, and Wireless Essentials	✓		✓	✓			✓	✓		✓						✓	✓			✓	✓			✓	✓	✓	✓
CCNA: Enterprise Networking, Security, and Automation	✓		✓	✓			✓	✓		✓						✓	✓			✓	✓			✓	✓	✓	✓
CCNP Enterprise: Core Networking							✓																				
CCNP Enterprise: Advanced Routing							✓																				
OS & IT																											
Get Connected			✓	✓			✓	✓		✓			✓			✓					✓	✓			✓		
IT Essentials	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓
NDG Linux Unhatched							✓	✓		✓						✓					✓				✓		
NDG Linux Essentials							✓																		✓		
NDG Linux I and II							✓																				

*Legacy Course

NetAcad.com Course Languages

	Arabic	Azerbaijani	Chinese-Simplified	Chinese-Traditional	Croatian	Dutch	English	French	Georgian	German	Greek	Hebrew	Hindi	Hungarian	Indonesian	Italian	Japanese	Kazakh	Korean	Polish	Portuguese-Brazil	Portuguese-Portugal	Romanian	Russian	Spanish	Turkish	Ukrainian
PROGRAMMING																											
PCAP - Programming Essentials in Python							✓													✓		✓			✓	✓	
JavaScript Essentials 1 (JSE)							✓																		✓		
CLA: Programming Essentials in C							✓																				
CLP: Advanced Programming in C							✓																				
CPA: Programming Essentials in C++							✓																				
CPP: Advanced Programming in C++							✓																				
PROGRAMMABLE INFRASTRUCTURE																											
DevNet Associate			✓				✓	✓																	✓		
Emerging Technologies Workshop - Experimenting with REST APIs using Webex Teams							✓																				
Emerging Technologies Workshop - Model Driven Programmability							✓																				
IoT Fundamentals: Connecting Things			✓				✓	✓		✓															✓		✓
IoT Fundamentals: Big Data & Analytics			✓				✓	✓																	✓		
IoT Fundamentals: Hackathon Playbook							✓																		✓		✓

*Legacy Course

NetAcad.com Course Languages

	Arabic	Azerbaijani	Chinese-Simplified	Chinese-Traditional	Croatian	Dutch	English	French	Georgian	German	Greek	Hebrew	Hindi	Hungarian	Indonesian	Italian	Japanese	Kazakh	Korean	Polish	Portuguese-Brazil	Portuguese-Portugal	Romanian	Russian	Spanish	Turkish	Ukrainian
CYBERSECURITY																											
Introduction to Cybersecurity (version 2.x)*	✓		✓			✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Cybersecurity Essentials (version 1.x)*		✓	✓					✓	✓	✓							✓				✓	✓		✓	✓		✓
CyberOps Associate			✓				✓	✓													✓				✓		
Cloud Security							✓																				
Network Security							✓														✓						
IoT Security			✓				✓																				

*Legacy Course

Course Offerings

Networking

Networking Basics

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.

Explore Opportunities in Technology

- ✓ 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: 25 hours

Prerequisites: None

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 17 modules and 13 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

Course Recognitions: Digital Badge

Certification Alignment: This course is part of the **Cybersecurity Career-Path** which aligns to the CCST Cybersecurity Certification

Recommended Next Course:
Networking Devices and Initial Configuration

skillsforall.com

Requirements & Resources

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

Networking Devices and Initial Configuration

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.

Explore Opportunities in Technology

- ✓ 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: 25 hours

Prerequisites: Networking Basic or equivalent knowledge

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 12 modules and 17 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

Course Recognitions: Digital Badge

Certification Alignment: This course is part of the **Cybersecurity Career-Path** which aligns to the CCST Cybersecurity Certification

Recommended Next Course:
Network Addressing and Basic Troubleshooting

skillsforall.com

Requirements & Resources

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

Networking Addressing and Basic Troubleshooting

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 providing customer support that prepares them for a wide variety of IT career paths.

Explore Opportunities in Technology

- ✓ 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 switches and routers.
- ✓ Teach the basic troubleshooting for network connectivity issues.

Course Details

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

Estimated Time to Completion: 20-25 hours

Prerequisites: Networking Devices and Initial Configuration or equivalent knowledge

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 8 modules and 8 practice labs
- ✓ Interactive activities and quizzes
- ✓ 1 final test

Course Recognitions: Digital Badge

Recommended Next Course:
CCNA: Switching, Routing and Wireless Essentials

View Course

Requirements & Resources

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

Networking Essentials

Course Overview

Networking Essentials teaches networking based on environments learners may encounter in daily life, including small office and home office networking. This course provides an engaging, self-paced learning experience using Packet Tracer simulation, interactive activities, and learning everyday devices found at home.

Benefits

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

Prepares for Careers

- ✓ For developers, cybersecurity, business analysts, or other professionals: gain essential networking knowledge
- ✓ For students: a launch point for many career pathways, from cybersecurity to software to business and more

View Course

Course Details

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

Estimated Time to Completion: 70 hours

Prerequisites: None

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:

- ✓ 20 modules and 19 practice labs
- ✓ 24 Cisco Packet Tracer activities
- ✓ 130+ interactive activities, videos, & quizzes
- ✓ 5 module exams
- ✓ 1 final exam

Course Recognitions: Digital Badge

Certification Alignment: This course is part of the Cybersecurity Career- Path which aligns to the CCST Cybersecurity Certification and the Network Technician Career Path

Recommended Next Course:
Endpoint Security

Requirements

- ASC Alignment Required: No
- Instructor Training Required: Optional
- Physical Equipment Required: No (uses Packet Tracer and devices found at home)

CCNA: Introduction to Networking (ITN)

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.

Prepare for Careers

- ✓ 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: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course:
CCNA: Switching, Routing, and Wireless Essentials (SRWE)

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes*
- Discount Availability: Not Applicable

*Includes Distance Learning option with Packet Tracer if lab equipment is not available

Certification Aligned
Cisco Certified Networking Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

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.

Prepare for Careers

- ✓ 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: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course:
CCNA: Enterprise Networking, Security, and Automation (ENSA)

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes*
- Discount Availability: Not Applicable

*Includes Distance Learning option with Packet Tracer if lab equipment is not available

Certification Aligned
Cisco Certified Networking Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

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).

Prepare for Careers

- ✓ 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: Certificate of Completion, Letter of Merit, Digital Badge

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

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes*
- Discount Availability: Yes

*Includes Distance Learning option with Packet Tracer if lab equipment is not available

Certification Aligned
Cisco Certified Networking Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

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.

Prepare for Careers

- ✓ 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

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: Certificate of Completion, Letter of Merit, Digital Badge

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

Networking

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Certification Aligned
Cisco Certified Networking Professional

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

CCNP Enterprise: Advanced Routing (ENARSI)

Course Overview

This second of the 2-course CCNP Enterprise series focuses on implementation and troubleshooting of advanced routing and redistribution for OSPF, EIGRP and BGP along with VPN technologies, infrastructure security and management tools used in Enterprise networks.

Benefits

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

Prepare for Careers

- ✓ Develop skills for professional-level networking roles
- ✓ Prepare for Cisco Enterprise Advanced Routing & Services exam (300-410 ENARSI) to earn a CCNP 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

Recommended Preparation: ENCOR 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: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course:
Broaden your skills with DevNet Associate, CyberOps Associate, Python, or Emerging Technologies Workshops

Networking

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Certification Aligned
Cisco Certified Networking Professional

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Data Science

Introduction to 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.

Explore Opportunities in Technology

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

[View Course]

Course Details

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

Estimated Time to Completion: 6 hours

Prerequisites: None

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:

- ✓ 4 modules
- ✓ 5 practice lab activities
- ✓ 1 interactive pivot table widget
- ✓ 13 videos
- ✓ Knowledge checks and module quizzes
- ✓ Final exam

Course Recognitions: Digital Badge

Recommended Insertion Points: A great start for learners exploring the area of data science along with machine learning, artificial intelligence, analytics and big data.

Requirements & Resources

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

Networking Academy

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.

Prepares for Careers

- ✓ SQL and Excel, used in every organization
- ✓ 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

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:

- ✓ 9 modules
- ✓ 26 practice labs
- ✓ 42 videos
- ✓ 90 practice opportunities
- ✓ 9 module exams
- ✓ 1 final exam

Course Recognitions: Digital Badge

Recommended Next Course: Python Essentials 1

View Course

Requirements

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

Operating Systems & Information Technology

Get Connected

Course Overview

Get Connected students are introduced to the Internet and experiment with various social networking sites. Talking characters and devices make this course a user-friendly environment for an audience new to Information Technology (IT).

Benefits

The digital world is upon us both personally and professionally. Gain essential skills like basic computer skills, such as how to use a computer, connect devices, and access search, email, and social media.

Explore Opportunities in Technology

- ✓ Develop your digital basics
- ✓ Start exploring the many career possibilities these skills can open up for you

Course Details

Target Audience: Secondary and general audience new to IT

Estimated Time to Completion: 30 hours

Prerequisites: None

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ 5 chapters
- ✓ Illustrations and narrations guide students through topics
- ✓ Interactive activities, videos, & quizzes

Course Recognitions: Certificate of Completion

Recommended Next Course:
IT Essentials

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Not Applicable

Career Advice
Tips for getting started in your career

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Computer Hardware Basics

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.

Explore Opportunities in Technology

- ✓ Develop your digital basics
- ✓ Start exploring the many career possibilities these skills can open up for you

Course Details

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

Estimated Time to Completion: 6 hours

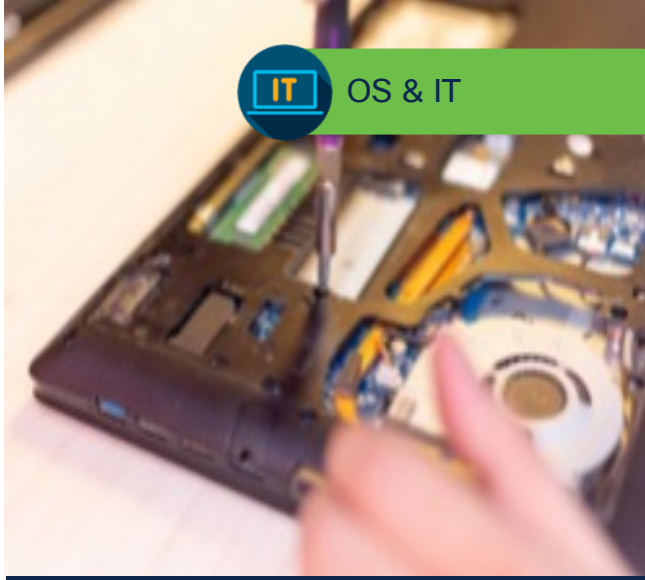
Prerequisites: None

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 3 modules
- ✓ Practice items, labs and quizzes
- ✓ 1 final exam

Course Recognitions: Digital Badge

Recommended Next Course:
Introduction to Networks, Networking Basics, IT Essentials



Requirements & Resources

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

Career Advice
Tips for getting started in your career

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Operating Systems Basics

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.

Explore Opportunities in Technology

- ✓ Develop your digital basics
- ✓ Start exploring the many career possibilities these skills can open up for you

Course Details

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

Estimated Time to Completion: 12 hours

Prerequisites: None

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 8 modules and 18 practice labs
- ✓ Checkpoints and quizzes
- ✓ 1 final test

Course Recognitions: Digital Badge

Recommended Next Course:
Introduction to Networks, Networking Basics, IT Essentials

Requirements & Resources

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

Career Advice
Tips for getting started in your career

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

IT Essentials

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!

Prepare for Careers

- ✓ 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

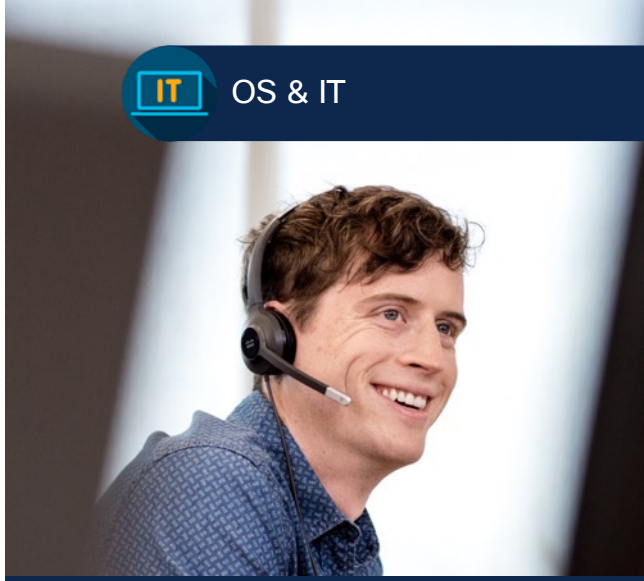
Prerequisites: None

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: Certificate of Completion, Digital Badge, Letter of Merit

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



Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: No
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Certification Aligned
CompTIA A+ Certification

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

NDG Linux Unhatched

Course Overview

This course covers introductory back-end operating system knowledge by teaching basic installation and configuration of Linux and introducing the Linux command line.

Benefits

Learners ease into acquiring Linux knowledge without having to commit to more than 8 total hours of self-paced learning, guided step-by-step with a series of hands-on virtual machine activities.

Explore Opportunities in Technology

- ✓ Wade into the shallow end of Linux and see whether it's for you or not
- ✓ Develop your digital basics
- ✓ Start exploring the many career possibilities these skills can open up for you

Course Details

Target Audience: Secondary and general audience new to IT

Estimated Time to Completion: 6-8 hours

Prerequisites: None

Course Delivery: Self-paced

Learning Component Highlights:
- ✓ 1 module
- ✓ 20 pages
- ✓ Built-in Linux machine with activities
- ✓ 1 assessment

Course Recognitions: Letter of Completion

Recommended Next Course:
NDG Linux Essentials

In partnership with NDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Not Applicable

Career Advice
Tips for getting started in your career

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

NDG Linux Essentials

Course Overview

This course teaches fundamentals of the Linux operating system, command line, and open source programming concepts.

Benefits

Nearly every IT job requires some Linux knowledge. Gain hands-on practice with Linux commands through the Linux virtual machine embedded in the course.

Prepare for Careers

- ✓ Develop fundamental operating system skills for entry-level IT jobs
- ✓ Prepare for LPI certificate exam
- ✓ Fulfill prerequisites to pursue more specialized IT and networking skills

Course Details

Target Audience: Secondary and 2-year college students

Estimated Time to Completion: 70 hours

Prerequisites: None

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ 16 chapters and 13 practice labs
- ✓ Built-in virtual machine to experiment with Linux commands
- ✓ Learner-directed activities
- ✓ Chapter, midterm, and final exams

Course Recognitions: Letter of Completion

Recommended Next Course:
NDG Linux I

In partnership with NDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certification Aligned
Linux Professional Institute (LPI) Linux Essentials Professional Development Certificate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

NDG Linux I and II

Course Overview

A 2-course series for aspiring Linux system administrators. Covers performing maintenance tasks on the command line, installing and configuring a computer running Linux, and configuring basic networking, using virtual machines running Linux.

Benefits

More rigorous and comprehensive than NDG Linux Essentials, this course develops your Linux mastery. Gain hands-on practice with Linux commands through the Linux virtual machine embedded in the course.

Prepare for Careers

- ✓ Develop skills for careers in cloud computing, cybersecurity, information systems, networking, programming, software development, big data, and more
- ✓ Prepare for LPIC-1 certification exams

Course Details

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

Estimated Time to Completion: 140 hours

Recommended Preparation: NDG Linux Essentials or equivalent

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ Built-in virtual machine to experiment with Linux commands
- ✓ Practice labs and activities
- ✓ Chapter, midterm, and final exams

Course Recognitions: Letter of Completion

Recommended Next Course:
DevNet Associate

In partnership with NDG

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes
- Cost: Fee for self-paced classes. Cost for instructor-led classes is determined by the institution.

Certification Aligned
Linux Professional Institute LPIC-1

Programming

Python Essentials 1

Course Overview

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

Benefits

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

Explore Opportunities in Technology

- ✓ 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

View Course

Course Details

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

Estimated Time to Completion: 30 hours

Prerequisites: None

Course Delivery: Instructor-guided 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 Aligned: PCEP: Certified Entry-Level Python Programmer certification

Recommended Next Course:
Python Essentials 2

Requirements

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

Developed in collaboration with

PYTHON INSTITUTE
OPEN EDUCATION & DEVELOPMENT GROUP

PCAP: Programming Essentials in Python

Course Overview

Designed as easy to understand and beginner-friendly course focusing on various data collections, manipulation tools, logic and bit operations and creating basic REST APIs.

Benefits

Learn to design, write, debug, and run programs encoded in the Python language. No prior programming knowledge is required. The course begins with the very basics guiding you step by step until you become adept at solving more complex problems.

Prepare for Careers

- ✓ Develop fundamental programming skills
- ✓ Prepare for PCEP and PCAP certification exam
- ✓ Build your foundation to pursue more specialized networking and software development skills

Course Details

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

Estimated Time to Completion: 75 hours

Prerequisites: None

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ 8 modules of interactive instructional content
- ✓ 30+ practice labs
- ✓ Built-in online tool for labs and practice
- ✓ Quizzes, tests, and final exam

Course Recognitions: Statement of Achievement

Recommended Next Course:
DevNet Associate

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certification Aligned
PCEP: Certified Entry-Level Python Programmer
PCAP: Certified Associate in Python Programming

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

JavaScript Essentials 1 (JSE)

Course Overview

Learn how interactive web and mobile apps are created with JavaScript programming – and how to design, write, debug, and run your own programs! No prior programming knowledge is required.

Benefits

Programming skills open you up to careers in almost any industry. These skills are required if you want to continue to more advanced and higher paying web, mobile app, or game development roles.

Prepare for Careers

- ✓ Develop fundamental programming skills
- ✓ Prepare for JSE certification exam
- ✓ Build your foundation to pursue more specialized networking and software development skills

Course Details

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

Estimated Time to Completion: 40 hours

Prerequisites: None

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ 6 Modules
- ✓ Interactive Activities
- ✓ Module Exams and Quizzes
- ✓ Labs
- ✓ Final Exam

Course Recognitions: Statement of Achievement

Recommended Next Course:
DevNet Associate

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: No

Certification Aligned
JSE: Certified Entry-Level JavaScript Programmer

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

CLA: Programming Essentials in C

Course Overview

This beginner course introduces the the universal concepts of computer programming using the C language, and teaches the syntax, semantics, and data types of the C language.

Benefits

Build transferable skills. When you learn C, you develop overarching fundamentals for all programming languages. Practice your skills through hands-on labs and write your own programs!

Prepare for Careers

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CLA certification exam
- ✓ Fulfill prerequisites to pursue more advanced programming skills

Course Details

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

Estimated Time to Completion: 70 hours

Prerequisites: None

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 9 modules of interactive instructional content
- ✓ 80+ practice labs
- ✓ Chapter and final exams

Course Recognitions: Certificate of Completion

Recommended Next Course:
Internet of Things (IoT) Fundamentals,
CCNA, NDG Linux Essentials

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certification Aligned
CLA: C Programming Language Certified Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

CLP: Advanced Programming in C

Course Overview

This advanced course teaches intermediate to advanced coding such as C handling variable number of parameters (<stdarg.h>), low level IO (<unistd.h>), memory and strings (<string.h> et al.), processes and threads, floats and ints (<math.h>, <fenv.h>, <inttypes.h> et al), and network sockets.

Benefits

Extend your programming knowledge and proficiency. Learn to think harder and deeper about programming concepts.

Prepare for Careers

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CLP 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: CLA: Programming Essentials in C course, CLA certification, or equivalent

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 8 modules of interactive instructional content
- ✓ 18 practice labs
- ✓ Quizzes, chapter and final exams

Course Recognitions: Certificate of Completion

Recommended Next Course:
Internet of Things (IoT) Fundamentals,
NDG Linux I

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certification Aligned
CLP: C Certified Professional Programmer

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

CPA: Programming Essentials in C++

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

Build transferable skills. When you learn C, you develop overarching fundamentals for all programming languages. Practice your skills through hands-on labs and write your own programs!

Prepare for Careers

- ✓ Develop skills for entry-level programming roles
- ✓ Prepare for CPA certification exam
- ✓ Fulfill prerequisites to pursue more advanced programming skills

Course Details

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

Estimated Time to Completion: 70 hours

Prerequisites: None

Course Delivery: Instructor-led or Self-paced

Learning Component Highlights:
- ✓ 8 modules of interactive instructional content
- ✓ 100+ practice labs
- ✓ Chapter and final exams

Course Recognitions: Certificate of Completion

Recommended Next Course:
Internet of Things (IoT) Fundamentals,
NDG Linux Essentials, DevNet Associate

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certification Aligned
CPA: C++ Certified Associate Programmer

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

CPP: Advanced Programming in C++

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

Extend your programming knowledge and proficiency. Learn to think harder and deeper about programming concepts.

Prepare for Careers

- ✓ 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

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 9 modules of interactive instructional content
- ✓ 65 practice labs
- ✓ Chapter and final exams

Course Recognitions: Certificate of Completion

Recommended Next Course:
CCNP Enterprise, NDG Linux I

In partnership with OPENEDG

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Not Applicable

Certification Aligned
CPP: C++ Certified Professional Programmer

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Programmable Infrastructure

Introduction to IoT and Digital Transformation

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.

Explores Opportunities in Technology

- ✓ 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

Course Delivery: Instructor-guided 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

Recommended Insertion Points: A great start for any learning path, and a way to introduce digital transformation before or during any Career course.

Requirements

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

View Course

DevNet Associate

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.

Prepare for Careers

- ✓ 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

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: Certificate of Completion, Letter of Merit, Digital Badge

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

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: No (Uses Virtual Machines on the student's computer)
- Discount Availability: Yes

Certification Aligned
Cisco Certified DevNet Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Workshop: Experimenting with REST APIs using Webex Teams

Course Overview

This workshop introduces the basic competencies needed to create applications and automate tasks using REST APIs, the most popular architecture for software integration in IT.

Benefits

Learn the value of the REST APIs architecture, practice Python programming skills, and perform basic software integration and automation using real-world APIs on an enterprise collaboration platform (Webex Teams).

Prepare for Careers

- ✓ Emerging Technologies Workshops are short, hands-on experiences to quickly develop new skills for today's job market
- ✓ Participate in relevant professional communities of practice (Cisco DevNet, GitHub, and Stack Overflow)

Course Details

Target Audience: Vocational, 2-year and 4-year College, 4-Year University students

Estimated Time to Completion: 8 hours

Prerequisites: Basic programming

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 2 chapters and 9 practice labs
- ✓ 13 interactive activities
- ✓ 1 final exam

Course Recognitions: Certificate of Completion

Recommended Insertion Points:
PCAP Programming Essentials in Python,
IoT Fundamentals: Connecting Things

Other Insertion Points:
IT Essentials, CCNA: Introduction to Networks

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: No
  (Self-paced training option available)
- Physical Equipment Required: Internet access to Cisco DevNet Labs and APIs (Free)
- Discount Availability: Not Applicable

DevNet Sandbox
Practice running code on live network infrastructure

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Workshop: Model-Driven Programmability

Course Overview

This workshop introduces students to device level programmability. By defining standardized device models and APIs, network device configuration and management tasks can be automated, making it easier to manage network devices at scale.

Benefits

Learn key model-driven programmability concepts: YANG to model networking devices, RESTCONF and NETCONF for device-level APIs, and Python scripting to programmatically retrieve and update device configurations.

Prepare for Careers

- ✓ Emerging Technologies Workshops are short, hands-on experiences to quickly develop new skills for today's job market
- ✓ Participate in relevant professional communities of practice (Cisco DevNet, GitHub, and Stack Overflow)

Course Details

Target Audience: Vocational, 2-year and 4-year College, 4-year university students

Estimated Time to Completion: 8 hours

Prerequisites: Basic programming, CCNA: Switching, Routing, and Wireless Essentials (SRWE) or equivalent

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 2 chapters and 10 practice labs
- ✓ 10 interactive activities
- ✓ 1 final exam

Course Recognitions: Certificate of Completion, Digital Badge

Recommended Insertion Points:
- After CCNA: SRWE
- With Network Security or CCNP Enterprise: Core Networking (ENCOR)

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: No (Self-paced training option available)
- Physical Equipment Required: Internet access to Cisco DevNet Labs and APIs (Free)
- Discount Availability: Not Applicable

DevNet Sandbox
Practice running code on live network infrastructure

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

IoT Fundamentals: Connecting Things

Course Overview

This highly hands-on course introduces how to securely interconnect sensors, actuators, microcontrollers, single-board computers, and cloud services over Internet Protocol (IP) networks to create an end-to-end IoT system.

Benefits

Develop the interdisciplinary skillset required to prototype an IoT solution for a specific business case with a strong focus on the security considerations for emerging technologies.

Prepare for Careers

- ✓ Develop an entrepreneurial and design-thinking foundation for IoT job families that exist today and in the future
- ✓ Practice integrating hardware, software, data analytics, and security concepts
- ✓ Build your foundation to pursue more specialized networking, software development, and IoT skills

Course Details

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

Estimated Time to Completion: 40-50 hours

Prerequisites: Basic programming, networking, and electronics

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 6 chapters and 35 practice labs
- ✓ 9 Cisco Packet Tracer activities
- ✓ 32+ interactive activities, videos, & quizzes
- ✓ 1 final exam

Course Recognitions: Certificate of Completion

Recommended Next Course:
IoT Fundamentals: Big Data & Analytics or Hackathon Playbook (Design Thinking)

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Optional (Self-paced training option available)
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

IoT Fundamentals: Big Data & Analytics

Course Overview

This highly hands-on course introduces how to use Python data libraries to create a pipeline to acquire, transform and visualize data collected from IoT sensors and machines.

Benefits

The transformative element of any IoT system is the data that can be collected from it. The ability to extract data and using data analytics techniques to gain insights are skills highly-valued by employers.

Prepare for Careers

- ✓ Develop entrepreneurial and design-thinking skills for IoT job families that exist today and in the future
- ✓ Practice integrating hardware, software, data analytics, and security concepts
- ✓ Build your foundation to pursue more specialized networking, software development, and IoT skills

Course Details

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

Estimated Time to Completion: 40-50 hours

Prerequisites: IoT Fundamentals: Connecting Things

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ 6 chapters and 11 practice labs
- ✓ 18 Jupyter Notebooks (with Python code)
- ✓ 35+ interactive activities, videos, & quizzes
- ✓ 1 final exam

Course Recognitions: Certificate of Completion

Recommended Next Course:
IoT Fundamentals: Hackathon Playbook

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Optional (Self-paced training option available)
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Hackathon Playbook (Design Thinking)

Course Overview

The Hackathon Playbook is a comprehensive framework of tools and templates to prepare and run a Hackathon as a result of best practices and lessons-learned collected from the global execution of IoT Hackathons within Networking Academy and by other organizers.

Benefits

Practice design thinking through a hands-on project. Deepen your multidisciplinary IoT and data skills by defining, designing, prototyping, and presenting an IoT solution to a panel of industry experts and peers.

Prepare for Careers

- ✓ Build a design thinking mindset
- ✓ Gain resume-worthy experience working on a real prototype
- ✓ Get feedback and mentorship from industry experts

Course Details

Target Audience: Secondary, vocational, 2-year and 4-year college, 4-Year university students

Estimated Time to Completion: 20-30 hours

Prerequisites: IoT Fundamentals: Connecting Things and/or Big Data and Analytics

Course Delivery: Instructor-led

Learning Component Highlights:
- ✓ Hands-on project

Course Recognitions: Certificate of Completion

Recommended Next Course:
Any Networking Academy Career course, or an industry IoT training program

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
  (Self-paced training option available)
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Cybersecurity

Introduction to 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.

Explore Opportunities in Technology

- ✓ 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-guided or Self-paced

Learning Component Highlights:
- ✓ 5 modules and 7 practice labs
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

Course Recognitions: Digital Badge

Certification Alignment: This course is part of the Cybersecurity Career-Path which aligns to the CCST Cybersecurity Certification

Recommended Next Course:
Networking Essentials or Cybersecurity Essentials

Requirements

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

skillsforall.com

netacad.com

Endpoint Security

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.

Prepare for Careers

- ✓ 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
Intent to find a job in cyber

Estimated Time to Completion: 40 hours

Recommended Preparation: Introduction to Cybersecurity and Networking Essentials

Course Delivery: Instructor-guided 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: This course is part of the Cybersecurity Career-Path which aligns to the CCST Cybersecurity Certification

Recommended Next Course:
Network Defense

Requirements

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

Network Defense

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.

Prepare for Careers

- ✓ 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
Intent to find a job in cyber

Estimated Time to Completion: 40 hours

Recommended Preparation: Introduction to Cybersecurity, Networking Essentials, and Endpoint Security

Course Delivery: Instructor-guided 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: This course is part of the Cybersecurity Career-Path which aligns to the CCST Cybersecurity Certification

Recommended Next Course:
Cyber Threat Management

Requirement

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

Cyber Threat Management

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.

Prepare for Careers

- ✓ 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: 20 hours

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

Course Delivery: Instructor-guided 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: This course is part of the Cybersecurity Career-Path which aligns to the CCST Cybersecurity Certification

Requirements

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

skillsforall.com

Cybersecurity Essentials

Course Overview

This course covers essential knowledge for all cybersecurity domains including information security, systems security, network security, ethics and laws, and defense and mitigation techniques used in protecting businesses.

Benefits

The demand for security professionals continues to grow. Develop a foundational understanding of cybercrime, security principles, technologies, and procedures used to defend networks.

Explores Opportunities in Technology

- ✓ Builds cybersecurity foundation
- ✓ Offer the next step in exploring the many career possibilities in cybersecurity
- ✓ Help learners determine if they want to pursue job roles in networking or cybersecurity

Course Details

Target Audience: Secondary and 2-year college vocational students

Estimated Time to Completion: 30 hours

Prerequisites:
- Introduction to Cybersecurity
- Foundational networking knowledge (equivalent of Networking Essentials)

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 8 Modules and 14 practice labs
- ✓ 12 Cisco Packet Tracer activities
- ✓ Interactive activities & quizzes
- ✓ 1 final exam

Course Recognitions: Digital Badge

Recommended Next Course:
CyberOps Associate or Cloud Security or Network Security, or IoT Security

Requirements

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

skillsforall.com

CyberOps Associate

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.

Prepare for Careers

- ✓ Develop skills for entry-level security operations center (SOC) jobs
- ✓ Prepare for CyberOps 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 wants to pursue a career in Security Operations

Estimated Time to Completion: 70 hours

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: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course:
Cloud Security, Network Security, IoT Security

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: No (Uses Virtual Machines on the student's computer)
- Discount Availability: Yes

Certification Aligned
Cisco Certified CyberOps Associate

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Cloud Security

Course Overview

This course introduces the fundamentals of cloud computing and skills needed to secure an organization in the cloud.

Benefits

Learn the methods and tools to design, build, and maintain a secure cloud business environment.

Prepare for Careers

- ✓ Develop skills for entry-level cloud security positions
- ✓ Prepare for Certificate of Cloud Security Knowledge (CCSK) exam
- ✓ Pursue a career in cloud security, an in-demand, exciting new area that spans all industries

Course Details

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

Estimated Time to Completion: 35 hours

Recommended Preparation: Introduction to Cybersecurity, Cybersecurity Essentials

Course Delivery: Online self-paced (with instructor mentorship)

Learning Component Highlights:
- ✓ 6 modules
- ✓ 20+ videos
- ✓ 10 interactive activities
- ✓ 37 quizzes
- ✓ 1 final exam

Course Recognitions: Certificate of attendance

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

Requirements & Resources

- ASC Alignment Required: No
- Instructor Training Required: No
- Physical Equipment Required: No
- Discount Availability: Yes

Certificate Aligned
Certificate of Cloud Security Knowledge (CCSK)

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Network Security

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.

Prepare for Careers

- ✓ 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

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: Certificate of Completion, Letter of Merit, Digital Badge

Recommended Next Course:
CyberOps Associate, Cloud Security, IoT Security

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Yes
- Physical Equipment Required: Yes
- Discount Availability: Not Applicable

PT Hands-on practice with Cisco Packet Tracer

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

IoT Security

Course Overview

The explosive growth of connected IoT devices also increases the exposure to security threats. Learn to perform vulnerability and risk assessments, and research and recommend risk mitigation strategies for common security threats in IoT systems.

Benefits

Learn practical tools for evaluating security vulnerabilities, perform threat modeling, and recommend threat mitigation measures. Gain hands-on, transferable skills relevant across IoT and other network architectures.

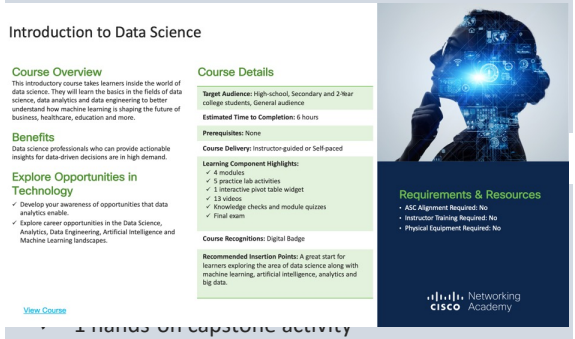
Prepare for Careers

- ✓ Develop skills for entry-level roles in the rapidly growing IoT and security domains
- ✓ Increase awareness of emerging technologies in the IoT Security space, such as Blockchain

Course Details

Target Audience: Vocational, 2-year and 4-year College, 4-Year University students

Estimated Time to Completion: 50 hours



- ✓ 1 hands-on capstone activity
- ✓ 1 IoT Security game with 10 missions
- ✓ 1 final exam

Course Recognitions: Certificate of Completion

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

Requirements & Resources

- ASC Alignment Required: Yes
- Instructor Training Required: Optional
- Physical Equipment Required: Yes
- Discount Availability: Yes

Features the IoT Security Game!

Quick Links

Course Page

Course Demos
(Available for select courses)

List of All Courses
(Includes language availability)

Getting Started with 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.

Explore Opportunities in Technology

- ✓ 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

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 2 modules
- ✓ 1 Cisco Packet Tracer Tutored Activity (PTTA)
- ✓ 1 Cisco Packet Tracer Activity
- ✓ 1 assessment

Course Recognitions: SFA Achievement

Recommended Next Courses:
- ✓ Exploring Networking with Cisco Packet Tracer
- ✓ Exploring IoT with Cisco Packet Tracer

View Course

Requirements

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

Cisco Packet Tracer

Exploring Networking with Cisco Packet Tracer

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.

Explore Opportunities in Technology

- ✓ 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 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: SFA Achievement

Recommended Next Course:

- ✓ Exploring IoT with Cisco Packet Tracer

Requirement

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

View Course

Exploring IoT with Cisco Packet Tracer

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.

Explores Opportunities in Technology

- ✓ 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.

View Course

Course Details

Target Audience: General audience

Estimated Time to Completion: 3 hours

Prerequisites: Getting Started with Cisco Packet Tracer course

Course Delivery: Instructor-guided or Self-paced

Learning Component Highlights:
- ✓ 2 modules
- ✓ 6 Cisco Packet Tracer Activity
- ✓ 1 assessment

Course Recognitions: SFA Achievement

Recommended Next Course:
Exploring Networking with Cisco Packet Tracer

Requirements

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

Practice

Hands-on tools & interactive experiences to build skills, not just knowledge

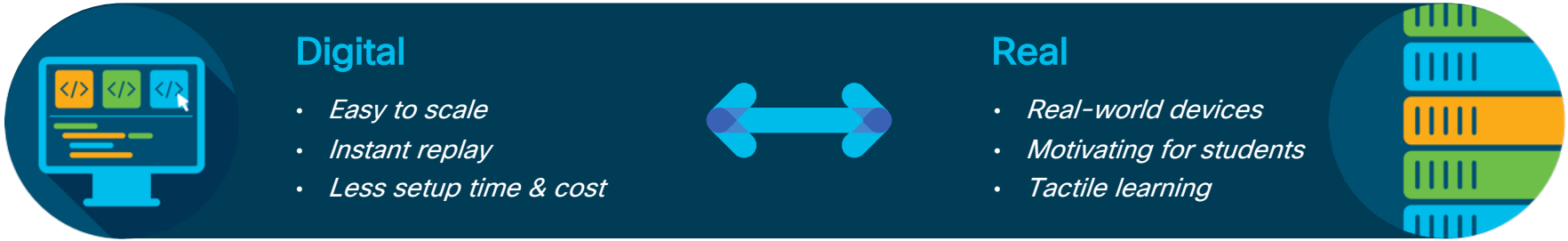
Hands-On Practice

A key pillar of Networking Academy

- Motivate your students with exciting experiences that make learning very real
- Accelerate and optimize each student's path to career-ready skills
- Build student confidence: "I can do this!"
- Developed by learning scientists & subject-matter experts

A Suite of Lab Environments

Options ranging from simulation to physical hardware



Simulation with Packet Tracer

Virtualized Equipment

Virtual Machines

Remote Equipment

Physical Hardware

Cisco Packet Tracer

Overview

Cisco Packet Tracer is a powerful simulation and visualization learning environment. Practice building simple and complex networks across a variety of devices and extend beyond routers and switches.

Benefits

Teach complex concepts without complex hardware. Leverage the versatility of simulation for lectures, labs, games, homework, assessments, competitions, and distance learning.

Build Skills for Success

- ✓ Quickly try, experiment, learn, repeat
- ✓ Practice teamwork, critical thinking and creative problem-solving skills
- ✓ Integration with online assessment engine prepares students for hands-on assessments

Details

Use it to:

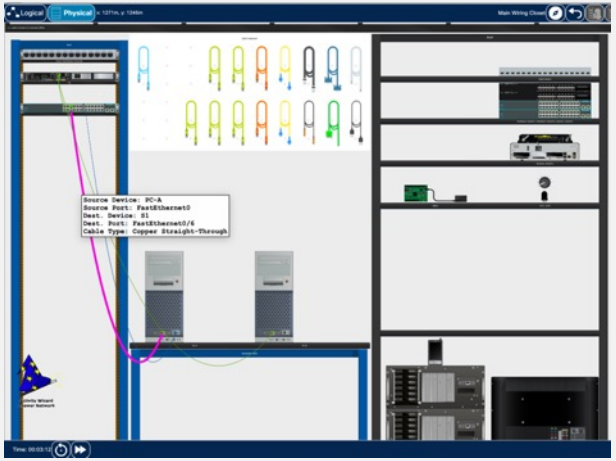
- Create and configure your own networks
- Practice cabling your devices in the rack with Physical Mode
- See how packets travel through your network with Simulation Mode
- Program your own IoT smart solution
- And more!

How to Access:
Enroll in Getting Started with Cisco Packet Tracer course to download desktop version

Courses that use Cisco Packet Tracer include:

- Networking Essentials
- Cybersecurity Essentials
- IT Essentials
- CCNA
- CyberOps Associate
- DevNet Associate
- CCNP Enterprise
- Introduction to Internet of Things (IoT)
- IoT Security
- Network Security

Practice



Requirements & Resources

- Cost: Free

Hands-on tools & interactive experiences to build skills, not just knowledge

Quick Links

[Getting Started with Cisco Packet Tracer short courses]

[Teaching with Cisco Packet Tracer]

[Cisco Packet Tracer FAQs]

Virtual Machines (VM)

Overview

Virtual machines are virtual environments that emulate a computer system. These self-contained virtual environments let students explore systems to the breaking point without causing actual damage.

Benefits

Experiment and explore in a low-risk environment. Deliberately test security threats and malware in a safe environment.

Build Skills for Success

- ✓ Hands-on cybersecurity practice
- ✓ Students become familiar with virtual machines to prepare for on-the-job skills

Details

Use it to:

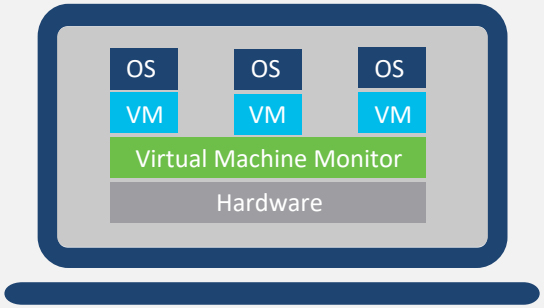
- Teach virtual machine technology
- Simulate real-world cybersecurity threat scenarios
- Create opportunities for ethical hacking, security monitoring, analysis, and resolution

How to Access:
Free software download from Oracle VirtualBox
https://www.oracle.com/virtualization/technologies/vm/downloads/virtualbox-downloads.html

Courses that use Virtual Machines include:

- CCNA
- CyberOps Associate
- Emerging Technologies Workshop: Model-Driven Programmability
- DevNet Associate

Practice



Requirements & Resources

- Cost: Free

Hands-on tools & interactive experiences to build skills, not just knowledge

Remote Equipment: NDG NETLAB+

Overview

Connect to real hardware through the web. Available through Networking Academy partnerships:

NDG NETLAB+ provides cloud-based, remote access to networking equipment and PCs.

Benefits

Reduce your setup time for complex labs with on-demand remote access to lab equipment when you need it.

Build Skills for Success

- ✓ Provide practice opportunities for students to complete labs from anywhere
- ✓ Supplement your lab offerings when physical hardware is not available at your institution

Details

Use it to:

- Access remote IT equipment through a web browser
- Reduce your lab setup time

How to Access:
Learn more at the NDG NETLAB+ page for Networking Academy.
https://www.netdevgroup.com/content/cnap/

Courses that use Remote Equipment include:

- CCNA
- CCNP Enterprise
- IT Essentials
- CyberOps Associate
- Network Security

Practice

In partnership with NDG NETLAB+

Requirements & Resources

- Cost: Yes

Hands-on tools & interactive experiences to build skills, not just knowledge

Remote Equipment: DevNet Sandbox

Practice

Overview

Connect to real hardware through the web. Available through Networking Academy partnerships:

Cisco DevNet Sandbox offers packaged labs for software development, testing APIs, training, hackathons, and more.

Benefits

Reduce your setup time for complex labs with on-demand remote access to lab equipment when you need it.

Build Skills for Success

- ✓ Students get experience running their code against live network infrastructure
- ✓ Practice working in a sandbox environment just like on-the-job software developers

Details

Use it to:

- Interact with live network infrastructure and programmable devices using real-world Application Programming Interfaces (APIs)

How to Access:
Learn more at the Cisco DevNet Sandbox page
https://developer.cisco.com/site/sandbox/

Courses that use Remote Equipment include:

- Workshop: Experimenting with REST APIs
- Workshop: Model-Driven Programmability
- DevNet Associate

DevNet Sandbox

Requirements & Resources

- Cost: Free

Hands-on tools & interactive experiences to build skills, not just knowledge

Physical Hardware

Overview

Bring the real world inside the classroom so students can practice physical, sensory skills. Seeing and exploring with real equipment makes the abstract more tangible.

Benefits

Excite learners to consider career pathways in networking technology, and increase retention through tactile learning.

Build Skills for Success

- ✓ Provide hands-on practice with the same devices found in the work environment
- ✓ Students gain real experience even before on-the-job training
- ✓ Build transferable, career-ready skills

Details

How to Access:

1. Contact a local Cisco Reseller Partner for pricing and order fulfillment. Use Partner Finder to find one near you.
2. Consider working with an Academy Support Center (ASC) who can help you choose the best way to secure equipment needed for your location. They may offer loaner equipment or used equipment options

Courses that use Physical Hardware include:

- Networking Essentials
- IT Essentials
- CCNA
- CCNP Enterprise
- Network Security
- IoT Security

Requirements & Resources

- Cost: Yes

Discounts

Equipment discounts are available for Networking Academy institutions. Available for Cisco equipment needed for Networking Academy courses and labs when purchased through a Cisco Reseller Partner.

Hands-on tools & interactive experiences to build skills, not just knowledge

Quick Links

- netacad.com
- skillsforall.com
- Getting Started for Educators
- Cisco Packet Tracer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