**AZ-500 Learning Resources**

**Prerequisite study references If you are new to the Azure Security Engineer role these references can help you understand security fundamentals.**

1. [**https://docs.microsoft.com/en-us/learn/modules/azure-well-architected-security/**](https://docs.microsoft.com/en-us/learn/modules/azure-well-architected-security/)
2. [**https://docs.microsoft.com/en-us/azure/security/fundamentals/technical-capabilities**](https://docs.microsoft.com/en-us/azure/security/fundamentals/technical-capabilities)
3. [**https://docs.microsoft.com/en-us/azure/security/fundamentals/identity-management-overview**](https://docs.microsoft.com/en-us/azure/security/fundamentals/identity-management-overview)
4. [**https://docs.microsoft.com/en-us/azure/security/fundamentals/network-overview**](https://docs.microsoft.com/en-us/azure/security/fundamentals/network-overview)
5. [**https://docs.microsoft.com/en-us/learn/modules/network-fundamentals-2/**](https://docs.microsoft.com/en-us/learn/modules/network-fundamentals-2/)
6. [**https://docs.microsoft.com/en-us/learn/modules/azure-well-architected-security/**](https://docs.microsoft.com/en-us/learn/modules/azure-well-architected-security/)

**MS Learn Path**

1. **Module 1:** [**https://docs.microsoft.com/en-us/learn/paths/manage-identity-access/**](https://docs.microsoft.com/en-us/learn/paths/manage-identity-access/)

Github lab link: **aka.ms/az500labs**

**MODULE 1**

* Azure Basics for beginners

Microsoft Learn has a series of Fundamental modules for Azure, networking, and security. More modules are added every day and can help you ramp up on Azure basics. <https://docs.microsoft.com/en-us/learn/browse/?term=fundamentals>

* **Exam AZ-500: Microsoft Azure Security Technologies -** <https://docs.microsoft.com/en-us/learn/certifications/exams/az-500>
* AZ-500 lab repository - <https://github.com/MicrosoftLearning/AZ500-AzureSecurityTechnologies>

(click on Instructions/Labs to see instructions for all labs )

* Microsoft Learn - <https://docs.microsoft.com/en-us/learn/browse/>.
* Azure Documentation - <https://docs.microsoft.com/en-us/azure/>  Stay informed on the latest products, tools, and features. Get information on pricing, partners, support, and solutions.
* Azure forums <https://social.msdn.microsoft.com/Forums/enUS/home?category=windowsazureplatform>.
* 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.
* Azure Tuesdays with Core - <https://channel9.msdn.com/Shows/Tuesdays-With-Corey/>.  Corey Sanders answers your questions about Microsoft Azure - Virtual Machines, Web Sites, Mobile Services, Dev/Test etc.
* Azure Fridays - <https://channel9.msdn.com/Shows/Azure-Friday>.  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.
* Channel 9 - <https://channel9.msdn.com/>.  Channel 9 provides a wealth of informational videos, shows, and events.
* Microsoft Azure Blog - <https://azure.microsoft.com/en-us/blog/>.  Keep current on what's happening in Azure, including what's now in preview, generally available, news & updates, and more.
* Microsoft Learning Community Blog - <https://www.microsoft.com/en-us/learning/community-blog.aspx>).  Get the latest information about the certification tests and exam study groups.
* Get started with Azure Active Directory : Azure Active Directory Documentation - <https://docs.microsoft.com/en-us/azure/active-directory/>
* Azure Active Directory comes in four editions—Free, Microsoft 365 Apps, Premium P1, and Premium P2. The Free edition is included with an Azure subscription. <https://docs.microsoft.com/en-us/azure/active-directory/authentication/concept-mfa-licensing#available-versions-of-azure-ad-multi-factor-authentication>
* <https://azure.microsoft.com/pricing/details/active-director>
* Administrator role permissions in Azure Active Directory - <https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/directory-assign-admin-roles>
* What is Azure Active Directory Domain Services? - <https://docs.microsoft.com/en-us/azure/active-directory-domain-services/overview>
* Add or delete users using Azure Active Directory - <https://docs.microsoft.com/en-us/azure/active-directory/fundamentals/add-users-azure-active-directory?context=azure/active-directory/users-groups-roles/context/ugr-context>
* Users, groups, licensing, and roles for large organizations - <https://docs.microsoft.com/en-us/azure/active-directory/users-groups-roles/directory-overview-user-model>
* [Administrative units in Azure Active Directory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/active-directory/roles/administrative-units)
* <https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-authentication-passwordless-phone>
* <https://docs.microsoft.com/en-us/azure/active-directory/authentication/howto-authentication-passwordless-security-key>
* Passwordless launch blog - [Passwordless authentication is now generally available! - Microsoft Tech Community](https://techcommunity.microsoft.com/t5/azure-active-directory-identity/passwordless-authentication-is-now-generally-available/ba-p/1994700)
* [Windows Hello for Business](https://docs.microsoft.com/en-us/azure/active-directory/authentication/concept-authentication-passwordless)
* [FIDO2 Security keys](https://docs.microsoft.com/en-us/azure/active-directory/authentication/concept-authentication-passwordless)
* [Microsoft Authenticator app](https://docs.microsoft.com/en-us/azure/active-directory/authentication/concept-authentication-passwordless)
* Secure your identities by using Azure Active Directory - <https://docs.microsoft.com/en-us/learn/modules/intro-to-azure-ad/>
* Manage users and groups in Azure Active Directory - <https://docs.microsoft.com/en-us/learn/modules/manage-users-and-groups-in-aad/>
* Create Azure users and groups in Azure Active Directory - <https://docs.microsoft.com/en-us/learn/modules/create-users-and-groups-in-azure-active-directory/>
* Secure Azure Active Directory users with Multi-Factor Authentication - <https://docs.microsoft.com/en-us/learn/modules/secure-aad-users-with-mfa/>
* Secure your cloud resources with access control - <https://docs.microsoft.com/en-us/learn/modules/cmu-secure-cloud-resources/>
* What is Azure AD Connect - <https://docs.microsoft.com/en-us/azure/active-directory/hybrid/whatis-azure-ad-connect>
* **All you need to know about Cloud Sync 🡪** [Azure AD Connect cloud sync documentation | Microsoft Docs](https://docs.microsoft.com/en-us/azure/active-directory/cloud-sync/)
* **How password hash synchronization works**
* [https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-password-hash-synchronization#how-password-hash-synchronization-works](https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-password-hash-synchronization)
* User sign-in with Azure Active Directory Pass-through Authentication - <https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-pta>
* Azure AD Connect and federation - <https://docs.microsoft.com/en-us/azure/active-directory/hybrid/how-to-connect-fed-whatis>
* [Authentication for Azure AD hybrid identity solutions - Active Directory | Microsoft Docs](https://docs.microsoft.com/en-us/azure/active-directory/hybrid/choose-ad-authn)
* Tutorial: Enable Azure Active Directory self-service password reset writeback to an on-premises environment - <https://docs.microsoft.com/en-us/azure/active-directory/authentication/tutorial-enable-sspr-writeback>
* What is Azure Active Directory Identity Protection? - <https://docs.microsoft.com/en-us/azure/active-directory/identity-protection/overview-identity-protection>
* **Azure Active Directory risk detections -**  <https://docs.microsoft.com/en-us/azure/active-directory/reports-monitoring/concept-risk-events>
* What is Conditional Access? - <https://docs.microsoft.com/en-us/azure/active-directory/conditional-access/overview>
* What are Azure AD access reviews? - <https://docs.microsoft.com/en-us/azure/active-directory/governance/access-reviews-overview>
* (docs.microsoft.com/Learn)
* Overview of identity and access management in Microsoft 365 - <https://docs.microsoft.com/en-us/learn/modules/m365-identity-overview/>
* Secure Azure Active Directory users with Multi-Factor Authentication - <https://docs.microsoft.com/en-us/learn/modules/secure-aad-users-with-mfa/>
* Protect your identities with Azure AD Identity Protection - <https://docs.microsoft.com/en-us/learn/modules/protect-identities-with-aad-idp/>
* Zero Trust Model - <https://www.microsoft.com/en-us/security/business/zero-trust>
* **Identity and access management -**<https://docs.microsoft.com/en-us/azure/architecture/framework/security/identity>
* License requirements to use Privileged Identity Management - <https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/subscription-requirements>
* Protect identity and access with Microsoft 365 - <https://docs.microsoft.com/en-us/learn/paths/m365-identity/>
* PIM Documentation - <https://docs.microsoft.com/en-us/azure/active-directory/privileged-identity-management/>
* Shared responsibility in the cloud - <https://docs.microsoft.com/en-us/azure/security/fundamentals/shared-responsibility>
* Security best practices for Azure solutions -  <https://azure.microsoft.com/mediahandler/files/resourcefiles/security-best-practices-for-azure-solutions/Azure%20Security%20Best%20Practices.pdf>
* Management groups - [https://docs.microsoft.com/en-us/azure/governance/management-groups/](http://Mhttps:/docs.microsoft.com/en-us/azure/governance/management-groups/)
* Azure Policy Documentation - <https://docs.microsoft.com/azure/azure-policy>
* Azure built-in roles - <https://docs.microsoft.com/en-us/azure/role-based-access-control/built-in-roles>
* What is Azure Blueprints - <https://docs.microsoft.com/en-us/azure/governance/blueprints/overview>
* Transfer billing ownership of an Azure subscription to another account **-** [https://docs.microsoft.com/en-us/azure/cost-management-billing/manage/billing-subscription-transfer](http://??https:/docs.microsoft.com/en-us/azure/cost-management-billing/manage/billing-subscription-transfer)
* (docs.microsoft.com/Learn)
* Control and organize Azure resources with Azure Resource Manager - https://docs.microsoft.com/en-us/learn/modules/control-and-organize-with-azure-resource-manager/
* Secure your Azure resources with role-based access control (RBAC) - <https://docs.microsoft.com/en-us/learn/modules/secure-azure-resources-with-rbac/>
* Create custom roles for Azure resources with role-based access control (RBAC) - <https://docs.microsoft.com/en-us/learn/modules/create-custom-azure-roles-with-rbac/>
* Apply and monitor infrastructure standards with Azure Policy - <https://docs.microsoft.com/en-us/learn/modules/intro-to-governance/>
* Manage access to an Azure subscription by using Azure role-based access control (RBAC) - <https://docs.microsoft.com/en-us/learn/modules/manage-subscription-access-azure-rbac/>
* Control and organize Azure resources with Azure Resource Manager - <https://docs.microsoft.com/en-us/learn/modules/control-and-organize-with-azure-resource-manager/>

**How to register for LODS (Learn on Demand Systems) environment (Labs)**

1. Follow the steps: 1. login at <https://esi.learnondemand.net>

Or aka.ms/studentlabs

1. Select “Register with Training key” option and enter the LODS Training key which you received on email
2. i.e., Training key: D35DD01F991442C4
3. note: login with personal email (select Microsoft account option to login)
4. Once you login, you will find option of “My Trainings”
5. Click on “My Trainings” then click “AZ-500” and click on “Launch” button to practice labs