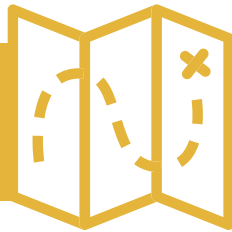


STUDY PLAN



Microsoft MCSA: Windows Server 2016 70-741

Total Videos: **89** Time: **22 hours***

*The time indicated above represents the total time to view all videos in the course, but does not include time spent using virtual labs, practice exams, embedded quizzes, etc.

Microsoft MCSA: Windows Server 2016

The Microsoft Certified Solutions Associate (MCSA): Windows Server 2016 certification is designed to prove mastery of the skills required to administer Windows Server 2016, including installation and implementation of storage solutions, Hyper-V, and Windows containers; networking with DNS, DHCP, IP address management, and advanced infrastructure; and administration of Active Directory Domain Services, group policy, Nano Server, and more.

Interestingly, Windows Server 2016 includes containers, which was once almost exclusively the purview of Linux/UNIX. The certification represents a new attitude of openness between Microsoft and the [Linux Foundation](#) and embodies Microsoft's [embrace of open source](#).

The MCSA: Windows Server 2016 certification is made up of three exams, all of which are covered by CBT Nuggets training.

- [70-740: Installation, Storage, and Computer with Windows Server 2016](#)
- [70-741: Networking with Windows Server 2016](#)
- [70-742: Identity with Windows Server 2016](#)

Typically, learners pursuing this certification path should have some familiarity (1-3 years) with Windows Server and experience working in an enterprise environment. The MCSA is considered an intermediate-level certification but has no prerequisite training or certifications.

Exam Details

Time allotted for exam: 120 minutes

Number of questions: 40-60*

Passing score: 700**

Question types: Multiple choice; multiple choice/multiple answer; scenario

Exam registration: [Microsoft Learning](#) or [Pearson Vue](#)

Exam cost: \$165 (USD)

Skills measured: Each exam registration page on the Microsoft website provides a list of Skills Measured (which is a free resource) to guide your study and preparation.

- [70-741](#)

Exam Replay: Microsoft exams have a reputation for being challenging. Many learners find they have to take an exam more than once to achieve a successful outcome. Fortunately, Microsoft is aware of the level of challenge associated with their exams, and often provides an "[Exam Replay](#)," allowing learners to retake exams at a fraction of the usual cost. Please note that the Exam Replay may not always be available.

**Microsoft does not publish the exact number of questions associated with its exams. Therefore, the number of questions a learner will see varies.*

***Because the number of questions varies, it is not necessarily true that learners must earn a simple 70% to pass the exam.*

STUDY STRATEGIES

Learners use a great variety of strategies to attack their training. Here are some options you can choose from to get the most out of your training experience:

Proceed through all CBT Nuggets video training on double-speed to develop a strong overview of the material; then proceed through all the training for a second time, taking good notes and focusing on deeper learning.

OR

Proceed through all CBT Nuggets video training, taking good notes and focusing on deep learning on the first pass; then proceed back through all training a second time, using double-speed when appropriate.

Supplement all video training with book study and practical application of knowledge.

Use the hands-on virtual labs throughout the course to practice your skills.

Learn more about how to get all you can out of your practice exam experience from a quick video by Keith Barker



PRACTICE EXAM STRATEGIES

CBT Nuggets offers practice exams as part of your subscription. You can take the practice exams as many times as you like! Here are some tips to help you take full advantage of this excellent resource:

! PLAN TO TAKE THE PRACTICE EXAM 3 TIMES

FIRST EXAM

Create a baseline against which you can measure your progress with future exams.

Identify areas of weakness in order to direct your training as you move forward.

SECOND EXAM

Measure your progress since your first practice exam! Ask yourself: Are you retaining the information and material you learned at the beginning of your training? Are there areas to which you should return now to ensure your understanding before moving forward?

The results from your second practice exam experience should help you identify areas where you may need to spend extra effort and energy in the training ahead.

THIRD EXAM

Measure your progress against your first two practice exams! Ask yourself: Are you scoring 90% by now? If so, you might be ready for the real

Allow the results from your practice exam to direct your review ahead of your certification exam. Ask yourself: Are you retaining all the material? And are you understanding it well?

KEY

4. DNS Forwarding and PowerShell Intro

14 15-30

The duration of the video in minutes.

Time required to complete a virtual lab in minutes.

The number and title for each video corresponds to the number and title you will find on the Microsoft MCSA: Windows Server 2016 70-741 course page online (and on your mobile device).

The Extra Mile section of your study plan challenges you to dig a little deeper with your training. The Extra Mile might be a textbook recommendation, supplemental materials downloads, or other resources to help you take your training to the next level. Nothing in the Extra Mile is required, but it is here to help you learn.



"I recommend watching the video first, then replaying the video step-by-step so you can reinforce what you learn by using the provided lab. Using this approach, you can expect between 30-90 minutes per Nugget/Lab."

- Keith Barker



Microsoft MCSA: Windows Server 2016 70-741

WEEK 1

1. Introduction to Networking with Windows Server 2016

2. DNS and Labs Overview

15 15-30

3. Adding the DNS Server Role

17 30-45

4. DNS Forwarding and PowerShell Intro

14 15-30

5. DNS Root Hints

18 30-45

6. Adding Active Directory (AD)

17 30-45

EXTRA MILE

Explore the [Microsoft Learning website](#) to learn more about the 70-741 exam, its requirements, and available resources.

Review the [skills measured](#) by the 70-741 exam. (Consider printing out the exam objectives to help guide your study!)

Consider purchasing a textbook to supplement your training.

- [MCSA Windows Server 2016 Complete Study Guide: Exam 70-740, Exam 70-741, Exam 70-742, and Exam 70-743](#), by William Panek
- [Exam Ref 70-741 Networking with Windows Server 2016](#), by Andrew Warren
- [MCSA Windows Server 2016 Study Guide: Exam 70-741](#), by William Panek

VIRTUAL LAB*

This CBT Nuggets course includes virtual labs to give you hands-on experience and help ensure that you are deeply understanding what you learn.

*Keep a list of any virtual lab experiences that you find particularly challenging so you can come back to them for additional practice later.

WEEK 2

7. Troubleshooting DNS

▶ 11 📦 15-30

8. DNS Records Overview

▶ 18 📦 30-45

9. DNS Zones Overview

▶ 17 📦 30-45

10. Reverse Lookup Zones

▶ 13 📦 15-30

11. DNS Round Robin

▶ 19 📦 30-45

EXTRA MILE

Join the [CBT Nuggets Learner Community](#) on Slack! Join other CBT Nuggets learners in a community where you can post questions, share study resources, connect with IT experts from all over the world, and get mentoring for your training.

**Please allow 48 hours for your request to join the community to be processed.*

Learn more about [DNS Server in Windows Server 2016](#) from Microsoft TechNet.

Create flashcards to quiz yourself on the content from your training! Or, use existing flashcard resources such as [quizlet.com](#)!

WEEK 3

12. DNS Delegation
13. DNS Stub Zones

▶ 19 📦 30-60

14. DNS GlobalNames Zone
15. DNS Recursion

▶ 19 📦 30-60

16. DNS Security (DNSSEC)

▶ 23 📦 30-45

17. DNS Cache Locking and Socket Pool
18. DNS Response Rate Limiting

▶ 18 📦 30-60

19. DNS Policy: Load Balancing

▶ 18 📦 30-45

EXTRA MILE

Take some time to visit Microsoft's TechNet to review the [DNS Policy Scenario Guide](#).

Learn more about security from the downloadable [Windows Server 2016 Security Guide](#) from TechNet.

"No great achievement is possible without persistent work."

- Bertrand Russell

WEEK 4

20. DNS Policy: Client Source Address

▶ 14 📦 15-30

21. DNS Policy: Time-based Requests

▶ 15 📦 30-45

TAKE THE PRACTICE EXAM!

📄 90-120

22. DNS Logging and Tuning

▶ 21 📦 30-45

23. DNS Scavenging

▶ 6 📦 15-30

EXTRA MILE

TAKE THE PRACTICE EXAM!

Use the results to drive your review and practice as you continue your study*.

- [Transcender Microsoft Cert - 70-741](#)

**Keep in mind that you've not completed the training yet, so you probably won't ace this exam. This is just to help you assess how well you are retaining the material you've learned so far!*

Learn more about [Understanding Aging and Scavenging](#) from Microsoft's TechNet.

WEEK 5

24. DANE and TLSA Records

▶ 23 📦 30-45

25. DNS Stats, Management, and Servers

▶ 10 📦 15-30

26. DNS Resource Record Hands-on Lab

▶ 18 📦 30-45

27. DHCP Overview and Install

▶ 13 📦 15-30

28. DHCP Scope Creation

▶ 26 📦 30-45

EXTRA MILE

Remember that list of virtual lab experiences that challenged you? Take some time this week to return to those labs to see if you can conquer them now!

Work your flashcards until you start dreaming Server 2016 concepts and acronyms! Visit [quizlet.com](#) or continue working with your own flashcards. Explore this bonus set of quizlet.com flashcards addressing [DNS Server Commandlets](#).

WEEK 6

29. DHCP Reservations

▶ 16 📦 30-45

30. DHCP Options

▶ 16 📦 30-45

31. DHCP Relay Configuration

▶ 19 📦 30-45

32. DHCP Relay Verification and Troubleshooting

▶ 22 📦 30-45

33. DHCP Dynamic Updates to DNS

▶ 13 📦 30-45

EXTRA MILE

Dig a little deeper on [Dynamic Host Configuration Protocol \(DHCP\)](#) with Microsoft Docs.

Learn more about [What's New in DHCP](#) in Server 2016 from Microsoft Docs.

“Persistence is the twin sister of excellence. One is a matter of quality; the other, a matter of time.”

- Marabel Morgan

WEEK 7

34. DHCP PXE Boot Support

▶ 13 📦 30-45

35. DHCP Super and Multicast Scopes

▶ 22 📦 30-45

36. DHCP Policies

▶ 8 📦 15-30

37. DHCP Preparing IPv6 Networking

▶ 24 📦 45-60

38. DHCP Creating IPv6 Scopes

▶ 18 📦 30-45

EXTRA MILE

Return to your [flashcards](#) this week to ensure you are committing all the necessary content to memory!

Optional Supplemental Learning: Consider watching this additional course to deepen your understanding of IPv6.

- [IPv6: Concepts, Implementation, and Verification of IPv6](#) with trainer Keith Barker (34 videos, 21 hours)

WEEK 8

39. DHCP Split Scopes

▶ 13 📦 30-45

40. DHCP Failover

▶ 17 📦 30-45

TAKE THE PRACTICE EXAM!

📄 90-120

41. DHCP User Classes

42. DHCP Backup, Restore, Import, Export

▶ 19 📦 30-60

43. DHCP L2 MAC Filtering

▶ 9 📦 15-30

EXTRA MILE

TAKE THE PRACTICE EXAM!

Use the results to drive your review and practice as you continue your study*.

- [Transcender Microsoft Cert - 70-741](#)

**You should see strong improvements in your performance by now! Measure your improvement and let your practice exam results guide your study ahead of your certification exam.*

"Press on. Nothing in the world can take the place of persistence."

- Ray Kroc

WEEK 9

44. DHCP Troubleshooting

▶ 16 📦 30-45

45. IPAM Overview and Installation

▶ 18 📦 30-45

46. Manage DNS using IPAM

▶ 16 📦 30-45

47. Manage DHCP using IPAM

▶ 13 📦 30-45

48. IPAM Role-based Access Control (RBAC)

▶ 15 📦 30-45

EXTRA MILE

Learn more about [IP Address Management \(IPAM\)](#) from Microsoft Docs.

Consider adding these [IPAM Cmdlets](#) from Microsoft TechNet to your flashcards.

"Continuous effort – not strength or intelligence – is the key to unlocking our potential."

- Winston Churchill

WEEK 10

49. Using IPAM to Manage IP Addresses

▶ 21 📦 30-45

50. IPAM Migration and Auditing

▶ 12 📦 15-30

51. Dynamic NAT/PAT

▶ 23 📦 30-45

52. Port Forwarding NAT/PAT

▶ 15 📦 30-45

53. Remote Access VPNs

▶ 29 📦 45-60

EXTRA MILE

Dig deeper with [Virtual Private Networking \(VPN\)](#) with Microsoft's Windows IT Center.

Learn more about how to [Manage VPN in Windows Server Essentials](#) from Microsoft Docs.

"Opportunities don't happen, you create them."

- Chris Grosser

WEEK 11

54. DirectAccess

▶ 23 📦 30-45

55. VPN Connection Profiles using CMAK

▶ 17 📦 30-45

56. Site-to-Site VPN

▶ 22 📦 30-45

57. Local Network Policy Server Fundamentals

▶ 21 📦 30-45

58. Local NPS and AD Interaction

▶ 12 📦 12-30

EXTRA MILE

Explore the [Network Policy Server Best Practices](#) from Microsoft's Windows IT Center.

Learn more about [How to Configure DirectAccess VPN on Server 2016](#) from technig.com.

"I find that the harder I work, the more luck I seem to have."

- Thomas Jefferson

WEEK 12

59. NPS with RADIUS

▶ 22 📦 30-45

60. RADIUS Proxy

61. RADIUS Accounting

▶ 27 📦 30-60

TAKE THE PRACTICE EXAM!

📄 90-120

62. NPS Imports, Exports,
and Templates

▶ 8 📦 15-30

63. Using Digital Certificates
with VPNs

▶ 16 📦 30-45

EXTRA
MILE

TAKE THE PRACTICE EXAM!

Use the results to drive your review and practice as you continue your study*.

- [Transcender Microsoft Cert - 70-741](#)

**You still haven't finished your training yet, so don't expect to earn 100% on your practice exam. But look for areas of strength as well as areas where you can work to improve your performance.*

Dig a little deeper with Microsoft's Windows IT Center to [Plan NPS as a RADIUS Proxy](#).

WEEK 13

64. IPv4 Overview and
Considerations

65. Binary Basics

66. Learning to Convert
Between Decimal and Binary

67. Unveiling the IPv4 Mask

▶ 38

68. Stealing Host Bits for
More Networks69. Identifying New IPv4
Subnets

▶ 38

70. Identify Valid Host
Ranges on Subnets71. Identify How Many Hosts
Will Fit on a Subnet72. Extract the Subnet ID
from a Host Address

▶ 37

73. Demonstrating Your IPv4
Skills in the Lab

74. IPv6 Fundamentals

▶ 27

75. Border Gateway Protocol
(BGP)

▶ 13 📦 15-30

EXTRA
MILE

Optional Supplemental Learning: Consider watching this additional course to deepen your understanding of IPv4.

- [IPv4 Subnetting: The Ultimate Guide](#) with trainer Keith Barker (16 videos, 4 hours)

Get some [subnetting practice](#) from lammle.com.

76. ISATAP

15 30-45

77. Teredo Tunnels

10 15-30

78. 6to4 Tunnels

15 30-45

79. Implementing DFS Namespaces

16 30-45

80. Namespace Availability
81. DFS Site Awareness

21 30-60

EXTRA MILE

Schedule your certification exam with an approved testing site. Consider purchasing the [Microsoft Exam Replay](#) voucher to help ensure your success on the 70-741 certification exam!

Review [Microsoft's Exam Policies and FAQs](#) to fully understand the testing conditions you'll face on the big day!

"People who succeed have momentum. The more they succeed, the more they want to succeed, and the more they find a way to succeed."

- Tony Robbins

82. DFS Scheduling, Staging, Compression, and Optimization

10 15-30

83. BranchCache Overview and Install

18 30-45

84. NIC Teaming
85. Switch Embedded Teaming (SET)

15 30-60

86. High-performance Network Solutions

87. Quality of Service (QoS) with Data Center Bridging (DCB)

16 15-30

88. Software Load Balancer (SLB) Overview
89. Software Defined Networking (SDN) Overview

16 30-60

EXTRA MILE

Review the [Skills Measured](#) by the 70-741 exam. Review each section to ensure that your preparations align with the exam expectations.

Take some time this week to consider your test-taking strategies. Different people attack their exams differently. Be intentional about building a strategy that will help you manage your time well and set you up to be successful. Learn more about [exam day strategies](#) from the CBT Nuggets blog.

Understand the value of the various skills measured by the 70-741 exam:

- Implement Domain Name System (DNS) (15-20%)
- Implement DHCP (15-20%)
- Implement IP Address Management (15-20%)
- Implement network connectivity and remote access solutions (25-30%)
- Implement core and distributed network solutions (10-15%)
- Implement an advanced network infrastructure (15-20%)

TAKE THE PRACTICE EXAM! One last time ...

Transcender Microsoft Cert - 70-741

Return to video Nuggets to brush up on areas of weakness identified by your practice exam results.

 90-120

VIRTUAL LABS

Work through your flashcards to really master the content that can be committed to memory.

VIRTUAL LABS

Flashcards are an excellent way to work on acronyms you'll need to know for your exam.

VIRTUAL LABS

Flashcards: They worked for you in grade school, they can work for you now!

VIRTUAL LABS

Your flashcards can help you deal with rote memorization.

EXTRA MILE

TAKE THE PRACTICE EXAM!

Use the results to drive your review and practice as you continue your study*.

- [Transcender Microsoft Cert - 70-741](#)

**As a general rule of thumb, learners who successfully pass certification exams consistently score 90% or better on practice exams. Pay attention to those topics where you may need to dedicate more time and effort to master.*

Take time to revisit a variety of your virtual labs to continue earning the hands-on experience you'll need ahead of your exam.

THE BIG DAY

Take the exam.

Get a good night's sleep ahead of your exam!



Brag about it! Tweet us or let us know how your exam went and what you're doing to celebrate your success!

The MCSA: Windows Server 2016 certification puts you on the path to a career in system administration, but also opens up other pathways as well, including networking, virtualization, security, cloud computing, system administration, and more. Consider these pathways as you move beyond your MCSA:

ENTRY LEVEL				INTERMEDIATE				ADVANCED	
NETWORKING									
CompTIA Network+	Cisco CCENT	Juniper JNCIA-Junos		CCNA Routing and Switching	CCNP Routing and Switching	Juniper JNCIS-ENT	Palo Alto Networks Firewall		Cisco CCIE Routing and Switching
SECURITY									
CompTIA Security+	Cisco CCENT			CCNA Security	CCNP Security	Penetration Testing with Linux Tools	EC-Council Certified Ethical Hacker		(ISC) ² CISSP Cisco CCIE Security
VIRTUALIZATION									
CompTIA Network+	VMware vSphere Foundation			MCSA: Windows Server 2012	CCNA Data Center	VMware VCP6.5-DCV	Cisco CCNP Data Center		MCSE: Cloud Platform and Infrastructure
CLOUD COMPUTING									
LPI Linux LPIC-1 and CompTIA Linux+	AWS: Technical Essentials			AWS: Certified Solutions Architect - Associate	AWS: Certified SysOps Administrator - Associate	MCSA: Cloud Platform	MCSA: Linux on Azure		MCSE: Cloud Platform and Infrastructure
SYSTEM ADMINISTRATION									
CompTIA A+	LPI Linux LPIC-1 and CompTIA Linux+	VMware vSphere Foundation	Powershell 4 Foundations (no associated certification)	Microsoft MCSA: Windows 10	Microsoft MCSA: Office 365	MCSA: Windows Server 2012	VMware vSphere 6.5 (VCP6.5-DCV)		MCSE: Cloud Platform and Infrastructure

CAREER PATHWAYS

CBT Nuggets is committed to providing you with the resources necessary to plan your training, certification, and career pathway effectively and efficiently. Review our Career Pathway blog posts to learn more.

- [Mapping Your IT Networking Career Pathway](#)
- [Mapping Your IT Networking Career Pathway Infographic](#)
- [Unlocking Your IT Security Career Pathway](#)
- [Decoding Your IT SysAdmin Career Pathway](#)
- [Charting Your IT Cloud and Virtualization Career Pathway](#)
- [Engineering Your IT DevOps Career Pathway](#)

Roadmap to Success: MCSA: Windows Server 2016

Learn more about the MCSA certification from the CBT Nuggets blog. The [Roadmap to Success: MCSA: Windows Server 2016](#) is part of a [series of blog posts](#) designed to help learners better understand certification pathways, career opportunities associated with those certifications, and next steps beyond certification.

THE NEXT STEP

The MCSA is a building block to allow learners to earn a variety of other certifications from Microsoft. After earning the MCSA: Windows Server 2016 certification, most learners take the next step by earning an MCSE (Microsoft Certified Solutions Expert) certification. The MCSE allows learners to select from a variety of elective exams, effectively customizing the certification to meet their unique needs. The expert-level certification aligned with the MCSA: Windows Server 2016 is the MCSE: Cloud Platform and Infrastructure certification. To earn the MCSE, learners must choose one elective exam from a pool of exam options:

- [70-532](#)
- [70-533](#)
- [70-534](#)
- [70-473](#)
- [70-475](#)
- [70-744](#)
- [70-413](#)
- [70-414](#)
- [70-246](#)
- [70-247](#)

Some learners may choose to diversify their certification resumes by pursuing certifications outside the Microsoft universe. Those who choose this path often consider the following certifications:

- [Cisco CCNA Routing and Switching](#) (made up of two exams: [ICND1](#) and [ICND2](#))
- [AWS Certified SysOps Administrator - Associate](#) (made up of one exam: [AWS Certified SysOps Administrator - Associate](#))
- [VMware vSphere 6.5](#) (made up of one exam: [VCP6.5-DCV](#))