

Purpose

This document is for Microsoft Certified Trainers (MCTs) teaching the *AZ-900T01: Microsoft Azure Fundamentals* course. This document contains general information for preparation and awareness. Information about specific topics is included in the student content and the instructor Microsoft PowerPoint Notes.

Certification exam

This course maps directly to and is intended to prepare students for the [AZ-900: Microsoft Azure Fundamentals](#) exam.

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

Study Areas	Weights
Understand Cloud Concepts	15-20%
Understand Core Azure Services	30-35%
Understand Security, Privacy, Compliance, and Trust	25-30%
Understand Azure Pricing and Support	25-30%

This exam is not a prerequisite for any other exam, nor is it a part of any credential offering. It is a standalone exam offering.

Course Design

This course will provide foundational level knowledge of cloud services and how those services are provided with Microsoft Azure. The course can be taken as an optional first step in learning about cloud services and Microsoft Azure, before taking further Microsoft Azure or Microsoft cloud services courses.

The course will cover general cloud computing concepts as well as general cloud computing models and services such as Public, Private and Hybrid cloud and Infrastructure-as-a-Service (IaaS), Platform-as-a-Service(PaaS) and Software-as-a-Service (SaaS).

It will also cover some core Azure services and solutions, as well as key Azure pillar services concerning security, privacy, compliance and trust. It will finally cover pricing and support services available with Azure.

Learning Objectives

In this course students will learn how to:

- Understand general cloud computing concepts
- Understand core services available with Microsoft Azure
- Understand security, privacy, compliance and trust with Microsoft Azure
- Understand pricing and support models available with Microsoft Azure.

Audience

The course is intended for a broad range of candidate backgrounds. It's suitable for candidates with non-technical backgrounds such as those involved in selling or purchasing cloud-based solutions and services, and those who have or will have some involvement with cloud-based solutions and services.

It's also suitable for candidates with a technical background who might be looking to take a first look at cloud services and Azure.

Prerequisites

There are no prerequisites for taking this course. Technical IT experience is not required; however, some general IT knowledge or experience would be beneficial.

Hands-on

There are no labs present in the course however there are two aspects to hands on in the course

- Following of topics in Azure - We would recommend that you encourage students to sign up for a free Azure account at the start of the course at [Create your free account today](#). This way they can try out some of the areas as you come across them in the course. There is a Demo available in Module 0 which provides a walkthrough of how to set up an Azure free account, which may be of use to students.

You could choose to ask students to create an Azure Free Account at this point at the start of the course, and encourage them to use that free account then, during the course.

- Walkthroughs – The course contains several “walkthrough” topics. These are step-by-step guides for completing a particular task in Azure. Students can just read through the tasks and get a feel for how they work, or actually step through them like a lab task. Another option could be to complete the walkthroughs at the end of the module, and complete all, or some, of the walkthroughs in the module together, at that stage, like an end of module, or even end of course, lab. Alternatively, the MCT may choose to deliver them in real time during the class as demonstrations, following the steps in the PPT instructor notes or student book. How you approach this may depend on your available time.

The following is a list of *walkthrough's* present in the course.

1. Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\04-Walkthrough-Create a Virtual machine using Azure Portal
2. Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\06-Walkthrough-Deploy Azure Container Instances (ACI) in Azure Portal
3. Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\09-Walkthrough-Create a virtual network via the Azure Portal
4. Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\13-Walkthrough-Create Blob storage
5. Mod 2 >M02-Core Azure Services\L03-Core Azure Services and Products\16-

Walkthrough-Create a SQL database

6. Mod 2 >M02-Core Azure Services\L04-Azure Solutions\04-Walkthrough-Add IoT device to Azure IoT Hub
7. Mod 2 >M02-Core Azure Services\L04-Azure Solutions\12-Walkthrough-Run serverless code with Azure Functions in Azure portal
8. Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\04-Walkthrough-Working with the Azure CLI
9. Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\06-Walkthrough-Create VMs from a script with Azure PowerShell
10. Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\07-Walkthrough-Install IIS webserver on a VM with Azure Cloud Shell
11. Mod 2 >M02-Core Azure Services\L05-Azure Management Tools\11-WalkthroughSave a recommendations report with Azure Advisor
12. Mod 3 > M03-Security, Privacy, Compliance and Trust\L02-Securing network connectivity in Azure\03-Walkthrough-Implement an Azure Firewall using Azure Portal
13. Mod 3 > M03-Security, Privacy, Compliance and Trust\L02-Securing network connectivity in Azure\07-Walkthrough-Secure Network traffic using NSGs and ASGs
14. Mod 3 > M03-Security, Privacy, Compliance and Trust\L04-Security Tools and Features\04-Walkthrough-Implement Azure Security Center
15. Mod 3 > M03-Security, Privacy, Compliance and Trust\L04-Security Tools and Features\07-Walkthrough-Create Password secret with Azure Key Vault
16. Mod 3 > M03-Security, Privacy, Compliance and Trust\L05-Azure Governance methodologies\05-Walkthrough-Create a policy assignment with Azure Policy
17. Mod 3 > M03-Security, Privacy, Compliance and Trust\L05-Azure Governance methodologies\07-Walkthrough-Manage access to Azure resources using RBAC
18. Mod 3 > M03-Security, Privacy, Compliance and Trust\L05-Azure Governance methodologies\09-Walkthrough-Manage Azure resources using Locks
19. Mod 3 > M03-Security, Privacy, Compliance and Trust\L06-Monitoring and Reporting in Azure\02-Walkthrough-Use Tags with Azure resources

20. Mod 3 > M03-Security, Privacy, Compliance and Trust\L06-Monitoring and Reporting in Azure\05-Walkthrough-Monitor VMs using Azure Monitor
21. Mod 3 > M03-Security, Privacy, Compliance and Trust\L07-Privacy, Compliance and Data Protection standards in Azure\10-Walkthrough-Accessing Trust Center STP and Compliance Manager
22. Mod 4-Azure Pricing and Support\L02-Azure Subscriptions\06-Walkthrough-Manage Subscriptions and Management groups
23. Mod 4-Azure Pricing and Support\L03-Planning and Managing costs\10-Walkthrough-Generate an Azure Pricing Calculator estimate
24. Mod 4-Azure Pricing and Support\L03-Planning and Managing costs\13-Walkthrough-Generate an Azure TCO Calculator cost comparison report
25. Mod 4-Azure Pricing and Support\L04-Support Options Available with Azure\06Walkthrough-Open a Support Request
26. Mod 4-Azure Pricing and Support\L05-Azure Service Level Agreements (SLAs)\05Walkthrough-Calculate Composite SLA for an Application
27. Mod 4-Azure Pricing and Support\L06-Service Lifecycle in Azure\08-WalkthroughAccess Azure Preview features

We would also recommend you can take the time to demonstrate some topics as you go, and as discussion comes up and evolve around subjects.

You will **not** have time to allow students to complete all *walkthrough's* during class time, as such you will need some strategy for how they are used, perhaps using the recorded *demos* instead of *walkthroughs* where they exist, or coming up with a strategy for which ones are performed by students in class, depending on student interest and available time, and the remainder completed by students after the class has completed, for revision and extra study.

You could also vary your approach by Module, choosing for some to be more conceptual and others to be more hands on i.e. For Module 4, which will be at the end of the day, focus more on hands on activities to try keep students engaged if they are tiring or if some parts of the content is not viewed as hugely exciting.

Azure subscriptions

No Azure subscriptions are provided or specifically required to teach this course, or for students to attend the course. However, as mentioned earlier in the Hands-on section, we would recommend that you encourage students to sign up for a free Azure account at the start of the course.

Preparing to teach the course

In the next sections we will cover the main course components and how you can use them in class. This includes the Microsoft PowerPoint slides, videos, module review questions, reference links, and practice exercises. There is a lot of flexibility in how you use this content to create a great learning experience for your students.

PowerPoint slides

PowerPoint slides are provided to help you teach the course:

- There is a Module 00 PowerPoint file. with the filename *AZ-900T01 Microsoft Azure Fundamentals-00.pptx*. The slide deck includes an agenda with modules and lessons for the course. It also includes a mapping from the certification study areas to the modules in the course. We recommend that you customize this file for your specific situation. For example, you can add an introduction, and explain the facilities for your specific building.
- Additionally, each module within the course has its own separate PowerPoint file. For example, *AZ-900T01 Microsoft Azure Fundamentals-01.pptx* is the slide deck for Module 01. Slides are designed to supplement the student materials. You should review how the topics are presented to the student versus how the slides are organized. By doing this, you can customize the slides to make your presentation more interesting.
- Each slide contains a mixture of text-based content, graphics, references, and notes. Use the topic and reference links to fully cover each concept.

Recorded Demonstrations

Your PPT deck includes some links to recorded video demonstrations, labelled *Demo* in the slides, that provide a video demonstration of a specific task that mirrors what is covered in the walkthrough, that sits alongside it. Demo's and walkthrough's typically sit one after the other in the slides as they cover the same tasks. Not all walkthrough's have accompanying demos at this stage. There are many ways to use the Demo's in your course:

- Play demonstrations during the course if you wish and you feel they add value, or use them for homework, or for revision later in the day. If you wish, and have time, you could view them and follow it up with a short discussion about the topics covered in the demo.
- The demos are inserted alongside the *walkthrough* slides and mirror what is covered in the walkthrough. They are effectively two different forms of the same topic.
- The demos can be used alongside, or in lieu of, the *walkthroughs*, or used for exam preparation for students after class by students. For example:
 - If you are short on time you can use the recorded demo instead of the walkthrough's, and ask students to complete the hands on walkthrough at home to help stay on schedule.
 - You could play the demo first, then ask students to then complete the task themselves by doing the walkthrough, or vice versa as a chance for the group to discuss the task and service.
 - You could play the demos first to introduce the topic or content, or, you could play the demos after a lesson is complete as a review and a mechanism to talk about and show items covered in the conceptual topics.
- You can create your own demonstrations based on certain topics as you go and do those if you prefer.
- There are many other videos which you can use as part of the course if you wish to supplement certain areas. Channel 9 is a great source for videos.
- We also recommend [Azure Friday](#) with Scott Hanselman, and the [Tuesdays with Corey Sanders](#) series.

- The following is a list of recorded video *Demos* present in the course
 1. Mod 0 > M00-Course Introduction\L01-Course overview\03-Demo-Create Free Azure Account
 2. Mod 2 > M02-Core Azure Services\L03-Core Azure Services and Products\03-DemoCreate Azure Virtual machine.
 3. Mod 2 > M02-Core Azure Services\L03-Core Azure Services and Products\05-Demo-Deploy Azure Container Instances (ACI) in Azure Portal
 4. Mod 2 > M02-Core Azure Services\L03-Core Azure Services and Products\12-DemoCreate Blob Storage
 5. Mod 2 > M02-Core Azure Services\L04-Azure Solutions\03-Demo-Add IoT device to Azure IoT Hub
 6. Mod 2 > M02-Core Azure Services\L04-Azure Solutions\11-Demo-Run serverless code with Azure Functions in Azure portal
 7. Mod 2 > M02-Core Azure Services\L05-Azure Management Tools\03-DemoCustomize the Azure Portal
 8. Mod 2 > M02-Core Azure Services\L05-Azure Management Tools\05-Demo-Create VMs from a script with Azure PowerShell
 9. Mod 2 > M02-Core Azure Services\L05-Azure Management Tools\07-Demo-Install IIS webserver on a VM with Azure Cloud Shell.md
 10. Mod 2 > M02-Core Azure Services\L05-Azure Management Tools\10-Demo-Save a recommendations report with Azure Advisor
 11. Mod4 > M04-Azure Pricing and Support\L03-Planning and Managing costs\09-Demo-Generate an Azure Pricing Calculator estimate
 12. Mod4 > M04-Azure Pricing and Support\L03-Planning and Managing costs\12-DemoGenerate an Azure TCO Calculator cost comparison report

Module review questions

Module review questions are provided at the end of each module. You might wish to supplement with questions of your own.

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 show them what they have learned.
- As a group, go through the questions before moving on to another section.
- Interspace the questions into the content as you cover the applicable material.

Reference links

The course content includes many reference links. This is because the Azure documentation is constantly being updated, and also for the MCT to use as reference, or an opportunity to link into a high-level overview of a certain feature:

- Before you teach the course, use the reference links to validate that the content is still current. Pay attention to capabilities and limits: for example, preview features and virtual machine (VM) sizes.
- Reference links have been added to your PowerPoint slides and instructor notes to make it easy for you to access more detailed information. Use these links to walk through details that are not covered in the content, and lengthy steps that have only been summarized in the content.

Group discussions

Consider initiating group discussion around certain topics. You can use the end-of module questions as conversation starters at any stage during the course delivery.

Course timing

While the content should not be particularly challenging, delivering the course on time in a one-day window will most likely be the biggest challenge you have. Remember you have discretion and flexibility to show a feature or area of Azure as you go, and this freedom should allow you to quicken or slow the course pace as you need. Also, based on the students' experience, you might be able to skip over or quickly go through certain topics or areas. The course content is designed to take a day to complete.

Resources

There are a lot of resources to help you and the student learn about Azure. We recommend you bookmark these pages and offer the list to your students:

- [Azure forums](#). The Azure forums are very active. You can search the threads for a specific area of interest. You can also browse categories such as Azure storage, pricing and billing, Azure VMs, and Azure Migrate.
- Microsoft Learning Blog. Get the latest information on the certification tests and exam study groups.
- Channel 9. Channel 9 provides a wealth of informational videos, shows, and events.
- Tuesdays with Corey. Corey Sanders answers your questions about topics such as Azure VMs, websites, mobile services, and Dev/Test.
- [Azure Friday](#). Join Scott Hanselman as he engages one-on-one with the engineers who build the services that power 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 in preview, what's generally available, and news and updates.
- [Azure Newsletter](#). Stay informed on the latest Azure features, events, and community activities. Browse through past newsletters or subscribe and get the latest Azure news delivered to your inbox.

Connect with others

You also have the ability to connect directly with others preparing to teach the course or to get assistance if need be:

- [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 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. It is the official support channel for courseware.

Feedback

These courses differ from the traditional MOC courses that Microsoft has provided in the past. This course has a framework for you to work within. 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!

Courseware Development Team