# AZ-104T00A – Introduction

**Welcome**

Welcome to this course, I’m very pleased to see such a large audience. This initiative had started as an internal update, given the new business dynamics and as you all may have guessed, in Avaloq there is nothing but talk about public cloud and especially because I was not very happy with the presentation that Microsoft made at the beginning of February. For all those who participated, I would like to share my view. It was a very superficial and unstructured presentation, nothing compared to Amazon’s one. I know the real value of Azure and that is why I wanted to explore the topic further with this course.

**Hello! Instructor Introduction**

For all who don’t know me, I’m Roberto Mereu. I’m the head of Wintel and Virtualization Competence Center in Avaloq. I’m based in Bioggio and I started working in Avaloq in 2016. I have always had a passion for teaching and sharing knowledge. I’m a Microsoft Certified Trainer since 2013 and I have taught many courses on topics such as Windows Server, Exchange Server, Microsoft 365 and as in our case on Azure. For almost an entire month I’ll be your trainer for this Microsoft Azure AZ-104 course. This course covers topics that are related to Azure infrastructure and map directly to Exam AZ-104: Microsoft Azure Administrator.

**About this course: Prerequisites**

There are some prerequisites to be met for this course and I hope you had the chance to check the body of the invitation for today in which I put some links related especially to the creation of a trial account on Azure and a Microsoft Learn module with some basic exercises for managing Azure portal and resources in three different ways. Through the Azure Portal directly, through Azure Command Line Interface (or CLI) or through Azure PowerShell. For the other prerequisites you have to be familiar with VMs, virtual networking and virtual hard disks, network configuration, Active directory concepts such as users, groups and role-based access control and with some disaster recovery and backup operations.

**Cloud Administrator Role**

The definition Microsoft provides for what an Azure Administrator does is “Azure Administrators implement, manage and monitor an organization’s Microsoft Azure environment”. The key words are: implement, manage and monitor.

**Microsoft Certifications**

As I said before, this course is a good tool to prepare for the exam, passing which will earn the Microsoft Azure Administrator Associate Certification. This slide is taken from PersonVue site and as you can see there are a lot of benefits to get certified.

**AZ-104 certification areas**

The topics you see in the list are known as functional groups and measure the skills needed to be successful in completion of AZ-104 exam. The percentages you see associated with each functional group indicate the importance of the topic and the likelihood of finding questions on that topic. The higher the percentage, the more questions you are likely to see in that area.

**About this course: Course Outline**

These are the topics we are going to address during our journey (I hope it will be interesting for most of you):

01 – In module number one, later on, we are going to talk about identities and how Azure Active Directory uses an identity management solution, to manage identification and access for resources in Azure.

02 – In module number two, we’ll discuss Governance and Compliance and how Azure policies and Role-based Access controls can be used to control and govern our resources and the access to those resources

03 – Module three, is all about administration, the Azure Resource Manager (or ARM) and the tools you use to interact with Azure, like Azure portal, Azure Command Line Interface (or CLI) and Azure PowerShell and other tools like mobile app

04 – Module four introduces the principle of Virtual networks

05 – Module five is all about inter-site connectivity, how we connect those Virtual networks to on-premises networks or how we connect virtual networks to other virtual networks

06 – Module six lets us work with network traffic management and we’ll use tools like load balancer and application gateway to manage traffic connectivity between networks, the internet and on-premises environments

07 – In module number seven we’ll talk about Azure storage, one of the big three in the world of Azure, Compute, Network and Storage. We’ll see different kinds of Storage accounts, services that are available, Blob services, File services, how those services actually works and how storage operates in Azure World

08 – Module eight is about Virtual Machines, deploying, managing, operating them, scaling them and making them available

09 – Module number nine, will introduce us serverless computing, specifically we’ll see how to work with Azure App Services and Containers and how to deploy containers as Azure Container Instances or use orchestration services like Azure Kubernetes Services to orchestrate the deployment of those docker containers

10 – Module ten is on Data Protection and we’ll talk about backing up data and about replicating data. We’ll address protecting data in Azure and on-premises.

11 – Finally the course ends with module number eleven, a discussion of monitoring, and we’ll start learning how Azure monitors all our resources through their lifecycle and how we use monitoring to get things like query capabilities or alert functionalities or automation capabilities in Microsoft Azure.

**Course schedule**

This is the course schedule. I will try to keep it that way, but if I have any organizational problems, I will notify you of any changes well in advance. I have tried to condense the modules into 2-hour sessions in which I will try not to bore you. Times are Swiss times, and because we are on different time zones with colleagues in Singapore or Pune, I tried to put the sessions in the early morning, if it’s ok for everyone. Many of you have asked me if it was possible to attend only certain sessions, and the answer is absolutely yes. feel free to choose the sessions that interest you most. from an organizational point of view, however, I would prefer to always send to all the appointments on the calendar so as not to go crazy with the various exclusions. You will receive invitations from week to week for 2 appointments. At the end we will organize a session with a practice test, a practice exam session, trying to consolidate what we have learned together.

**Hands-on Labs**

Usually this is a course that takes place in 4 full 8h days so a total of 32 hours. Given business commitments, I tried to compress it into a nugget format with 2-hours sessions. Because of this short time and complexity of the topics I would only share two points with you. I’ll try to have a 5 minutes break after the first hour, but in case I’ll find that I don’t have enough time, I would beg you to endure a single session. For the same reason I will leave 10 minutes at the end for questions, so in case you have any during the slides, mark and ask during that session, please. Second point is about labs. I don’t know if there will be time to do them together, so I have created a repository in Github where I will put both the instructions for doing the module labs and the lesson transcripts in case you want to review the topics. Unfortunately, I cannot record the sessions because the material used is protected by Microsoft's copyright.