

## Purpose

This document is for Microsoft Certified Trainers preparing to teach the AZ-103 Microsoft Azure Administrator course. This course is designed for students who are planning to take the associated certification exam, or students who are performing Azure administrator tasks in their day-to-day job.

## AZ-103 Certification Exam

Since launching the role-based certification program in September 2018, we have received a tremendous amount of feedback about the requirements to earn our certifications. Based on this feedback it was announced that starting on May 1, 2019, you will only need to pass one exam—AZ-103: Microsoft Azure Administrator—to earn the Azure Administrator certification. This new exam replaces AZ-100, Microsoft Azure Infrastructure and Deployment, and AZ-101, Microsoft Azure Integration and Security, with most of the new exam coming from AZ-100.

✓ For more information, read this [blog announcement](#) on the new AZ-103 Certification Exam.

Certification exams measure your ability to accomplish certain technical tasks for a job role. The study areas are based on the Job Task Analysis that was conducted for the role in March 2018, and then revalidated based on the new exam announcement.

Each study area has a percentage indicating the relative weight of the area on the exam. The higher the percentage, the more questions you are likely to see in that area.

Study Area	Percentage
Manage Azure subscriptions and resources	15-20%
Implement and manage storage	15-20%
Deploy and manage virtual machines	15-20%
Configure and manage virtual networks	30-35%
Manage identities	15-20%

✓ For more information, on the skills measured in the exam, please visit the [AZ-103 Microsoft Azure Administrator](#) certification page.

## Azure Administrator Role Definition

Both the certification exam and the courseware are based on the Azure Administrator role. When students ask why some areas are being covered and other areas are not,

refer them to this role definition. Remember there are other roles, such as DevOps and Solutions Architect.

Azure Administrators manage the cloud services that span storage, networking, and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle.

They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, capacity, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors.

Cloud Administrators use the Azure Portal and as they become more proficient, they use PowerShell and the Command Line Interface.

Successful Cloud Administrators start this role with experience on operating systems, virtualization, cloud infrastructure, storage structures, and networking.

## **Preparing to Teach**

In the next sections we will cover the main course components and how they can be used in class. There is a lot of flexibility in how you use this content to create the best learning experience for your students.

## **Content**

The content for your course is organized into Modules, Lessons, and Topics. There are 12 modules. The first six modules are considered core or foundational to Azure administration.

- M01 – Azure Administration
- M02 – Virtual Machines
- M03 – Azure Storage
- M04 – Virtual Networking
- M05 – Intersite Connectivity
- M06 – Monitoring

The last six modules are considered feature-based content.

- M07 – Data Protection
- M08 – Network Traffic Management
- M09 – Azure Active Directory
- M10 – Securing Identities
- M11 – Governance and Compliance

## M12 – Data Services

- ✓ Some instructors rearrange the modules to cover all networking or storage content together.
- ✓ You must pay close attention to your timing. If you cover every slide, demonstration, and lab there is more content than four days. So, consider how important each lesson is to your students. Are they studying for the certification? Do they have that feature? Are they most interested in hands-on lab time or conceptual demonstrations and lecture? Balance your time to ensure you cover the content most important to your students.

## PowerPoint Slides

Each module has a PowerPoint deck. Each course topic has a PowerPoint slide. Module overview and lesson overview slides are now included so you can introduce the content to your students.

- ✓ The Module 00 PowerPoint provides a course overview.

## Azure Subscriptions

To complete the labs and any additional demonstration exercises in this course, students will need an Azure Subscription. The current recommended way to give students access to Azure is by requesting Microsoft Learning Azure Passes.

You can [request Microsoft Learning Azure Passes](#) for yourself and your students. Ensure that you request these passes at least two weeks before the class starts. After receiving the passes each student will need to activate their pass.

- ✓ The Azure pass effectively functions in the same way as the [publicly available Microsoft Azure Trial Subscription](#). This means there are limitations on what you can do with the pass.
- ✓ Azure free passes and Azure student passes may not have all the capabilities needed to do the labs, especially those requiring premium features.

## Labs

Labs are provided for each module, except Module 01 (Azure Administration). Each lab is estimated at one hour. The lab instructions are in the AZ-103 [Microsoft Learning GitHub](#) repository. Supplemental files, like scripts and templates, are also provided.

To complete the labs, you will need:

- An internet connection to the Azure portal.
  - An Azure subscription. To complete certain labs, as noted in the lab instructions, you must use a Microsoft account that has the Owner role.
- ✓ Hosted machines may be available for an additional charge.
- ✓ Based on your student's interests, you will need to decide which labs to do. Be sure to use the GitHub site to provide feedback on the labs.

## Portal, Cloud Shell, PowerShell, and the CLI

The lab instructions are written to use the Cloud Shell. The Cloud Shell automatically connects to Azure and provides access to PowerShell and the CLI.

If you would rather have students use PowerShell or the CLI locally, you can use these links.

- [Install Azure PowerShell on Windows with PowerShellGet](#)
  - [Install Azure CLI 2.0 on Windows](#)
- ✓ Most coding examples in this course use PowerShell, but some CLI examples have also been included.
- ✓ Module 01, Azure Administration, has an excellent overview of common Azure Administrator tools including Azure portal, Azure PowerShell, Cloud Shell, Azure CLI, and ARM templates. There are demonstrations that you can use to ensure your students are ready for the labs.

## Demonstrations

This course has numerous demonstrations. Take the time to work through each one and decide which to use. Some of the demonstrations are simple show and tell walk-throughs of the Azure portal; others require scripting skills. Consider having the students do the demonstrations themselves, or walk-through as a group. You might also consider using the demonstration instead of the slides. Lastly, consider the overlap with the formal labs and make the best use of your time.

## Group Discussions

Included throughout the content are questions designed to help students reflect on what they have learned or emphasize some important point. When you see a checkmark, you have a chance to interact with your students and engage them in discussion. This

information is included in the student materials and the PowerPoint notes area. For example,

- ✓ Has your organization implemented MFA? Which authentication methods are they using?

## Module Review Questions

Module review questions are provided at the end of each module. These are multiple choice and multiple answer questions. You can use these review questions in several ways:

- Have the student's pre-test before the course starts and then at the end to see what they have learned.
  - As a group, go through the questions before moving on to another section.
  - Sprinkle the questions into the content as you cover the appropriate material.
- ✓ Note these questions are not at the level of the certification exam. You may wish to supplement with questions of your own choosing.

## Video

This course includes a few video references in the topic *For more information* area. Videos have not been included as the single focus of a topic, but only as supplemental information.

## Resources

There are a lot of resources to help you and the student learn about Azure. We recommend you bookmark these pages. The list is included in the Welcome section of the student materials.

- [Azure forums](#). The Azure forums are very active. You can search the threads for a specific area of interest. You can also browse categories like Azure Storage, Pricing and Billing, Azure Virtual Machines, and Azure Migrate.
- [Mindhub certification practice tests](#). Take a Microsoft Official Practice Test for exam AZ-103.
- [Microsoft Learning Community Blog](#). Get the latest information about the certification tests and exam study groups.

- [Channel 9](#). Channel 9 provides a wealth of informational videos, shows, and events.
- [Azure Tuesdays with Corey](#). Corey Sanders answers your questions about Microsoft Azure - Virtual Machines, Web Sites, Mobile Services, Dev/Test etc.
- [Azure Fridays](#). Join Scott Hanselman as he engages one-on-one with the engineers who build the services that power Microsoft Azure, as they demo capabilities, answer Scott's questions, and share their insights.
- [Microsoft Azure Blog](#). Keep current on what's happening in Azure, including what's now in preview, generally available, news & updates, and more.
- [Azure Documentation](#). Stay informed on the latest products, tools, and features. Get information on pricing, partners, support, solutions, and more.

## Connect with Others

[MCT Central](#) – Your one stop for all things MCT. Stay up to date with the latest MCT news, learn about upcoming events, find job opportunities, or connect with other MCTs around the world. You can also ask questions and discuss a variety of topics including courseware and certification with Microsoft and other MCTs through the MCT Central Forums.

[MOC Courseware Support](#) – If there are problems with a course or you need to log a support ticket, contact the Official Support channel for MOC courses. This channel is monitored by support agents and is the quickest way to log your course support issue.

## Feedback

In this course we have provided a framework for you to work with. Take time to prepare and think about the value that only an instructor can bring to training. We hope to partner with you to provide an exceptional student experience and we welcome your feedback.

Happy learning!  
Azure Administrator Courseware Development Team