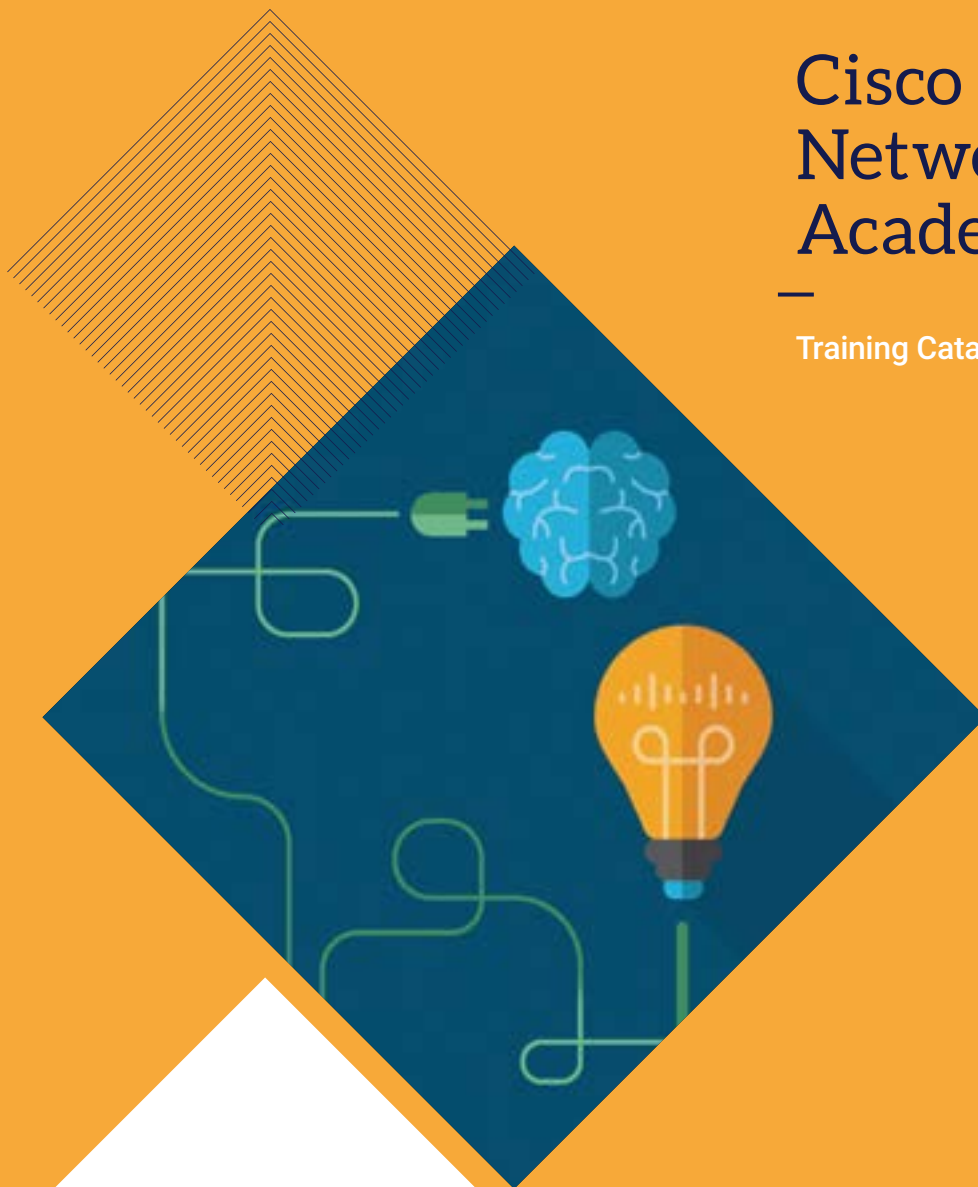


Cisco Networking Academy®

Training Catalog



2020
-

 University of Luxembourg
Competence Centre



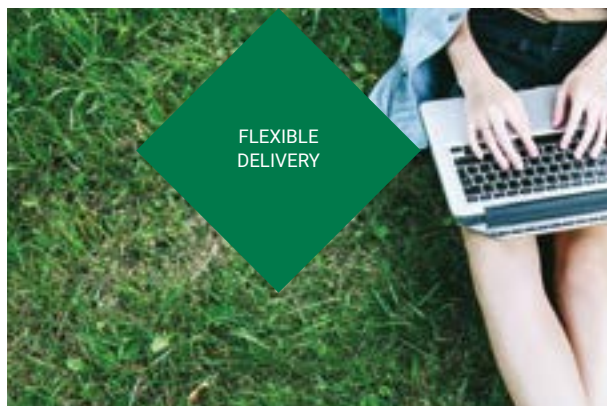
LUXEMBOURG LIFELONG
LEARNING CENTER
La formation continue de la Chambre des salariés



WORLDWIDE
COMMUNITY



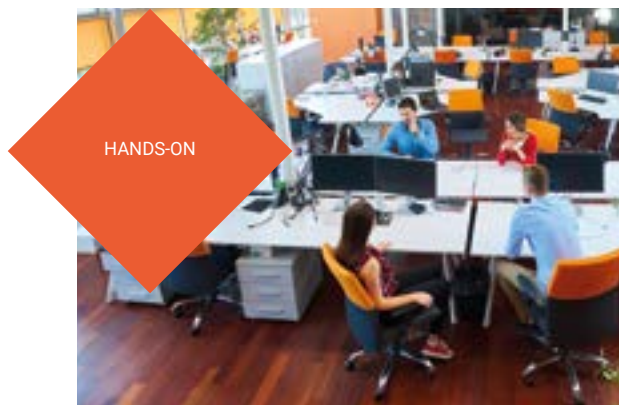
SIMULATIONS



FLEXIBLE
DELIVERY



SUPPORTS
PERSONALIZED
INSTRUCTION



HANDS-ON

COURSE DESCRIPTIONS,
DATES AND ORGANIZATION
OF CUSTOMIZED PROGRAMS :

www.LLLC.lu
or www.competence.lu



The Competence Centre with the Chamber of employees CSL and its adult training center, the Luxembourg Lifelong Learning Center (LLLC), have decided to collaborate on the development of the Cisco Networking Academy in Luxembourg which offers a program of skills acquisition and professional development for educational institutions and individuals around the world. The Cisco Networking Academy offers lectures, online training materials, interactive tools, and hands-on workshops to ensure candidates gain the knowledge and skills they need to succeed in a technology-driven market.



The training programs cover the following areas:

- **NETWORK**
- **SECURITY AND CYBERSECURITY**
- **IOT (internet of things)**
- **PROGRAMMING**
- **LINUX AND GENERAL IT CONCEPTS**



CHAMBRE DES SALAIRES
LUXEMBOURG



LUXEMBOURG LIFELONG
LEARNING CENTER
La formation continue de la Chambre des salariés



Learning methods include hands-on work, problem solving, project-based learning, initiative and leadership, and an experiential learning approach. All the courses offered focus on the preparation of industrial certifications recognized by the sector. The purpose of this brochure is to synthesize the training offer of the Cisco Networking Academy in Luxembourg.

For more informations concerning
the different training programs, please contact :

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T. +352 27 494 637

ict-training@competence.lu
+352 26 15 92 42





Cisco Networking Academy

Cisco Networking Academy is an IT skills and professional development program for educational institutions and individuals around the world. Since 1997, nearly 8 million people have joined the Cisco Networking Academy. The Cisco Networking Academy offers lectures, online training materials, interactive tools, and hands-on workshops to ensure participants gain the knowledge and skills they need to succeed in a technology-driven market. Our candidates and instructors appreciate how the different elements of a course flexibly work together to succeed in their field.



Innovate as
technology
experts



Think
like innovators



Become actors
of the change
of society





A Global Platform

NetAcad.com is a globally accessible platform that supports the entire program worldwide. It is available in seven languages and some courses are translated into 18 languages.

One of its key strengths is the online performance-based assessments which provide detailed reports on a candidate's strengths and weaknesses with recommended course topics to help close the gaps. The platform also offers an excellent learning management environment. It allows instructors to manage and personalize their course and exchange with participants.

A person with blonde hair is seen from the back, working on a laptop. A tablet is placed next to the laptop, displaying a grid-like interface. The background is a light-colored wooden desk.

NETWORKING ACADEMY COURSES ARE DIVIDED
INTO THE FOLLOWING CATEGORIES:

Exploratory emphasizes exposure to new ideas, and some basic conceptual understanding with a taste of the breadth of skills one might learn—with the desire to encourage candidates to consider a career in a particular technology area or type of technology-related business.

Foundational develops a breadth of conceptual understanding and practice of beginning and intermediate skills that form the basis for choosing one or two areas to specialize their skills.

Career-Ready gives candidates the depth of skills needed to prepare for an entry-level job or further specialization using iterative learn / apply skill cycles in every lesson.

All courses offered focus on the preparation of certifications recognized by industry.

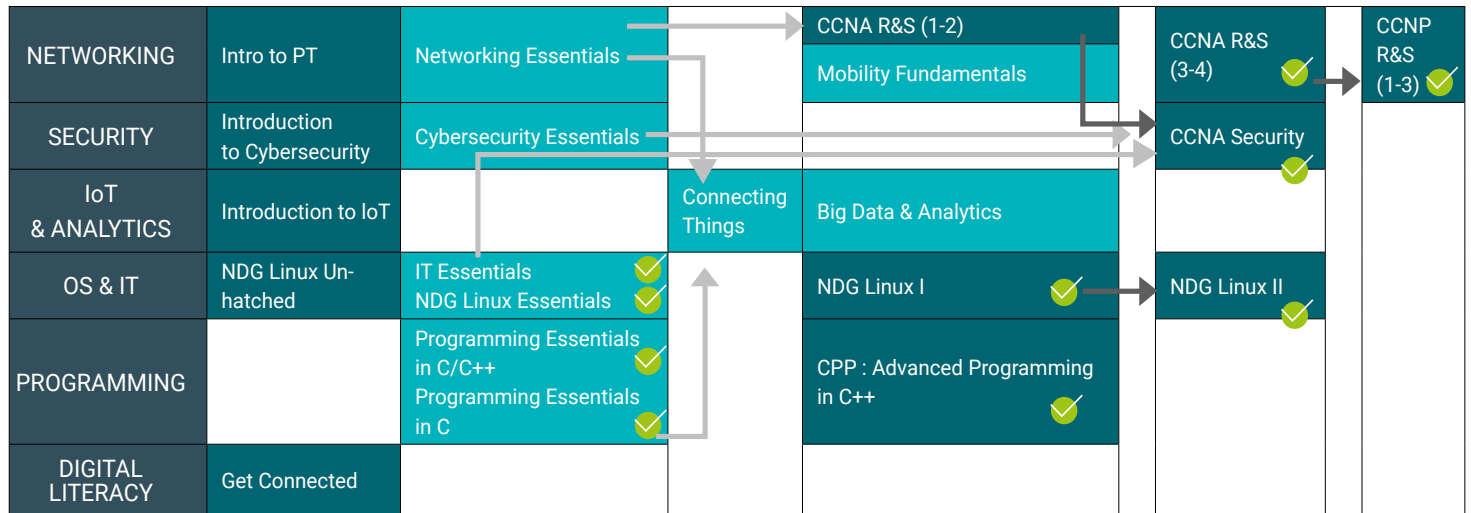
The Networking Academy Learning Portfolio



	Exploratory	Foundational	Career-Ready
NETWORKING		 Networking Essentials Mobility Fundamentals	 CCNA R&S : Introduction to Networks, R&S Essentials, Scaling Networks, Connecting Networks  CCNP R&S : Switch, Route, TShoot
SECURITY	 Introduction to Cybersecurity	 Cybersecurity Essentials IoT Security	 CCNA Security  CCNA Cyber Ops
IoT	 Introduction to IoT	IoT Fundamentals Connecting Things, Big Data & Analytics	
OS & IT	 NDG Linux Unhatched	 NDG Linux Essentials  IT Essentials	 NDG Linux I  NDG Linux II
PROGRAMMING		 CLA : Programming Essentials in C  CPA : Programming Essentials in C++  PCAP : Programming Essentials in Python	 CLP : Advanced Programming in C  CPP : Advanced Programming in C++
DIGITAL LITERACY	 Get Connected		

Flexible pathways to promote problem solving globally

- ✓ Learning progressions
- ✓ Flexibility to adapt
- ✓ New Technologies

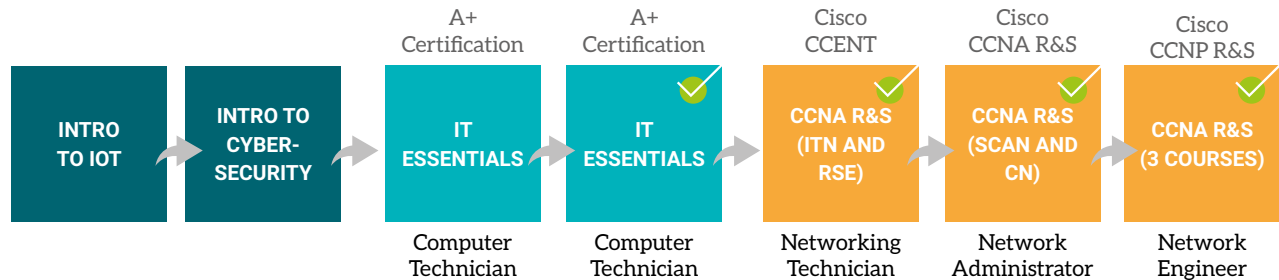


Exploratory
Foundational
Career-Ready
➡ Pre-requisite knowledge
➡ recommended Pre-requisite knowledge
✓ Certification aligned

Exemples of common course progressions

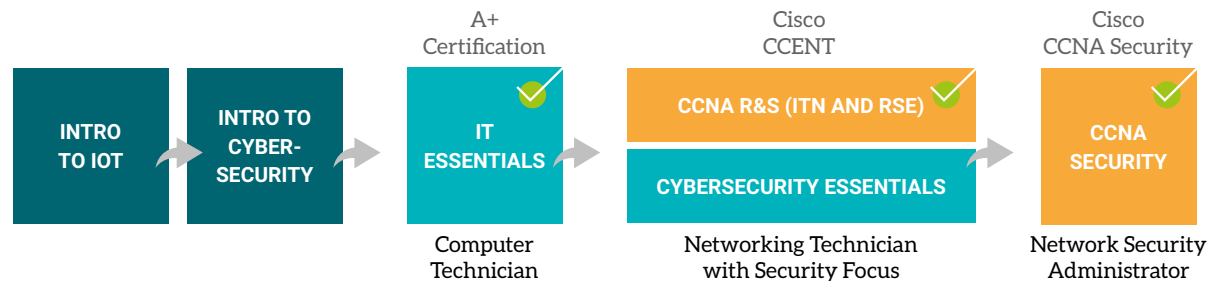
Networking Professional : Course Progression

As major industries migrate their infrastructure to take full advantage of IoT, the role and skills required of a networking professional are evolving and more vital than ever because the network connects everything.

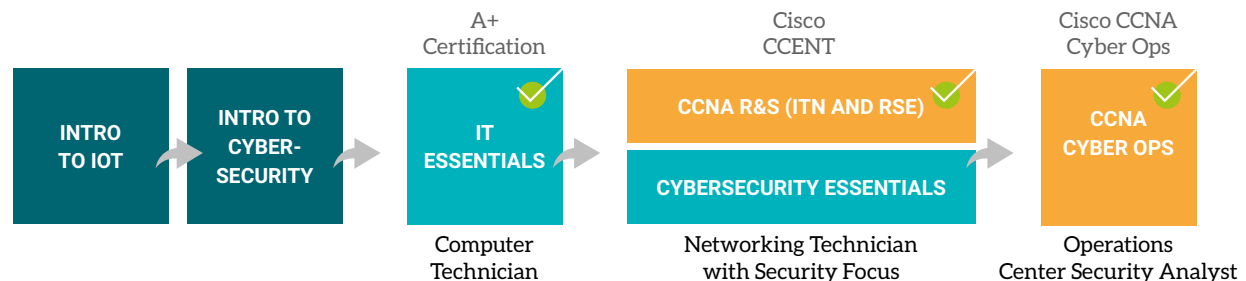


Network Security Administrator : Course Progression

As more people and things are connected to the network, security professionals are in high demand to develop and implement security infrastructure, recognize threats and vulnerabilities to networks, and mitigate security threats.



Cybersecurity Analyst : Course Progression







1

EXPLORATORY

1

Exploratory

– Introduction to IoT

Course Overview

The Introduction to IoT (Internet of Things) course introduces learners to the technologies that support IoT, and the career and social opportunities created by the growing number of networked connections between people, processes, data, and things.

Benefits

For candidates seeking an overview of trends, technologies, and career opportunities in the Internet of Things.



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led or Self-paced

Estimated Time to Complete : 20 hours

Recommended Next Course : IT Essentials or IoT Fundamentals Connecting Things

Learning Components

- 5 modules of interactive content featuring IoT experts
- Activities, videos, and simulations to enhance the learning experience
- Pre-test, module quizzes, and a final exam

Introduction to Cybersecurity

Course Overview

The Introduction to Cybersecurity course explores cyber trends, threats and staying safe in cyberspace, and protecting personal and company data.

Benefits

Learn how to protect your personal data and privacy online and in social media, and why more and more IT jobs require cybersecurity awareness and understanding.

Learning Components

- 5 modules
- Interactive and instructional content
- 8 activities and 7 lab exercises that reinforce learning
- 4 quizzes and 1 final exam
- Links to related resources



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led or Self-paced

Estimated Time to Complete : 15 hours

1

Exploratory

– Get Connected



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led or Self-paced

Estimated Time to Complete : 30 hours

Recommended Next Course : IT Essentials

Course Overview

Candidates 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 IT.

Benefits

Get Connected teaches basic communication and collaboration technologies, essential skills for career advancement in today's global workforce.

Learning Components

- 5 chapters
- Illustrations and narrations guide candidates through topics
- Videos and activities
- Quizzes

NDG Linux Unhatched

Course Overview

Aligned to the Linux exam objectives found on the CompTIA A+ 220-902 exam, this course teaches basic installation and configuration of Linux software and introduces the Linux command line.

Benefits

NDG Linux Unhatched eases learners into acquiring Linux knowledge with a free online learning course.

Learning Components

- 1 module
- 20 pages
- Built-in Linux machine with activities
- 1 assessment



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Self-paced

Estimated Time to Complete : 6-8 hours

Recommended Next Course : NDG Linux Essentials





GLOBAL

NETWORK

SEARCH

WWW

@SYMBOL

WORKSTATION



((2))

FOUNDATIONAL

((2))

Foundational – IT Essentials



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA R&S
Introduction to Networks

Course Overview

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

Benefits

For candidates seeking career-oriented, entry-level hardware and software skills to prepare for technical support roles, this course aligns with the CompTIA A+ certification.

This course also serves as a foundation for CCNA-level courses.

Learning Components

- 14 chapters
- 99 hands-on labs and 29 interactive activities
- Cisco Packet Tracer, virtual laptop, and virtual desktop learning tools
- 14 chapter exams, 1 checkpoint exam, 1 skills review exam, 1 practice final exam, 1 final exam, 1 skills-based assessment, and 2 practice exams for CompTIA A+ certification

Foundational Networking Essentials

Course Overview

Networking Essentials teaches networking based on environments candidates may encounter in their daily lives including small office and home office (SOHO) networking. This course provides single real equipment and Packet Tracer simulation activities.

Benefits

This course teaches the skills needed to obtain entry-level SOHO network installer jobs. It also helps candidates develop some of the skills needed to become network technicians, cable installers, and help desk technicians.

Networking Essentials prepares candidates for continuing with the CCNA R&S curriculum. Candidates studying other non-IT fields would also find this course a useful introduction to IT and networking.

Learning Components

- 9 chapters
- 21 hands-on labs
- 17 Cisco Packet Tracer files
- 1 hands on skill assessment
- 9 chapter exams, 1 checkpoint exam, 1 practice final exam, 1 final exam



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course :

CCNA R&S Introduction
to Networks, Introduction to IoT



((2))

Foundational

Cybersecurity Essentials



FEATURES

Prerequisites :

Introduction to Cybersecurity

Language : English (other on demand)

Course Delivery : Instructor-led and Self-paced

Estimated Time to Complete : 30 hours

Recommended Next Course : CCNA R&S Introduction to Networks

Course Overview

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

Benefits

This course is recommended for candidates planning to study any CCNA certification. It provides foundational security skills for entry-level networking and security roles.

Learning Components

- 8 chapters
- 34 interactive activities, 10 Cisco Packet Tracer Activities, 12 hands-on labs that reinforce learning
- 8 chapter quizzes, 1 final exam
- Links to related resources

NDG Linux Essentials

Course Overview

The NDG Linux Essentials course, developed by Networking Academy partner NDG, teaches the fundamentals of the Linux operating system and command line and open source concepts. The Linux virtual machine is embedded in the course; allowing candidates to experiment with Linux commands.

Benefits

Learn Linux OS, open source programming, and IoT skills to expand IT knowledge beyond networking. Aligns with the Linux Professional Institute (LPI) Linux Essentials Professional Development Certificate.

Learning Components

- 16 chapters
- Built-in virtual machine to experiment with Linux commands
- 13 lab exercises
- Learner-directed activities
- Chapter exams, mid-term, and final exam



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led or Self-paced

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA R&S
Introduction to Networks

((2))

Foundational

CLA: Programming Essentials in C

Course Overview

The CLA: Programming Essentials in C curriculum is designed for candidates who want to learn the fundamentals of programming through the C language.

Benefits

Learn the universal concepts of computer programming, as well as the syntax, semantics and data types of the C language needed for entry-level programming career opportunities. Aligns with CLA – C Programming Language Certified Associate Certification.



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : IT Essentials
or IoT Fundamentals Connecting Things

Learning Components

- 9 modules of interactive instructional content
- More than 80 practice labs
- Chapter and final exams

CPA: Programming Essentials in C++

Course Overview

Prepares candidates to accomplish coding tasks related to the basics of programming in the C++ language and the fundamental notions and techniques used in object-oriented programming.

Benefits

Builds the skills you need for entry-level programming career opportunities and to succeed in jobs related to software development, network engineering and system administration. Aligns with CPA – C++ Certified Associate Programmer Certification

Learning Components

- 8 modules of interactive instructional content
- More than 100 practice labs
- Chapter and final exams



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : IoT Fundamentals, CCNA R&S, NDG Linux Essentials

((2))

Foundational

IoT Fundamentals: Connecting Things



FEATURES

Prerequisites : Basic programming, networking and electronics

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 40-50 hours

Recommended Next Course : IoT Fundamentals: Big Data & Analytics or Hackathon Playbook

Course Overview

In Connecting Things, candidates learn how to securely interconnect sensors, actuators, microcontrollers, single-board computers, and cloud services over IP networks to create an end-to-end IoT system.

Benefits

Candidates will develop the interdisciplinary skillsets required to prototype an IoT solution for a specific business case with a strong focus on the security considerations for emerging technologies.

Learning Components

- Understand and explain the concepts, opportunities and challenges of digital transformation using IoT.
- Interconnect sensors/actuators, microcontrollers (Arduino), Single Board Computers (Raspberry Pi) and cloud services (Cisco Spark restful API) to create an end-to-end IoT system.
- Understand the relevant aspects of cybersecurity and privacy for an IoT solution.
- Understand how digitalization is changing vertical markets such as manufacturing, energy, and smart cars.
- Use simulation tools (Packet Tracer) to create end-to-end IoT system.

IoT Fundamentals: Big Data & Analytics

Course Overview

Candidates will learn 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. Thus the ability to extract data and using data analytics techniques to gain insights increases employability.

Learning Components

- Use Python to read data from sensors and store data in a SQL data base.
- Use Python Data Analysis library to clean, manipulate, integrate data sets.
- Use Python Visualization Libraries to visualize real-time data end explore acquired data sets.
- Explain the fundamental principles of a modern scalable Big Data platforms like Hadoop.
- Use storytelling to present the insights gained from extracted data.



FEATURES

Prerequisites : IoT Fundamentals:
Connecting Things

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 40-50 hours

Recommended Next Course : IoT Fundamentals:
Hackathon Playbook

((2))

Foundational

– Mobility Fundamentals



FEATURES

Prerequisites : CCENT knowledge

Language : English (other on demand)

Course Delivery : Instructor-led or Self-paced

Estimated Time to Complete : 1.5 hours per module, total 9 hours

Recommended Next Course : CCNA R&S Introduction to Networks, CCNA R&S Routing and Switching Essentials

Course Overview

Starting with Wireless Technology Standards, the Mobility Fundamentals series teaches candidates about wireless and mobility technologies in the Digital Transformation Age.

Topics covered in these instructor-developed courses include wireless LAN design and mobility applications.

Benefits

Builds foundational wireless and mobility technology career skills for current IT Essentials or CCNA R&S candidates interested in expanding their skills.

Learning Components

- Six modules of multimedia content
- Video recordings featuring Networking Academy instructors
- Activities that reinforce learning, including Cisco Packet Tracer activities
- Assessments, including module quizzes
- Certificates of completion for each module

PCAP: Programming Essentials in Python

Course Overview

Easy-to-understand, beginner-friendly course that covers miscellaneous data collection, tool manipulation, logical and binary operations and basic REST API creation.

Benefits

The PCAP: Programming Essentials in Python course teaches you how to design, write, debug, and execute Python-coded programs. No prior knowledge of programming is required. The course starts with the basics and offers step-by-step guidance until you are able to solve more complex problems.

Learning Components

- 5 modules of interactive learning content
- More than 30 practical workshops
- Integrated online tool to follow the practical work and to train
- Examinations by chapter and final exams



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : provided by an instructor

Estimated Time to Complete : 70 hours

Recommended Next Course : IoT Fundamentals, Networking Essentials, NDG Linux Essentials





3

CAREER-READY



CCNA Routing and Switching

Curriculum of 4 courses

Curriculum Overview

The 4 courses in the CCNA R&S curriculum help candidates develop a comprehensive understanding of how networks operate, from protocols and services to network management, with an emphasis on hands on learning and essential career skills like problem solving and collaboration.

Career Prep

Courses 1-2 align with the Cisco CCENT certification and courses 3-4 align with the Cisco CCNA R&S certification. Candidates gain the skills needed to become network administrators, technicians, or managers.

Learning Components

- 4 courses: Introduction to Networks, Routing and Switching Essentials, Scaling Networks, Connecting Networks (Course overviews follow)
- Hands on labs and Cisco Packet Tracer network simulation activities
- Videos and activities to reinforce learning
- Quizzes and exams to measure learning outcomes



FEATURES

Prerequisites: None

IT essentials or equivalent knowledge prior to CCNA R&S is recommended

Language: English (other on demand)

Course Delivery: Instructor-led

Estimated Time to Complete: 280 hours
(4 courses, 4 x 70 hours)



CERTIFICATION
ALIGNED

Career-Ready

CCNA R&S: Introduction to Networks



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course :

CCNA R&S Routing and Switching Essentials

Course Overview

The first course in the Cisco CCNA Routing and Switching curriculum teaches candidates about the architecture, structure, functions and components of the Internet and other computer networks.

Candidates achieve a basic understanding of how networks operate.

Benefits

By the end of the course, candidates will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

Learning Components

- 11 chapters
- 36 hands-on labs and 1 hands-on skills assessment
- Pre-test, 11 chapter quizzes, 1 sectional quizzes, 11 chapter exams, and 1 final exam
- 2 Cisco Packet Tracer skills-based assessments

CCNA R&S: Routing and Switching Essentials

Course Overview

The second course in the CCNA Routing and Switching curriculum describes the architecture, components, and operations of routers and switches in a small network.

Candidates learn how to configure a router and a switch for basic functionality

Benefits

Candidates are ready to prepare for CCENT certification, skilled to apply for entry-level network technician jobs and able to move on to advanced certifications.

Learning Components

- 10 chapters
- 29 hands-on labs and 1 hands-on skills assessment
- Pre-test, 10 chapter quizzes, 10 chapter exams, and 1 final exam
- 2 Cisco Packet Tracer skills-based assessments



FEATURES

Prerequisites : CCNA R&S:

Introduction to Networks

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA R&S
Scaling Networks or CCNA Security

Career-Ready

CCNA R&S: Scaling Networks



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA R&S Connecting Networks

Course Overview

The third course in the CCNA Routing and Switching curriculum describes the architecture, components, and operations of routers and switches in large, complex networks.

Benefits

Candidates learn how to configure and troubleshoot routers and switches for advanced functionality and resolve common issues with protocols in both IPv4 and IPv6 networks.

Learning Components

- 11 chapters
- 33 hands-on labs and 1 hands-on skills assessment
- Pre-test, 11 chapter quizzes, 2 sectional quizzes, 11 chapter exams, and 1 final exam
- 2 Cisco Packet Tracer skills-based assessments

CCNA R&S: Connecting Networks

Course Overview

The fourth and final course in the CCNA Routing and Switching curriculum covers the WAN technologies and network services employed by converged applications in a complex network

Benefits

By the end of the course, candidates learn how to configure and troubleshoot network devices and implement virtual private networks and are ready to prepare for the CCNA R&S certification.

Learning Components

- 9 chapters
- 12 hands-on labs and 1 hands-on skills assessment
- Pre-test, 9 chapter quizzes, 2 sectional quizzes, 9 chapter exams, and 1 final exam
- 2 Cisco Packet Tracer skills-based assessments



FEATURES

Prerequisites : CCNA R&S:

Scaling Networks

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA Security
or CCNP R&S ROUTE

**FEATURES**

Prerequisites : CCNA R&S Essentials (CCENT)

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNP R&S ROUTE

Course Overview

CCNA Security introduces the core security concepts and skills needed to troubleshoot and monitor computer networks and help ensure the integrity of devices and data.

It emphasizes the practical application of the skills needed to design, implement, and manage network security systems.

Benefits

CCNA R&S candidates interested building security and data protection expertise for the Cisco CCNA Security career certification and jobs as network security specialists.

Learning Components

- 11 chapters, quizzes, and chapter exams
- 13 Cisco Packet Tracer activities and one Packet Tracer Practice Skills Based Assessment (SBA)
- 16 hands-on labs
- One each: pre-test, certification practice exam, practice final, final exam and skills-based assessment

CCNA Cybersecurity Operations

Course Overview

The CCNA Cybersecurity Operations course introduces the key skills and concepts to monitor, detect, and analyze cyber-crime, cyber-espionage, internal threats, advanced persistent threats, regulatory requirements and other issues linked to cybersecurity businesses face, while providing the tools to respond to those threats. It focuses on the application of the skills required to ensure network availability and security.

Benefits

Participants acquire Associate level Skills in Cybersecurity, a growing field, and learn how to apply them. In addition, this training is aligned with the Cisco CCNA Cybersecurity Operations certification.

Learning Components

Interactive content, exams and questionnaires

- 13 chapters
- 13 quizlets
- 54 interactive activities
- 45 hands-on workshops (including 27 on virtual machines)
- 5 exercises on Packet Tracer
- Assessment Methods:
skill-based assessment, mock exams (210-250 SECND; 210-255 OPSEC) and final exam



FEATURES

Prerequisites : None

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNA Security

Career-Ready

CCNP Routing and Switching Curriculum of 3 courses

Curriculum Overview

The three CCNP Routing and Switching courses provide a comprehensive overview of enterprise-level networking concepts, including advanced routing, switching, and troubleshooting. The curriculum integrates industry-relevant instructional approaches to help candidates prepare for career opportunities.

Career Prep

College candidates seeking hands-on practical experience, Cisco CCNP R&S certification, and career skills in advanced routing, switching, and troubleshooting.

Learning Components

- 3 courses: CCNP R&S ROUTE: Implementing IP Routing, CCNP R&S SWITCH: Implementing IP Switched Networks, and CCNP R&S TSHOOT: Troubleshooting and Maintaining IP Networks
- Hands-on labs
- Cisco Press textbooks
- Chapter exams and final exams



FEATURES

Prerequisites:

CCNA R&S courses 1-4

Language: English (other on demand)

Course Delivery: Instructor-led

Estimated Time to Complete:

210 hours (3 x 70 hours)



CERTIFICATION
ALIGNED

CPP: Advanced Programming in C

Course Overview

It prepares participants to perform intermediate to advanced level coding tasks, for example, to manipulate in C language a variable number of parameters (<stdarg.h>), detailed I/O (<unistd.h>), memory and strings (<string.h>, etc.), processes and flows, floats and integers (<math.h>, <fenv.h>, <inttypes.h>, etc.) and network interface.

Benefits

When you discover programming in C, you develop the basics common to all programming languages. You learn to consider and reflect on programming concepts in depth. The course is aligned with the CPP - C Certified Professional Programmer certification.

Learning Components

- 8 modules of interactive learning content
- 18 practical workshops
- Questionnaires, chapters and final exams



FEATURES

Prerequisites : CLA - Programming Essentials in C, CLA certification or proof of equivalent knowledge
Language : English (other on demand)
Course Delivery : provided by an instructor
Estimated Time to Complete : 70 hours
Recommended Next Course : CCNP R&S, NDG Linux I

Career-Ready

CLP: Advanced Programming in C++

Course Overview

Prepares candidates to accomplish coding tasks such as C++ template mechanism, understanding and using properly template classes and methods, and the C++ STL library including solving common programming problems and the IO part.

Benefits

Builds the skills needed for programming career opportunities and success in jobs related to software development, network, engineering and system administration. Aligns with CPP-C++ Certified Professional Programmer Certification.



FEATURES

Prerequisites : CPA – Programming Essentials in C++ course, certification or equivalent knowledge recommended

Language : English (other on demand)

Course Delivery : Instructor-led

Estimated Time to Complete : 70 hours

Recommended Next Course : CCNP R&S, NDG Linux I

Learning Components

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

Acting in close collaboration with the University of Luxembourg, the University of Luxembourg Competence Centre has access to the University high-end state-of-the-art facilities as well as to its faculty, thus taking advantage of their expertise to ensure the quality of the training programmes.

Its main activities revolve around innovation and learning. Its mission is to constantly evolve and develop, offer and manage adult training programmes in different areas focusing on the use of new technologies and methodologies.

The Competence Centre is organized in competency clusters. Among them, the "Digital Learning Cluster" aims to provide teachers and trainers in innovative skills in order to guide the learner in a bright, original and connected way. The "Digitalization & ICT Cluster" concentrates on the needs that have arisen with the digitalization, concentrating on how to help organizations in Luxembourg deal with the challenges they are facing. In this way, the Competence Centre is a key partner of the CSL for sustaining and developing the Cisco Networking Academy

Competence Centre

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A NECESSARY INSTITUTION TO DEFEND EMPLOYEES' INTERESTS

The Chamber of employees (Chambre des salariés, CSL), which was constituted as a result of the introduction of the unique status has about 530.00 adherents. It plays a major role in the consultation process regarding national legislative procedures. Its opinion is required on all bills in relation with its adherents before the final vote in the Parliament.

The CSL publishes documentation on legal issues regarding labour law, social security law as well as viewpoints and opinions on economic and social topics. It also organises public conferences with relation to the work environment.

The CSL appoints the employee and retiree representatives which sit within the Caisse nationale de santé (National Health System), the Assurance pension (retirement insurance), the labour court and the social security jurisdictions.

It proposes training courses to employees and to their representatives in its centre for training and seminars (Centre de formation et de séminaires, CEFOS) in Remich. The latter is constituted of a multifunctional structure for the organisation of meetings and conferences.

Further education for adults is one of the main activities of the CSL. The Luxembourg Lifelong Learning Center (LLLC), the further education centre of the CSL, proposes a large panel of evening courses, seminars, university degrees, specialised training courses and professional certifications.

Luxembourg Lifelong Learning Center

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Career-Ready

NDG Linux Curriculum of 2 courses

Curriculum Overview

The NDG Linux curriculum, developed by Networking Academy partner NDG, is a 2-course series for aspiring Linux system administrators.

Candidates develop proficiency in performing maintenance tasks on the command line, installing and configuring a computer running Linux, and configuring basic networking, using virtual machines running Linux.

Career Prep

NDG Linux curriculum prepares you for careers in cloud computing, cybersecurity, information systems, networking, programming, software development, big data, and more.

Aligned with two certifications: Linux Professional Institute LPIC-1 Certification and CompTIA Linux+ powered by LPI Certification.

Learning Components

- 2 courses: NDG Linux I, NDG Linux II
- More rigorous than Linux Essentials
- Built-in virtual machine to experiment with Linux commands
- Hands-on labs and activities
- Chapter, midterm and final exams



FEATURES

Prerequisites: None, but NDG Linux Essentials or equivalent knowledge recommended

Instructor Training Required: No

Language: English (other on demand)

Course Delivery: Instructor-led and Self-paced

Estimated Time to Complete: 140 hours
(2 x 70 hours)



CERTIFICATION
ALIGNED