

# Preparing students for the changing IT industry

NetAcad update

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# Cisco's portfolio evolution: The New Network

To enable automation and IT operations

Cisco Leadership



## Intent-based Networking

Users, Devices, Apps,  
Security Intent & Policy



## Multi-Domain Networking

Enterprise, Data Center,  
Service Provider, Security



## APIs and Programmable

Automation, Agility, Scale  
DevOps & CI/CD

# World of Networking Engineers



## Automation

Software-defined infrastructure  
programmability

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## Multi-Cloud

New expectations for speed,  
scale, and security

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## AI/ML & Business Insights

For increased performance,  
reliability, and security

# World of Software Developers



## Application Economy

Speed of development, shift  
from IT to LOB, cloud offers  
quick and easy

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## Internet of Things

Connectivity increases value,  
edge computing and analytics

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## DevOps & Cloud

Powerful developer tools, APIs  
and open source, CI/CD and  
DevOps are enablers

# The IT Team of the Future

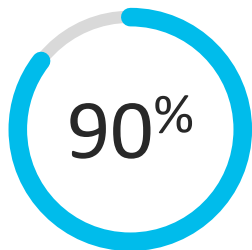
World of  
Networking Engineers



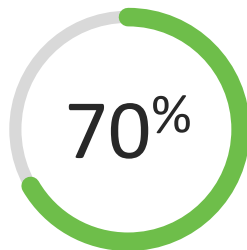
World of  
Software Developers

## Cisco will help build this

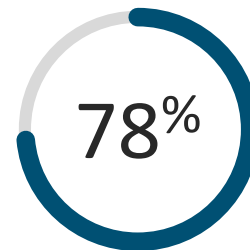
# Certifications drive key skills for innovation and scale



Of CEOs say their company is facing disruptive change driven by digital technologies



Of CEOs say their company doesn't have the skills to adapt



Of technology execs/managers believe technical certifications are a critical success factor

# Introducing Cisco's new certification suite

## Cisco Certifications

Associate Level

Specialist Level

Professional Level

Expert Level

Networking  
Engineers



Software  
Developers



Future  
Offering

# Certifications Changes

## Associate

CCNA R&S	➡ New CCNA
CCNA Cyber Ops	➡ CyberOps Associate
CCNA Security	
CCNA Cloud	
CCNA Collaboration	
CCNA Data Center	Training credential
CCDA	
CCNA Industrial	
CCNA Service Provider	
CCNA Wireless	

## Professional

CCNP R&S
CCNP Cloud
Streamlined to 5 Technology tracks:
• Enterprise
• Security
• Data Center
• Collaboration
• Service Provider
CCNP Service Provider
CCNP Wireless

## Expert

CCIE Collaboration
Streamlined to 5 Technology tracks:
• Enterprise
• Security
• Data Center
• Collaboration
• Service Provider
CCIE Service Provider
CCIE Wireless

# Certifications Timing

## Announcement

June 10, 2019

New certifications,  
continuing education  
and training badges go  
live

February 24, 2020





# What Does it Mean to NetAcad?



# Networking Academy, but even better

## Same

- Innovative courses with strong outcomes
- Aligned to industry recognized certifications
- Powerful learning tools to simulate work scenarios
- Real connections to job
- Professional development and tools to assist instructors
- Digitally delivered

## New

### **CCNA/CCNP courses and Cyber/Security courses:**

- Prepares for the new Cisco CCNA and CCNP certifications
- CCNA CyberOps course will change to CyberOps Associate
- CCNA Security course will transform to NetAcad Network Security

### **Offering that aligns to DevNet Associate certification:**

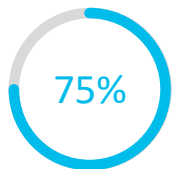
- Creating new opportunities for students to develop programming skills applicable to intent-based networking
- Prepares for the new Cisco DevNet Associate Certification

### **Digital Badging:**

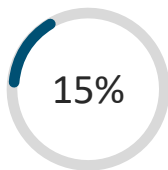
- Provides professional recognition as it's earned along the learning path
- Allows students to validate skills throughout their career

# Closer Look at New CCNA

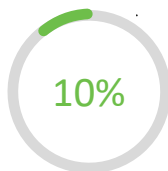
IP Foundation (Core Networking)



Security



Automation & Programmability



Solid IP foundation including coverage of digital transformation technologies

- |                  |              |                           |
|------------------|--------------|---------------------------|
| • Virtualization | • Security   | • Network Programmability |
| • Cloud          | • Automation | • Analytics               |
| • Wireless       |              |                           |



Align to new CCNA certification



Improved course layout to increase student engagement



Use of innovative learning tools



Secure assessments to combat cheating

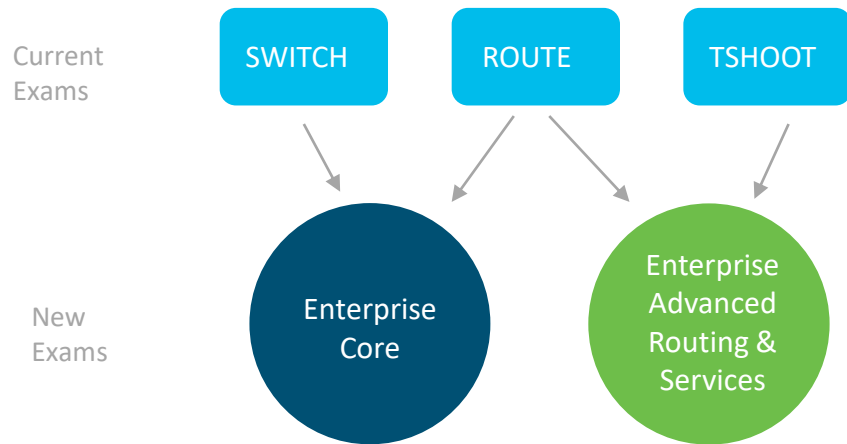


New user experience with improved accessibility



Digital badges for course completions and passing assessments

# Closer Look at CCNP Enterprise



Align CCNP labs and exams to new CCNP Enterprise certification – Enterprise Core + Advanced Routing & Services



Digital badges for completion of labs & exams and passing assessments

Leverages ROUTE/SWITCH/TSHOOT topics and labs with addition of:

- Virtualization
- Wireless
- Network Programmability
- Automation
- Analytics

# Cisco Certified CyberOps Associate Certification and Training Program

## Introducing the new Cisco Certified CyberOps Associate certification program

As the sophistication, stealth, and frequency of cybersecurity threats continue to increase, the need for cybersecurity operations personnel has accelerated. Globally, cybersecurity jobs continue to grow at a rate of 8.2%<sup>1</sup> annually. Cybersecurity functions continue to augment staff with specialized cybersecurity operations personnel or establishing dedicated Security Operations Centers (SOCs). Cybersecurity operations trained personnel provide the “defense” skills that complement the cybersecurity team.

The updated Cisco Certified CyberOps Associate certification program gives you the foundational skills and knowledge you need to begin a career in cybersecurity operations. We designed the program to help you become a valuable member of a SOC. The certification validates the fundamentals needed for associate-level SOC job roles, with one exam and one training course to help you prepare. The exam and training cover knowledge and skills related to security concepts, security monitoring, host-based analysis, network intrusion analysis, and security policies and procedures.

From one of industry's leading provider of security solutions and certifications, the new CyberOps Associate certification and training program is your pathway to a career in cybersecurity operations. And the process couldn't be simpler: pass one exam and you are on your way.

<sup>1</sup>IDC, 2019

## Benefits

- **Launch your career in cybersecurity operations** with the new Cisco® Certified CyberOps Associate certification
- **Master the essentials** to prevent, detect, and respond to cybersecurity threats and breaches
- **Rev up your resume** with training and certification on cybersecurity operations knowledge and skills
- **Boost your confidence** by gaining real-world know-how
- **Tell the world what you've achieved** with a digital certification badge on your social media profiles

## Explore

Introduction to exciting opportunities in technology.

- ▲ Get Connected
- ▲ Introduction to Packet Tracer
- ▲ NDG Linux Unhatched
- ▲ Cybersecurity Essentials
- ▲ Introduction to Cybersecurity
- ▲ Introduction to IoT
- Networking Essentials
- ▲ Entrepreneurship

## Career

Preparation for entry level positions.



Digital Essentials

- ★ ● ■ IT Essentials
- ▲ NDG Linux Essentials

- ▲ PCAP: Programming Essentials in Python
- Hackathon Playbook



Networking

- ★ ● ■ CCNA v7:
  - Introduction to Networks (ITN)
  - Switching, Routing, & Wireless Essentials (SRWE)
  - Enterprise Networking, Security & Automation (ENSA)
- ★ ● ■ CCNP Enterprise:
  - Core Networking (ENCOR)
  - Advanced Routing(ENARS)



Programmable Infrastructure

- Emerging Tech Workshops:
  - Network Programmability
  - Experimenting with REST APIs
- IoT Fundamentals:
  - ★ ■ Connecting Things
  - ★ ■ Big Data & Analytics



Cybersecurity

- ★ ● ■ CCNA Security
- ★ ● ■ Cisco Certified CyberOps Associate
- IoT Fundamentals:
  - IoT Security

## Practice

Increase mastery with hands-on tools & experiences

Packet Tracer

Gaming

Prototyping Lab

Virtual Labs

Assessments

Physical Equipment

## Complementary Offerings

Additional offerings available from Partners.



- ▲ NDG Linux I
- ▲ NDG Linux II
- NDG NetLab+
- NDG CCNA CyberOps Lab



- CLA: Programming Essentials in C
- CLP: Advanced Programming in C
- CPA: Programming Essentials in C++
- CPP: Advanced Programming in C++

# Closer Look at DevNet Associate Certification



## Cisco Certified DevNet Associate

### Validate these skills

- Software Development skills (python, git, JSON)
- Ability to securely use REST APIs
- Understanding of containers, microservices, and CI/CD pipelines
- Infrastructure Automation & DevOps skills
- Knowledge of Cisco Platform Capabilities

### Deliver Outcomes

- Build software applications as part of a team
- Build Network Automation scripts
- Build tools for logging, monitoring and testing



Creates opportunities to attract new instructors, departments and academies



52k+ NetAcad users already using DevNet (13% of total)



Emerging Tech Workshops & programming courses target network programmability



New course offering

# Suite of Digital Badges

## Cisco Badges

### Certification Badges



Pass Certification Exam

### Training Badges



Completion of Training course and passing assessment

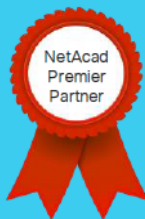
## NetAcad Badges

### Learning Badges



- Resume-worthy skills
- Completion of NetAcad courses & passing assessments
- Complements Certificate of Completion

### Recognition Badges



- Instructor recognition
- Academy recognition



# Upcoming activities and initiatives

- CCNA v7 adoption readiness seminars (5 days): Feb, May, Jun
- Programmability workshop (1 day): Feb, Apr (2<sup>nd</sup> half)
- Networking Academy Games 2020 (national): Apr 2, TUKE
- Annual CZ/SK NetAcad conference: Jun 11-13, TUKE
- Summer school 2020: instructor (and student) training

# Key takeaways

- Networking Engineers + Software Developers = IT Team of the future
- Industry certification remains extremely important for job market
- NetAcad CCNA: 4 courses -> 3 courses
- NetAcad CCNP: 3 courses -> 2 courses
- NetAcad CCNA CyberOps -> CyberOps Associate
- New DevNet Associate course – opportunity to engage more students
- ASC and ITCs are supporting changes by ‘bridge courses’
- Changes require support of the school management

