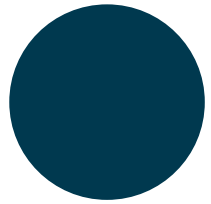# Lehren im Academy-Programm - Tools, Lernmaterialien

Skillsforall und neue Zertifikate, Tools
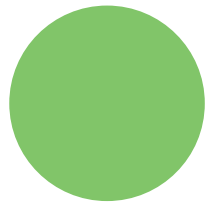
Carsten Johnson carsjohn@cisco.com

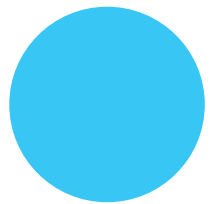Januar 2023

Skillsforall

Neue entry level Zertifikate

Packet Tracer & Co.

CISCO Networking Academy

Skills for All

A reimagined online learning experience
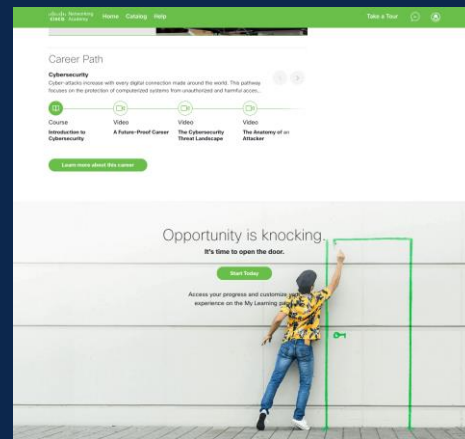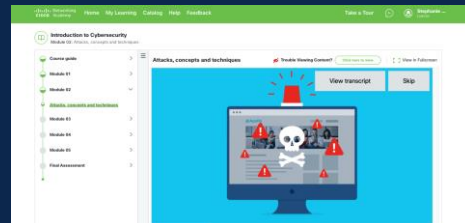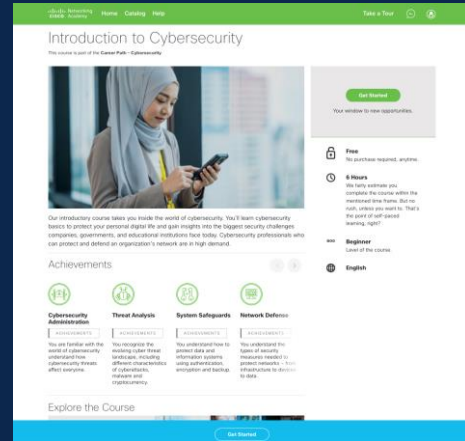
Cisco Networking Academy
Skills for All

Skills for All with Cisco Networking Academy is a reimagined learning experience connecting global learners to free, self-paced, mobile-friendly courses and learning pathways leading to entry-level technology certifications and jobs.

Creating a Hybrid Learning Environment
Expanding Cisco Networking Academy with Skills for All

Free, flexible, mobile-friendly, self-paced learning experiences

For All

SkillsForAll.com

NetAcad.com

Instructor-Led experiences for in-class, blended or 100% distance learning

For Academies

More course delivery options for instructors to meet students where they are in their learning journeys.

What is the Instructor-Guided Learner Experience?

Your opportunity to leverage the power of the innovative online learning experience on Skills for All.

Academy instructors can open free, mobile-friendly, online courses and monitor student progress.

Guide learners through engaging content, pre-built with gamification, interactive activities, videos, practice labs, and more.

Early access – be one of our first educators and help shape the experience.

Building towards a converged 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.

Existing experience
on NetAcad.com

Converged experience
new NetAcad.com

Skills for All:
Greenfield innovation space to build out
new teaching & learning experience

- Full course portfolio available within new teaching & learning experience

- Integrated educator experience, including class management features and resource center

- Foundation for future enhancements like adaptive learning and intrinsically-motivated learning

- Entry-level, stackable offerings – more flexible options to fit into your own curriculum program

Networking Academy Curriculum Portfolio

11.01.2022

Explore
Introduction to exciting opportunities in technology.

- ▲ Get Connected
- ▲ NDG Linux Unhatched

übersetzt
- ▲ Introduction to Cybersecurity
- ▲ Introduction to IoT and Digital Transformation

- ▲ Introduction to Data Science *neu*
- ▲ Getting Started with Cisco Packet Tracer
- ▲ Exploring Networking with Cisco Packet Tracer
- ▲ Exploring IoT with Cisco Packet Tracer

Career
Preparation for entry level positions.

Digital Essentials
- ★ ● IT Essentials
- ● ▲ NDG Linux Essentials
- ▲ Networking Essentials
- ▲ Cybersecurity Essentials
- ● ▲ PCAP: Programming Essentials in Python

Networking *übersetzt*
- ▲ Networking Basics *neu*
- ▲ Networking Devices and Initial Configuration
- ▲ Network Addressing and Basic Troubleshooting

CCNA:
- ★ ● ■ Introduction to Networks
- ★ ● ■ Switching, Routing, & Wireless Essentials
- ★ ● ■ Enterprise Networking, Security & Automation

CCNP Enterprise:
- ★ ● ■ Core Networking (ENCOR)
- ★ ● ■ Advanced Routing (ENARSI)

Programmable Infrastructure
- ● ▲ Python Essentials 1
- ● ▲ Python Essentials 2 *neu*
- ★ ● ■ DevNet Associate

Workshop: Experimenting with REST APIs

Workshop: Model-Driven Programmability

Cybersecurity
- ● ▲ Endpoint Security *neu*
- ● ▲ Network Defense
- ● ▲ Cyber Threat Management
- ● ▲ Cybersecurity Pathway
- ★ ● ■ CyberOps Associate
- ★ ■ Network Security
- ● ▲ Cloud Security

Practice
Develop skills with interactive tools & experiences

Cisco Packet Tracer	Gaming	Virtual Labs	Assessments	Physical Equipment

Complementary Offerings
Additional offerings available from Partners.

NDG
- ● ▲ NDG Linux I
- ● ▲ NDG Linux II
- NDG NETLAB+
- NDG CyberOps Lab

OPENEDG
- ● ▲ JavaScript Essentials 1 (JSE) *neu*
- ● CLA: Programming Essentials in C
- ● CLP: Advanced Programming in C
- ● CPA: Programming Essentials in C++
- ● CPP: Advanced Programming in C++

○ Aligns to Certification/Certificate ☐ Instructor Training Required △ Self-paced ☆ ASC Alignment Required

Includes courses on NetAcad.com and SkillsForAll.com

Neue entry level Zertifikate

Read FAQs

https://www.cisco.com/c/en/us/training-events/training-certifications/certifications/entry/ccst-certifications.html#~webinars

CCST certifications

Cisco Certified Support Technician (CCST) Cybersecurity

First date to test: March 1, 2023

The CCST Cybersecurity certification validates a candidate's skills and knowledge of entry-level cybersecurity concepts and topics, including security principles, network security and endpoint security concepts, vulnerability assessment and risk management, and incident handling.

The CCST Cybersecurity certification is also a first step toward CyberOps Associate certification.

Check out the free training and resources that can help you prepare for certification:

- CCST Cybersecurity exam topics

- Cybersecurity Career Path from Cisco Networking Academy

Cisco Certified Support Technician (CCST) Networking

First date to test: April 2023

The CCST Networking certification validates an individual's skills and knowledge of entry-level networking concepts and topics. The certification demonstrates foundational knowledge and skills needed to show how networks operate, including the devices, media, and protocols that enable network communications.

The CCST Networking certification is also a first step toward CCNA certification.

Check out the free training and resources that can help you prepare for certification:

- CCST Networking exam topics

- Networking Career Path from Cisco Networking Academy (Availability of training targeted for April 2023)

Kick-start your IT career with CCST certifications

Be the first to hear about an upcoming CCST webinar where you'll get valuable information and resources that will prepare you to get certified!

First name:

Last name:

Email address:

Country:

Select... ⌄

My Cisco certification status:

Select... ⌄

Sign up and we'll help you connect to the tools, training and perspective you need to meet your learning goals.

☐ I would like to receive email communications about Cisco training and certification programs. I understand I can unsubscribe at any time.

Kurzinformation zu Cisco Certified Support Technician Zertifikaten

- CCST Cybersecurity exam: March 1, 2023

- CCST Networking exam: April 2023

- The **CCST Cybersecurity** and **CCST Networking** certifications are entry-level certifications. These certifications will provide the basic knowledge and training required for candidates to progress to CCNA and CyberOps associate-level certifications

- Ausbildungsziel

- **CCST Cybersecurity ->** entry-level Cybersecurity position, such as a Cybersecurity Technician, Cybersecurity Analyst, or Tier 1 Help Desk Support. 150 hours of instruction and hands-on experience -> Anschluss: Cybersecurity Operations Associate

- **CCST Networking ->** entry-level network technicians and customer support technicians, as well as students and interns. 150 hours of instruction and hands-on experience -> Anschluss: CCNA

Learners gain verified skills along the pathway
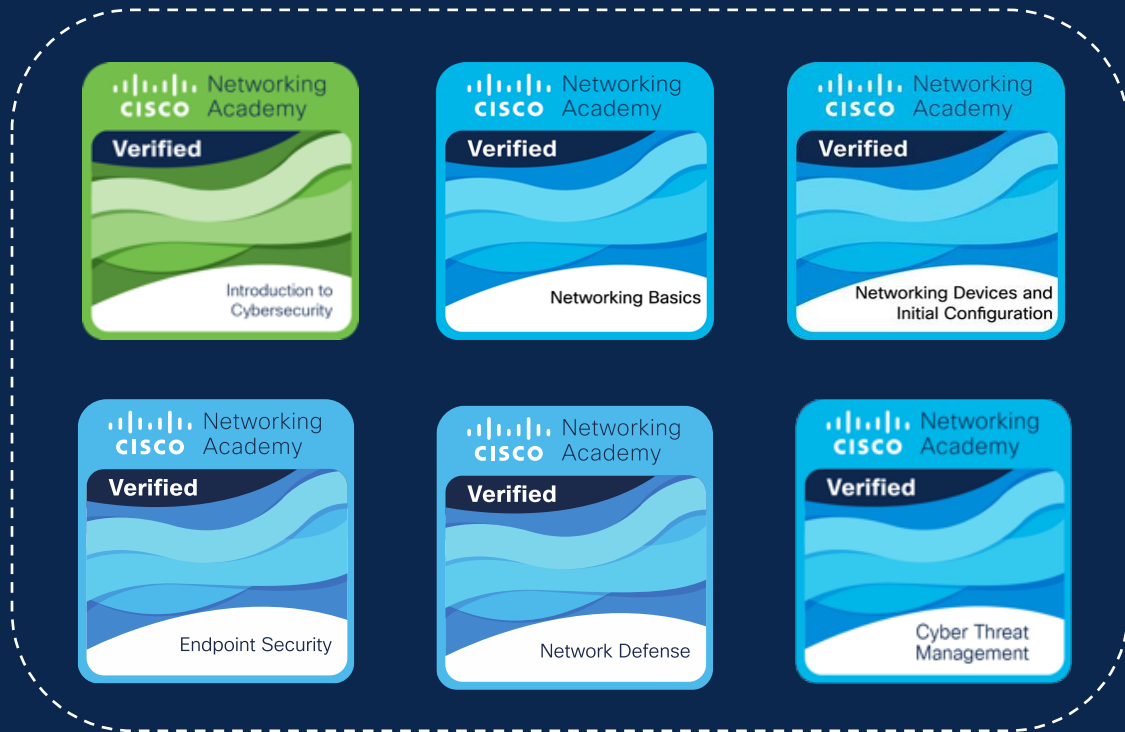
Course Badges

Pathway Badge

Certification

Skills for All can lead to instructor-led course offerings - CyberSec

SkillsForAll.com
Self-paced (Instructor-guided)

NetAcad.com
Instructor-led

Introduction to Cybersecurity

Networking Basics

Networking Devices and Initial Configuration

Endpoint Security

Network Defense

Cyber Threat Management

Cybersecurity Pathway

its
INFORMATION
TECHNOLOGY
SPECIALIST

CyberOps Associate

Cloud Security

Network Security

IoT Security

Certification

Digital Badge

Job Preparedness

Learners gain verified skills along the pathway

Networking Academy
CISCO
Verified
Networking Basics

Networking Academy
CISCO
Verified
Networking Devices and Initial Configuration

Networking Academy
CISCO
Verified
Network Addressing and Basic Troubleshooting

Networking Academy
CISCO
Verified
Network Defense

Getting Started with Cisco Packet Tracer

Exploring Networking with Cisco Packet Tracer

CCST Networking

Course Badges

Pathway Badge

Certification

Skills for All can lead to instructor-led course offerings - Networking

SkillsForAll.com
Self-paced (Instructor-guided)

Networking Pathway

Getting started with PT → Networking Basics

Exploring Net-working with PT → Networking Devices + Initial Config.

Networking Devices + Initial Config. → Network Defense → Network Addressing + Troubleshoot

NetAcad.com
Instructor-led

CCNA

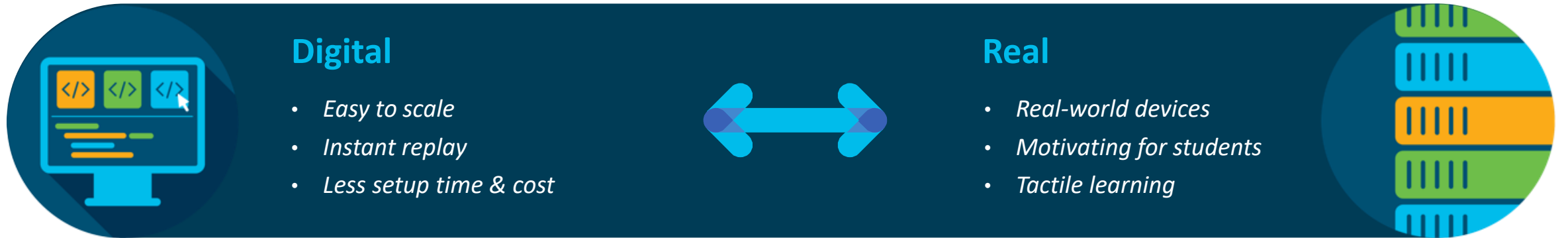CCNP

DevNet Associate

Certification   Digital Badge   Job Preparedness

Packet Tracer & Co.

A Suite of Lab Environments

Options ranging from simulation to physical hardware

Digital

- *Easy to scale*
- *Instant replay*
- *Less setup time & cost*

Real

- *Real-world devices*
- *Motivating for students*
- *Tactile learning*

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
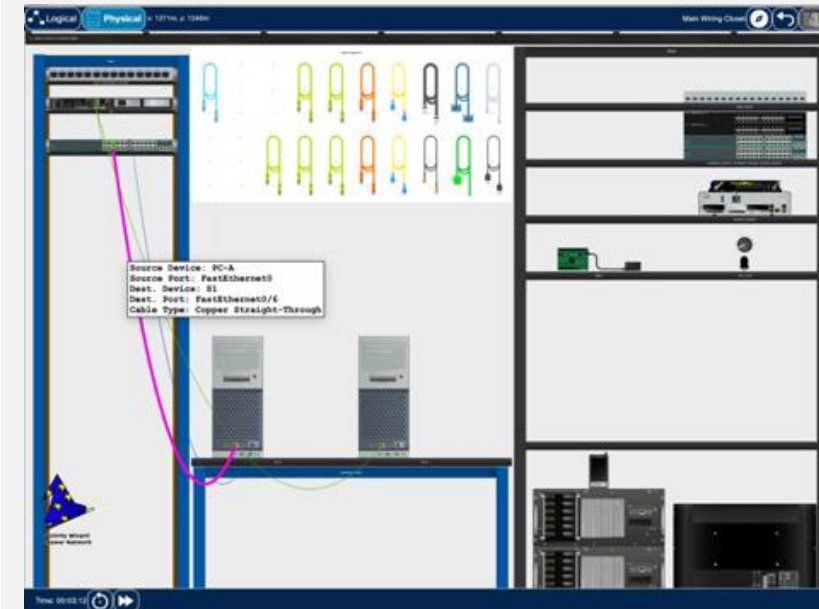• And more!

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

Requirements & Resources

• Cost: Free

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

Quick Links

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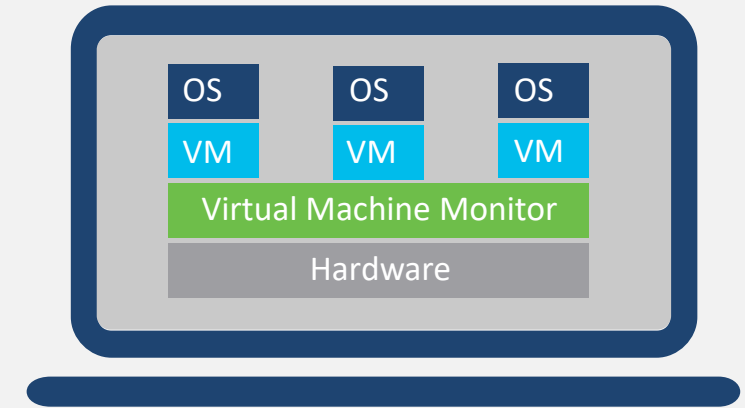
How to Access:
Free software download from Oracle VirtualBox
https://www.oracle.com/virtualization/technologies/vm/downloads/virtualbox-downloads.html

Courses that use Virtual Machines include:
- CCNA
- CyberOps Associate
- Emerging Technologies Workshop: Model-Driven Programmability
- DevNet Associate

Requirements & Resources

- Cost: Free

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

Remote Equipment: DevNet Sandbox

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

One more thing…

Nchhaltigkeit in der IT Ausbildung

Abschnitt F: fachrichtungsübergreifende, integrativ zu vermittelnde Fertigkeiten, Kenntnisse und Fähigkeiten

4. Umweltschutz (§ 4 Absatz 7 Nummer 4)

- (Die Auszubildenden sollen) (...) zur Vermeidung betriebsbedingter Umweltbelastungen im beruflichen Einwirkungsbereich beitragen, insbesondere

  a) mögliche Umweltbelastungen durch den Ausbildungsbetrieb und seinen Beitrag zum Umweltschutz an Beispielen erklären

  b) für den Ausbildungsbetrieb geltende Regelungen des Umweltschutzes anwenden

  c) Möglichkeiten der wirtschaftlichen und umweltschonenden Energie- und Materialverwendung nutzen

  d) Abfälle vermeiden sowie Stoffe und Materialien einer umweltschonenden Entsorgung zuführen
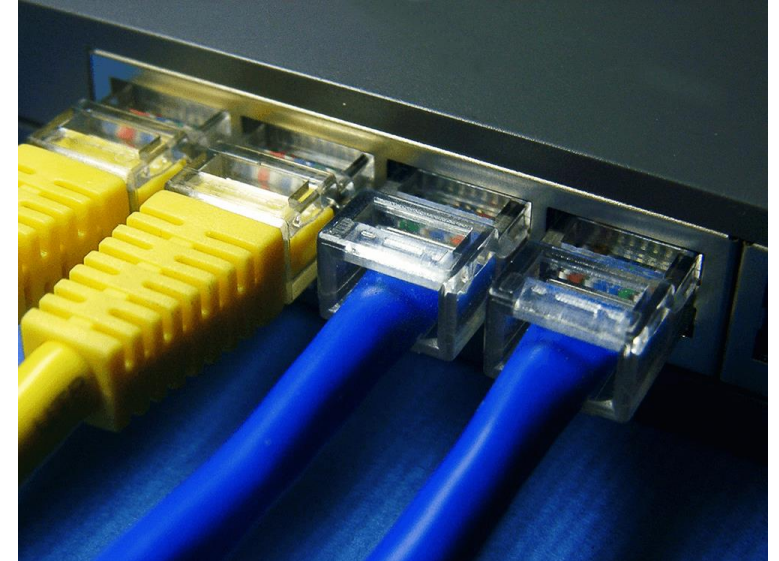
IT-Bildungsnetz e.V. entwickelt einen Kurs

Der zu entwickelnde Kurs besteht aus 3 Modulen mit jeweils ca 60-90 Minuten Lerninhalt (Beispieltitel)

1. Umweltrelevante Einflussgrößen bei der Herstellung von IT Infrastrukturgeräten, der Bereitstellung von Diensten und Logistik (Produktion)

2. Energieeffizienter und CO2-sparsamer Betrieb von IT-Netzwerken (Betrieb und Administration)

3. Umwelt- und Nachhaltigkeitsregelung für IT-Betriebe, Nachhaltigkeitsorientierte Leistungsausschreibung (Umweltschutzregeln und Beschaffung)

- Sprache: Deutsch und englisch

- Verfügbar voraussichtlich ab April / Mai 2023

- Kein Instructor Training

- Können Sie einen Beitrag leisten?

- Haben Sie Unterrichtsmaterial oder Empfehlungen, was in den Kurs passen könnte?

-> IT-Bildungsnetz, GF Vanessa Verstegen-Häntsch
vanessa.verstegen@it-bildungsnetz.de