

# Cloud Certifications: Azure Fundamentals

Exam: AZ-900



## Introduction

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This guide provides information and resources on the Azure Fundamentals certification, as well as some tips to help you prepare for the exam.

# Who this certificate is for?

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This certification is intended for professionals beginning to work with Microsoft Azure who are able to demonstrate a foundational knowledge of cloud concepts and services and how they are provided with Azure.

This certification would be right for you if you don't necessarily have a technical background and hands-on experience with Azure, but you've been involved with it (e.g. in a sales or management role) enough that you are familiar with cloud concepts and are able to demonstrate knowledge of Azure services, workloads, security, privacy, pricing, and support. If you have a technical background and some hands-on experience with Azure, this certification can also be a way for you to validate your foundational level knowledge.

# What this certificate is for?

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The Azure Fundamentals certification is meant for professionals to demonstrate their grasp of cloud concepts and ability to work with the Microsoft Azure ecosystem. It can be used to prepare for other Azure role-based or specialty certifications, although it is not a prerequisite for any of them.

Achieving this certification will demonstrate that you're comfortable describing cloud concepts, core Azure services and management tools, Azure identity services, Azure pricing and SLAs, and options around security, privacy, compliance, and trust with Microsoft Azure.

# Which exams are applicable?

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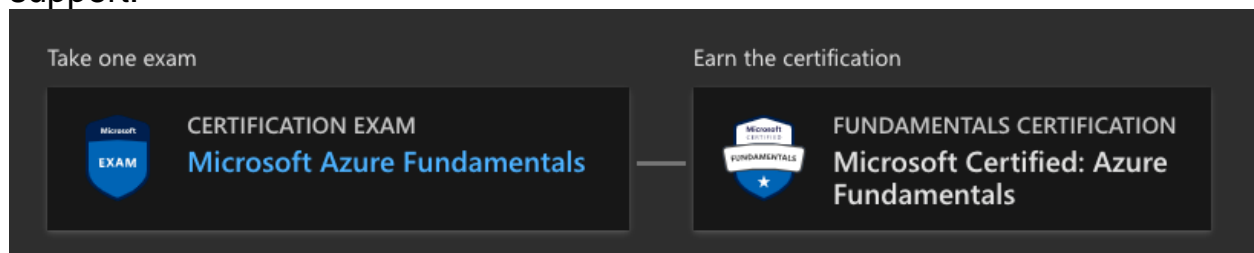
To earn this certification, only one exam is required: AZ-900: Microsoft Azure Fundamentals.

To pass this exam you should be able to demonstrate knowledge of the fundamentals of Azure. It is not a highly technical exam and requires rather a high-level understanding of the concepts.

## Prerequisites

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There is no prerequisite for this exam, but you should be familiar with basic cloud concepts and Azure services, workloads, security, privacy, pricing, and support.



## Skills Measured

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The AZ-900 exam will measure skills in different categories as listed below (**non**-exhaustively). Along with each topic, a few keywords are listed to give you a better picture of what specific concepts are involved.

### *Cloud Concepts (15-20% of the exam):*

- Describe the benefits and considerations of using cloud services: High Availability, Scalability, Elasticity, Agility, Fault Tolerance and Disaster Recovery. Consumption-based model and difference between CapEx and OpEx.
- Describe the differences between delivery models: IaaS, PaaS and SaaS
- Describe the differences between cloud models: Public, Private, and Hybrid cloud

## *Core Azure Services (30-35% of the exam):*

- Describe the core Azure architectural components: Regions, Availability Zones, Resource Groups, Azure Resource Manager, benefits and usage of core Azure architectural components
- Describe some of the core products available in Azure: Compute, Networking, Storage and Database services
- Describe some of the solutions available in Azure: Internet-of-Things (IoT) services, Big Data and Analytics services, AI and Machine Learning services, Serverless computing offers, and DevOps solutions
- Describe Azure management tools: Azure Portal, Azure PowerShell, Azure CLI, Cloud Shell, Azure Advisor

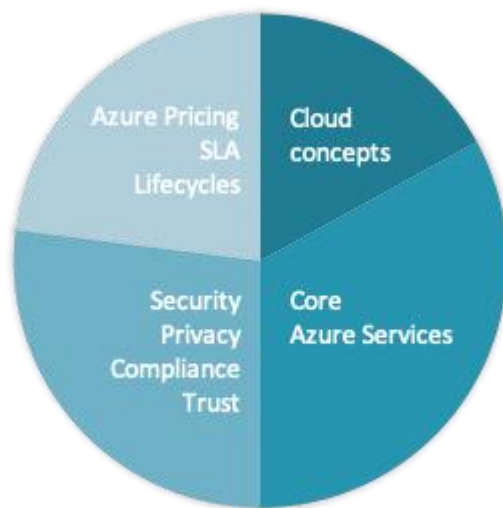
## *Security, Privacy, Compliance, and Trust (25-30% of the exam)*

- Describe securing network connectivity in Azure: Network Security Groups (NSG), Application Security Groups (ASG), User Defined Routes (UDR), Azure Firewall, Azure DDoS Protection
- Describe core Azure Identity services: Azure Active Directory, Azure Multi-Factor Authentication (MFA), difference between authentication and authorization
- Describe security tools and features of Azure: Azure Security Center, Key Vault, Azure Information Protection (AIP) and Azure Advanced Threat Protection (ATP)
- Describe Azure governance methodologies: Azure Policy, Role-Based Access Control (RBAC), Locks, Azure Advisor, Azure Blueprints
- Describe monitoring and reporting options in Azure: Azure Monitor, Azure Service Health
- Describe privacy, compliance, and data protection standards in Azure: Compliance terms such as GDPR, ISO and NIST. Microsoft Privacy Statement, Trust Center, Service Trust Portal, Compliance Manager, Azure Government, Azure China

## Azure Pricing, Service Level Agreements, and Lifecycles (20-25% of the exam)

- Describe Azure subscriptions: Azure Subscription uses and options, Management Groups
- Describe planning and management of costs: options for purchasing Azure products and services, options around Azure Free account, Pricing Calculator, Total Cost of Ownership (TCO) calculator
- Describe Azure Service Level Agreements (SLAs): SLA and Composite SLAs
- Describe service lifecycle in Azure: Public and Private Preview features, General Availability (GA), monitoring feature updates and product changes

The chart below puts the different categories in perspective, based on how much they each contribute towards the exam:

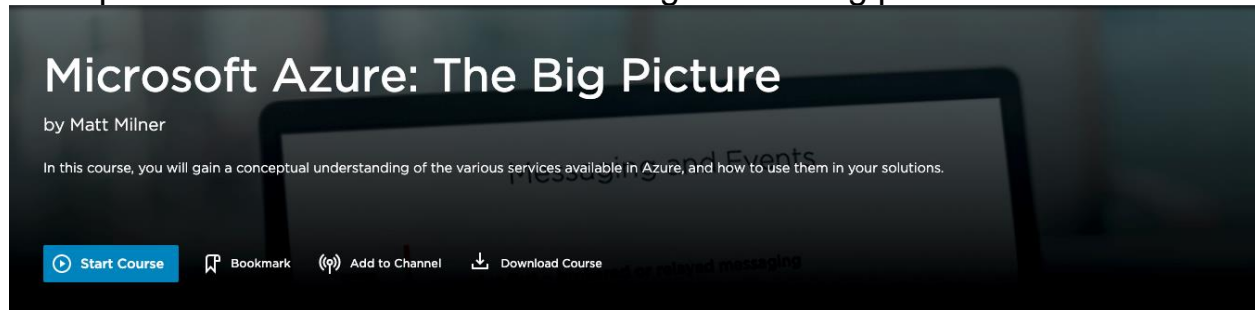


## Helpful Resources

There are several Pluralsight courses to help you prepare. Because the AZ-900 exam has a lot of *breadth*, but not a lot of *depth*, you may want to check out the various course listings for Azure at the beginner level (as time allows):

- [Pluralsight Azure courses for beginners](#)

In particular, the course [Microsoft Azure: The Big Picture](#) explores several of the topics covered in the exam and it's a good starting point.



In addition, you can explore the following Microsoft resources:

- [Azure Fundamentals Learning Path](#)
- [Official Practice Test for Microsoft Azure Fundamentals](#)
- [Exam policies and FAQ](#)

# Compensation and Employment Outlook

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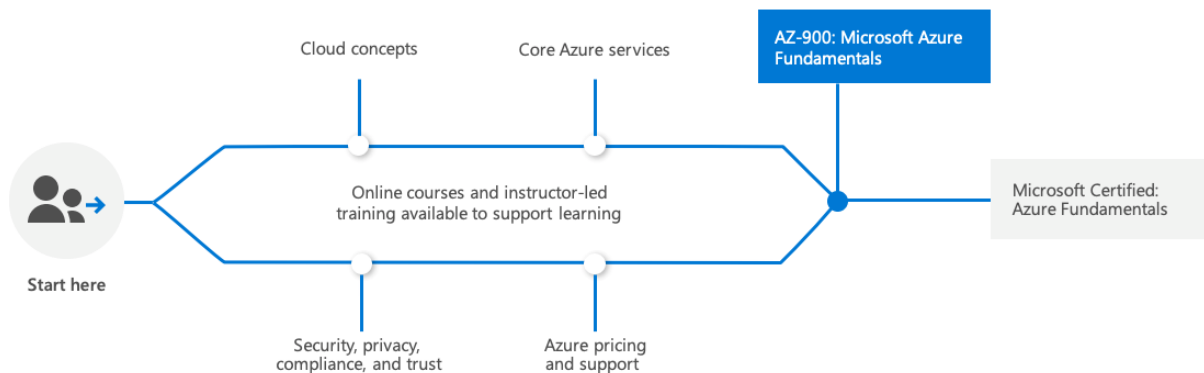
According to [Oracle's Top 10 Cloud Predictions](#), “80% of all enterprise (and mission-critical) workloads will move to the cloud by 2025.” Getting started with gaining a better understanding of cloud technologies and getting certified will future-proof your career and improve your prospects.

In addition, here are some other potential benefits you can expect from getting certified in Azure Fundamentals:

- Higher salaries: According to a Global Knowledge report published in February 2020 [15 Top-Paying IT Certifications for 2020](#), the Azure Fundamentals certification makes it to the 15 top-paying IT certifications this year, paying an average salary of \$126,323.
- Job Security: As a certified Azure professional you will be a vital asset for organizations and therefore more likely to secure your job and be offered more responsibilities and opportunities.
- Career development: With the Azure Fundamentals certification you will have a stepping stone to achieving other role-based certifications and boosting your career development and prospects even further.

# The certification Path

Along with Azure AI Fundamentals, Azure Data Fundamentals, the Azure Fundamentals course sits in the overall Azure Fundamentals tier of Microsoft certifications. This is the entry level within the Azure certification ecosystem, which also includes Azure Specialty and Azure Role-based certification tiers. With no prerequisite to this certification, and the fact that it is not a prerequisite for any other, this certification is not part of any larger certification path but it stands on its own.



Professionals in sales or management roles may find that this is the only Microsoft Azure certification that they need.





# Conclusion

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The Microsoft Certified: Azure Fundamentals certification is a good way to validate your knowledge and skills whether you have a technical background or hands-on experience with the platform.

This certification can serve as preparation for other specialty or role-based Azure certifications, although it is not a prerequisite for any of them. It may, however, boost your career prospects, salary, and job security in its own right. Finally, here are some tips and suggested next steps if you wish to pursue this certification:

- Focus on breadth over depth. This is not a technical exam requiring deep expertise on any specific Azure-related topic, but it covers a wide variety of topics at a high-level.
- Pay attention to the percentage of the exam allocated to each category and spend a little bit more time on those with the highest impact (refer to the pie chart in the "Skills Measured" section).
- Check out Pluralsight courses related to Azure at beginner level (those are linked in the "Helpful Resources" section). Learning through videos and visuals is a lot more effective than by reading for most people, and you can easily do it on the go with the mobile app.
- Feeling unsure whether you're ready? Take the Microsoft's Official practice exam (linked in the "Helpful Resources" section). It is not free, but it will prepare you for the kind of questions you're going to see, and get you used to the exam format and overall experience (especially if you've never taken a Microsoft certification exam before).