

# New Certifications and CCNA 7

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12 September 2019



# World of **Networking Engineers**

# World of **Software Developers**



## **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



## **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

# Key Elements of Cisco Certifications Changes

## Training

Learning/Training Levels 100-400



Provides badge for completing training and passing assessment. Counts for Continuing Education (CE) credits

Level 100 training examples:

- Security (IINS)
- Wireless (WIFUND)
- Collaboration (CICD & CIVND)
- Data center (DCICN & DCICT)

## Associate Level



One Exam



One Exam

## Specialist Level



One Exam



One Exam:

## Professional Level



Two Exams:  
1 core and 1 concentration exam



Two Exams:  
1 DevNet core and 1 concentration exam

## Expert Level



Lab Exam



Future offering

# Certifications Changes

## Entry

CCENT
CCT

## Associate

CCNA R&S
CCNA Cyber Ops
CCNA Security
CCNA Cloud
CCNA Collaboration
CCNA Data Center
CCDA
CCNA Industrial
CCNA Service Provider
CCNA Wireless

## Professional

CCNP R&S
CCNP Cloud
CCNP Collaboration
CCNP Data Center
CCDP
CCNP Security
CCNP Service Provider
CCNP Wireless

## Expert

CCIE Collaboration
CCIE Data Center
CCDE
CCIE R&S
CCIE Security
CCIE Service Provider
CCIE Wireless

# Certifications Changes

## Entry

No Certification credential
CCT

## Associate

CCNA R&S	➔	New CCNA
CCNA Cyber Ops	➔	Continues
CCNA Security		
CCNA Cloud		
CCNA Collaboration		
CCNA Data Center		
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	

# Cisco Digital Badges

## Cisco

### Certification Badges



Pass Certification Exam

### Training Badges



Completion of Training course and passing assessment

## NetAcad

### Learning Badges



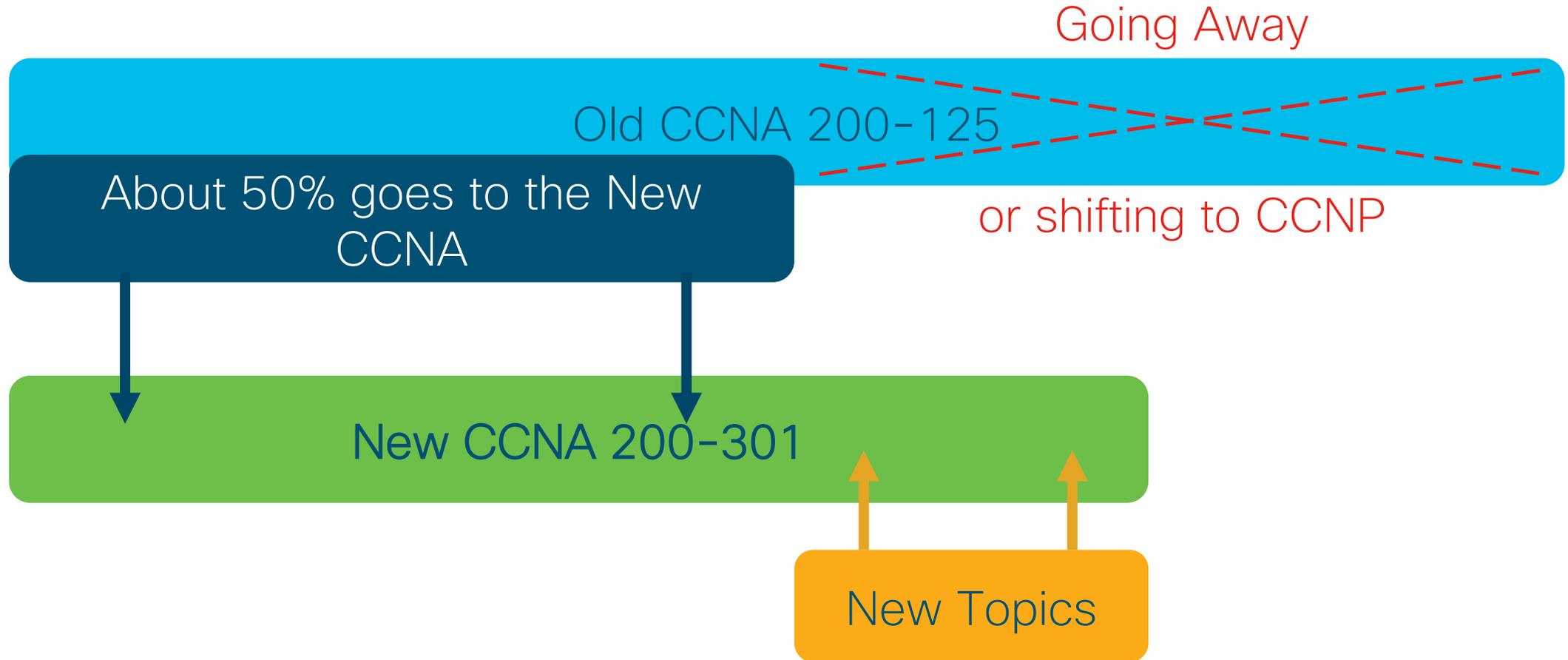
- Resume-worthy skills
- Completion of NetAcad courses & passing assessments
- Complements Certificate of Completion

### Recognition Badges



- Instructor recognition
- Academy recognition

# Relative Exam Blueprint Comparison by Size



# Exam Domains Comparison

%	200-125 (Old CCNA)	200-301 (New CCNA)	%
15%	Network Fundamentals	Network Fundamentals*	20%
21%	Lan Switching	Network Access*	20%
23%	Routing	IP Connectivity	25%
10%	WAN	IP Services	10%
10%	Infrastructure Services	Security Fundamentals*	15%
11%	Infrastructure Security	Automation and Programmability*	10%
10%	Infrastructure Management		

\* - Domains with new content to study

# What you need to know about CCNA

## Course

- New course coming in November 2019 aligned to the new CCNA cert.
- Translations to come starting mid 2020

## Content

- Core: Networking and IP
- New: More Wireless, Automation, Programmability and Security.

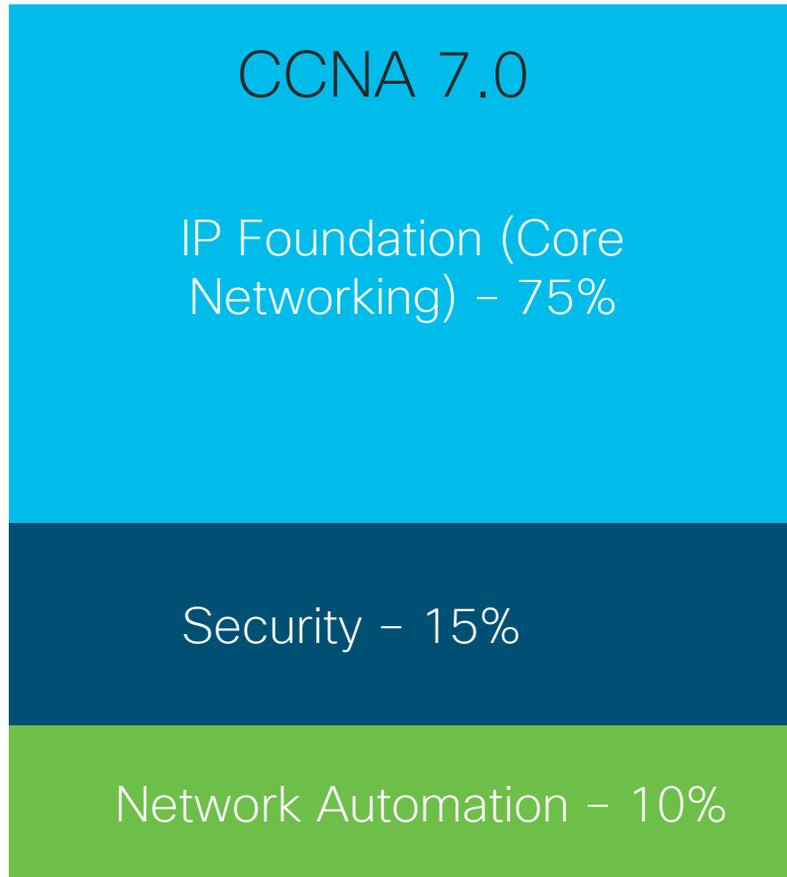
## Certification

- CCNA R&S EOL 23 Feb 2020
- CCENT EOL 31 July 2020
- New CCNA cert. (1 exam only) from 24 Feb 2020

## CCNA X

- CCNA Security course continues the same
- CCNA Security cert. EOL 23 Feb 2020
- CCNA Security = CCNA cert. + Security Training Badge from 24 Feb 2020
- CCNA Cyber Ops course and cert. continue the same

# CCNA 7 Focus Areas and Major Differences



CCNA v6

280 hrs

4 Courses

CCENT /  
CCNA

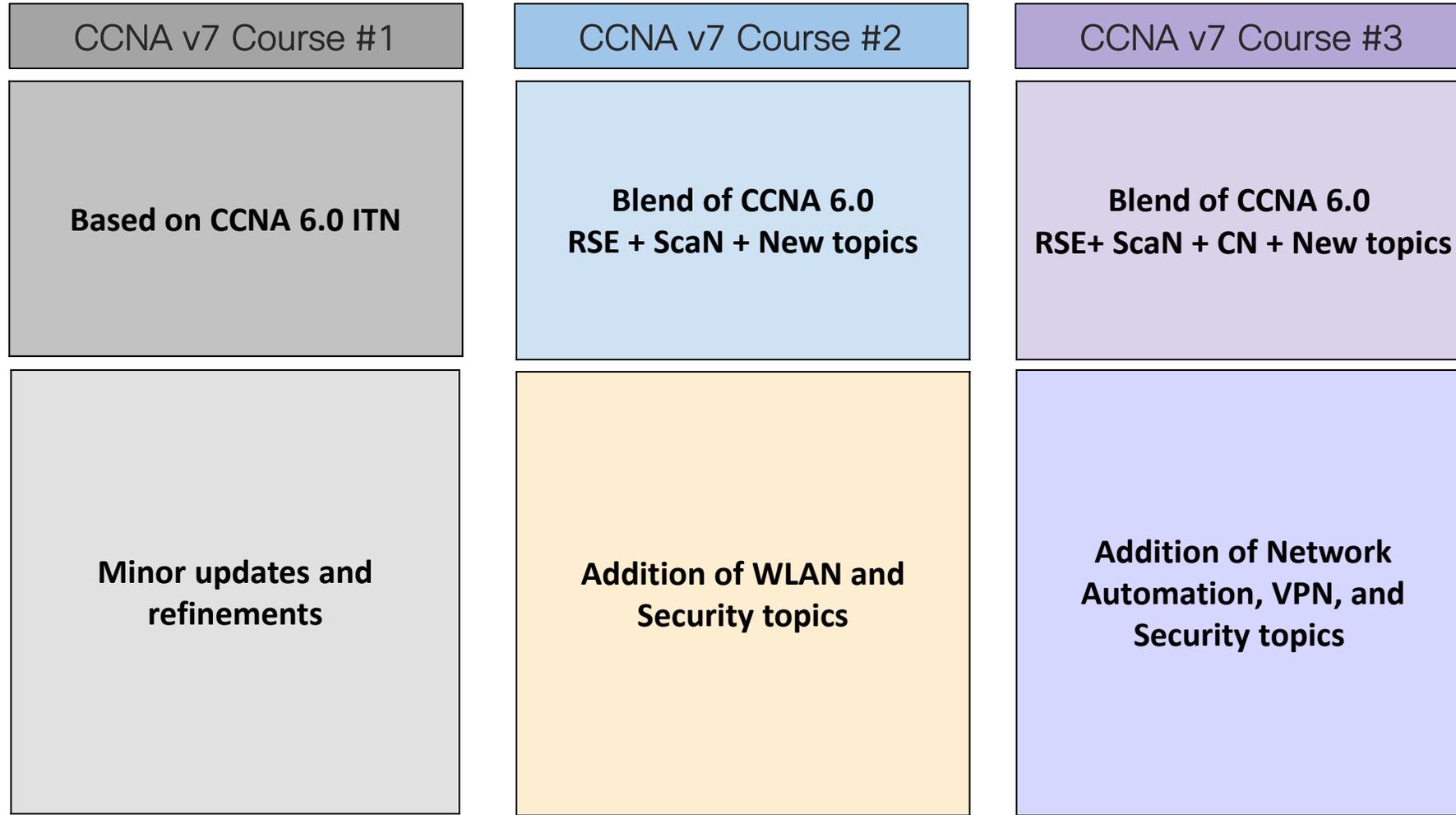
CCNA 7.0

~ 200 hrs

3 Courses

CCNA

# CCNA 7.0 Course Packaging



# CCNA 7.0 Course Outlines

CCNA v7 Course #1
Networking Today
Basic Switch and End Device Configuration
Protocol Models
Physical Layer
Number Systems
Data Link Layer
Ethernet Switching
Network Layer
Address Resolution
Basic Router Configuration
IPv4 Addressing
IPv6 Addressing
ICMP
Transport Layer
Application Layer
Network Security Fundamentals
Build a Small Network

CCNA v7 Course #2
Basic Device Configuration
Switching Concepts
VLANs
Inter-VLAN Routing
STP
Etherchannel
DHCPv4
SLAAC and DHCPv6 Concepts
FHRP Concepts
LAN Security Concepts
Switch Security Configuration
WLAN Concepts
WLAN Configuration
Routing Concepts
IP Static Routing
Troubleshoot Static and Default Routes

CCNA v7 Course #3
Single-Area OSPFv2 Concepts
Single-Area OSPFv2 Configuration
WAN Concepts
Network Security Concepts
ACL Concepts
ACLs for IPv4 Configuration
NAT for IPv4
VPN and IPsec Concepts
QoS Concepts
Network Management
Network Design
Network Troubleshooting
Network Virtualization
Network Automation

 New/significantly changed content

# CCNA 6.0 Content Shifted to CCNP

CCNA v6	CCNP Enterprise Core
Old CCNA-2 (RSE Course)	Troubleshoot ACLs
	Troubleshoot NAT
Old CCNA-3 (ScaN Course)	Spanning Tree Configuration
	Distance Vector Dynamic Routing
	Link-State Dynamic Routing
	EIGRP Characteristics
	Implement EIGRP for IPv4
	EIGRP Operation
	Implement EIGRP for IPv6
	Tune EIGRP
	Troubleshoot EIGRP
	Single-area OSPFv3
	Multiarea OSPF Operation
	Implement Multiarea
	Troubleshooting Single-Area OSPF Implementations
Old CCNA-4 (CN Course)	GRE
	eBGP
	Introducing IPsec
	IPv6 ACLs
	Troubleshoot ACLs
	Cisco Switch Port Analyzer (SPAN)
	NetFlow

# Scope & Sequence Draft

Curriculum  
Description



Lab Equipment  
Requirements



CCNA v7.0  
Curriculum Outline



## CCNA 7.0 DRAFT Scope and Sequence

**Last Updated August 28, 2019**

### Target Audience

The Cisco Networking Academy® CCNA® 7.0 curriculum is designed for participants who are seeking associate-level jobs in the ICT industry or hope to fulfill prerequisites to pursue more specialized ICT skills. The CCNA 7.0 curriculum provides an integrated and comprehensive coverage of networking topics including: IP routing and switching fundamentals, network security and services, and network programmability and automation, while providing learners extensive opportunities for hands-on practical experience and career skills development.

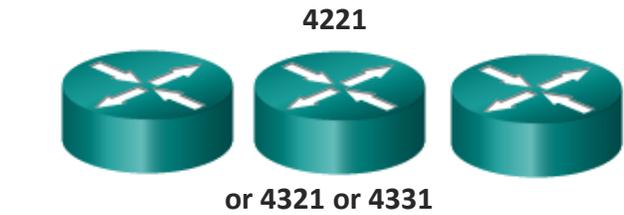
The curriculum is appropriate for learners at many education levels and types of institutions, including high schools, secondary schools, universities, colleges, career and technical schools, and community centers.

### Prerequisites

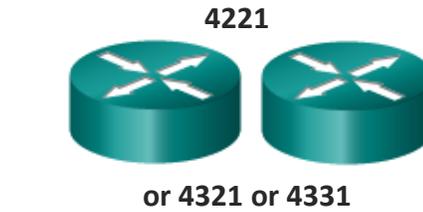
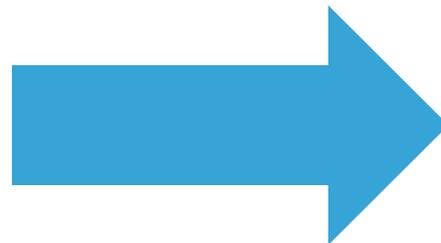
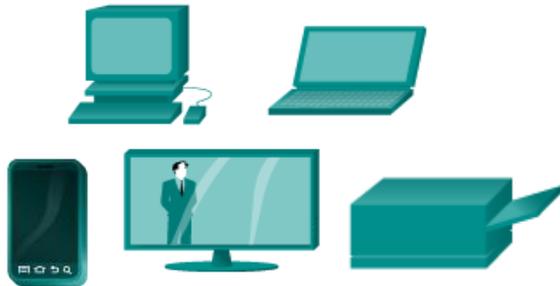
There are no prerequisites for this offering. Learners are expected to have the following skills:

Equipment

# CCNA 6 vs CCNA v7 Minimal Lab Bundle



Various end devices



Various end devices



PT for 3-router  
topologies

# SOHO Wi-Fi Router is Back in CCNA



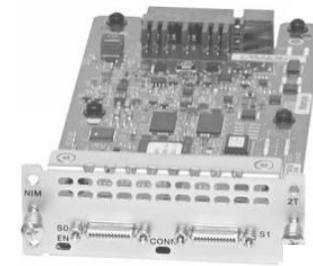
- 1 wireless router (generic brand) with WPA2 support
- Configure a Home Network with Wireless
- Configure WLAN with WPA2 Encryption
- GUI

# HWIC Serial Interfaces and Cables are Optional

- Trend in the industry toward Ethernet links
- Reducing cost to the Academy

## The Following Parts are Moving to Optional:

- *NIM-2T*= 2 Port Serial WAN Interface Card
- *CAB-SS-V35MT*= V.35 DTE Male to Smart Serial
- *CAB-SS-V35FC*= V.35 DCE Female to Smart Serial



# Considerations to Equipment Updates

- Minimal lab POD will now be cheaper
- Existing academies with 3R+3SW PODs can now be more efficient in student/equipment ratio: ex. **Academies with 12R + 12SW can now serve simultaneously 6 complete lab PODs instead of 4**
- SOHO Wi-Fi Router was a requirement earlier in CCNAv5 and now it's in action again
- HWIC Modules and Cables still can be used in more advanced courses

# Instructor Requirements

# No Re-Training Requirement for Current Instructors



- No Obligatory Additional Training Needed
- Instructor Training Accreditation Grandfathered to CCNAv7
- Highly Recommended to Study New Content

# CCNA Instructor Qualification Mapping

CCNA R&S v6 Course Qualification(s)	CCNA v7 Qualification Earned	Materials to Review*
CCNA 1 (Intro to Networks)	CCNA 1	No additional
CCNA 1 (Intro to Networks) CCNA 2 (Routing & Switching Essentials)	CCNA 1 CCNA 2	CCNA2 v7
CCNA 1 (Intro to Networks) CCNA 2 (Routing & Switching Essentials) CCNA 3 (Scaling Networks)	CCNA 1 CCNA 2 CCNA 3	CCNA3 v7 + Bridging Course
CCNA 1 (Intro to Networks) CCNA 2 (Routing & Switching Essentials) CCNA 3 (Scaling Networks) CCNA 4 (Connecting Networks)	CCNA 1 CCNA 2 CCNA 3	Bridging Course

\*Self-enroll in the IPD Week class  
at <http://cs.co/ipd20>

CCNA 7 in IPD Week

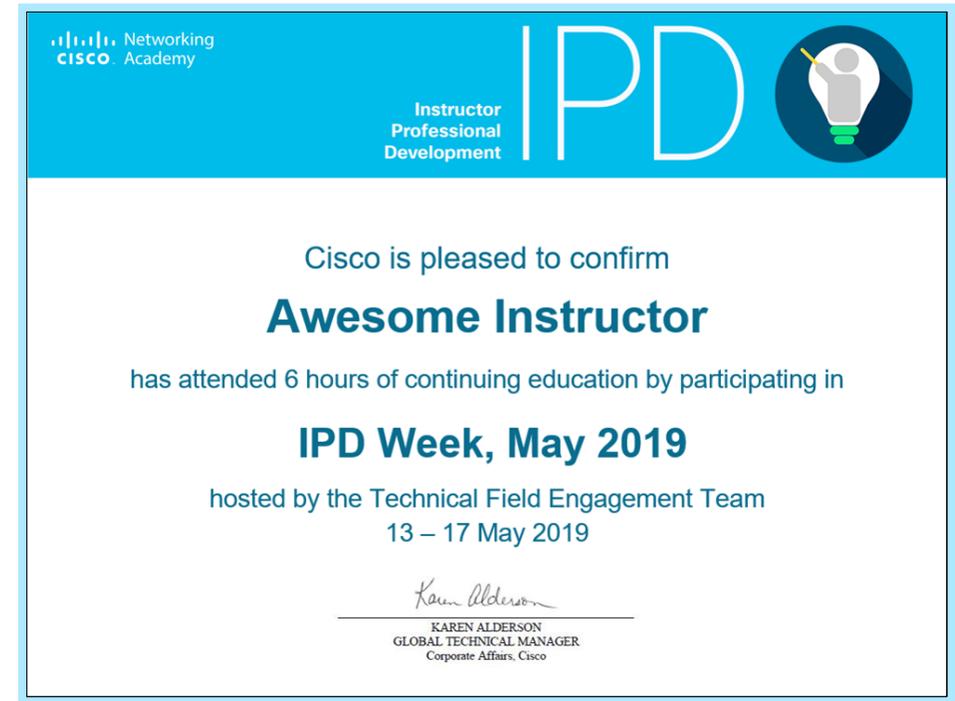


# New CCNAv7. Topic delivered in May 2019

## CCNA 7 – Technical Sessions



Topic	Session	Recording	Presentation
Network Automation	Getting to know Cisco DNA Center		
	Puppet, Chef and Ansible		
	REST API and JSON Encoded Data		
	SDN an Open Source Demo		
Wireless	WLAN Fundamentals		
	Wireless Security		



# NetAcad IPD Week

## September 23-27, 2019

IPD Week FY20



Join us quarterly in the Instructor Professional Development Week.

Our next IPD Week will be 23 - 27 September 2019.

Click below to register for September sessions.

### Global Sessions

English   
Program Updates  
[Check the agenda]

English   
Technical Sessions  
[Check the agenda]

### Localized Sessions

 العربية عربي	 Bahasa	 中文
 Deutsch	 Dutch	 Español
 Français	 Hindi	 Italiano
 Polski	 Português	 Русский
 Sinhalese	 Telugu	 Türkçe
 Urdu	 Українська	

49 IPD sessions:

- 12 English
- 37 localized

18 languages

Focus of the week:

- CCNA v7 Tech. Topics such as Network Security, LAN Security, Virtualization, Cloud Computing
- New CCNA Certification
- IT Essentials v7

IPD Week Course Enrollment Link <http://cs.co/IPD20>



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# IPD Week 23 - 27 September

 Networking Academy

Instructor Professional Development

# IPD



Cisco is pleased to confirm  
**Awesome Instructor**  
has attended 6 hours of continuing education by participating in  
**IPD Week, September 2019**  
hosted by the Technical Field Engagement Team  
23 – 27 September 2019

  
KAREN ALDERSON  
GLOBAL TECHNICAL MANAGER  
Corporate Affairs, Cisco

## Program Updates

- Catch up on the latest strategies and products from Cisco Networking Academy!

## Program Updates Special Session CCNAv7

### Technical Session Topics Include:

- Wireshark Tips & Tricks Part 5
- Network Security Concepts
- Virtualization and Cloud Computing
- Overview of New Technical Topics in CCNA v7
- LAN Security Concepts
- IT Essentials v7 Deep Dive
- Network Virtualization
- & many more!



# FY20 IPD Week Dates

**23 - 27**  
**September**  
**2019**

**9 - 13**  
**December**  
**2019**

**17 - 21**  
**February**  
**2020**

**4 - 8**  
**May**  
**2020**

