
CLS004: Microsoft Azure Fundamentals**COURSE DESCRIPTION**

This course provides the underlying knowledge required by all individuals who will be evaluating Microsoft Azure, whether they are administrators, developers, or database administrators. This course also provides the prerequisite knowledge for students wishing to attend [Course CLS005: Developing Microsoft Azure Solutions](#), or [Course CLS006: Implementing Microsoft Azure Infrastructure Solutions](#).

This course will introduce students to the principles of cloud computing. Students will become familiar with how these principles have been implemented in Microsoft Azure. In addition, this course will explain how to implement the core Azure infrastructure, consisting of virtual networks and storage. With this foundation, students will learn how to create the most common Azure services, including Azure Virtual Machines, Web Apps, and Azure SQL Database. The course will conclude by describing features of Azure AD and methods of integrating it with on-premises Active Directory.

AUDIENCE PROFILE

This course is intended for individuals who want to evaluate deploying, configuring, and administering services and virtual machines (VMs) by using Azure. This includes:

- Developers who want to evaluate creating Azure solutions.
- Windows Server administrators who want to evaluate the migration of on-premises Active Directory roles and services to the cloud.
- IT professionals who want to evaluate the use of Azure to host websites and mobile app back-end services.
- Database administrators who want to evaluate the use of Azure to host SQL databases.

AT COURSE COMPLETION

After completing this course, students will be able to:

- Describe cloud computing, Azure, and Azure subscriptions.
- Use Azure PowerShell, the Azure Software Development Kit (SDK), and the Azure command-line interface (CLI) to manage Azure subscriptions.
- Create and configure virtual machines in Azure, and manage their disks.
- Create, configure, and monitor web apps in Azure and deploy Azure platform as a service (PaaS) cloud services.
- Create and configure Azure virtual networks.
- Create, manage, and configure cloud storage in Azure.
- Use Azure SQL Database to create, configure, and manage SQL databases.
- Create and manage Azure AD.

COURSE OUTLINE***Module 1: Getting started with Microsoft Azure***

This module introduces students to cloud services and the various Azure services. It describes how to use the Azure portal to access and manage Azure services, and to manage Azure subscription and billing.

Lessons

- What is cloud computing?
- What is Azure?
- Managing Azure
- Subscription management, support, and billing

Lab: Using the Azure portals

- Customizing the Azure portal interface
- Viewing billing, usage, and quotas data

After completing this module, students will be able to:

- Describe cloud computing.
- Describe Azure and its various services.
- Manage Azure services from the Azure portal.
- Manage their Azure subscription and billing.

Module 2: Microsoft Azure management tools

This module explains Azure PowerShell and its use in managing Azure subscriptions. It also describes how to use the Azure SDK and the Azure CLI to manage Azure subscriptions.

Lessons

- What is Azure PowerShell?
- Azure SDK and Azure CLI

Lab: Using Microsoft Azure management tools

- Using the Azure PowerShell modules
- Using the Azure CLI

After completing this module, students will be able to:

- Describe and use Azure PowerShell to manage their Azure subscription.
- Describe and use the Azure SDK and the Azure CLI to manage your Azure subscription.

Module 3: Virtual machines in Microsoft Azure

This module explains how to create and configure virtual machines in Azure and how to manage disks for virtual machines.

Lessons

- Creating and configuring VMs
- Configuring disks

Lab: Creating a VM in Azure

- Create a VM from the Azure portal by using an Azure Marketplace image
- Verify the functionality of the VM
- Configure storage of a VM

After completing this module, students will be able to:

- Create and configure VMs in Azure.
- Configure disks for VMs.

Module 4: Web Apps and cloud services

This module explains how to create, configure, and monitor web apps in Azure. It also describes how to create and deploy Azure PaaS cloud services.

Lessons

- Creating and configuring web apps
- Deploying and monitoring web apps
- Creating and deploying PaaS cloud services

Lab: Web Apps and cloud services

- Creating and configuring a WordPress web app
- Creating a cloud service

After completing this module, students will be able to:

- Create and configure web apps by using the Azure portal.
- Deploy and monitor web apps in Azure.
- Create and deploy Azure PaaS cloud services.

Module 5: Creating and configuring virtual networks

This module explains how to create and implement Azure networks and how to use their components to enhance the resiliency and availability of virtual machines.

Lessons

- Getting started with virtual networks
- Configuring Azure networking
- Getting started with Azure Load Balancer

Lab: Create and configure virtual networks

- Creating virtual networks
- Verifying virtual network functionality

After completing this module, students will be able to:

- Describe the purpose and functionality of Azure virtual networks.
- Create Azure virtual networks.
- Describe and implement Azure Load Balancer.

Module 6: Cloud storage

This module explains the features and benefits of cloud storage. It also explains how to create, manage, and configure cloud storage in Azure.

Lessons

- Understanding cloud storage
- Create and manage storage

Lab: Configure Azure Storage

- Create an Azure Storage account
- Create and manage blobs

After completing this module, students will be able to:

- Describe the features and benefits of cloud storage.
- Create and manage storage in Azure.

Module 7: Microsoft Azure Databases

This module explains the options available for storing relational data in Azure. It also explains how to use SQL Database to create, configure, and manage SQL databases in Azure.

Lessons

- Understanding options for relational database deployments
- Creating and connecting to Azure SQL databases

Lab: Creating a SQL Database in Azure

- Create a new Azure SQL database in Azure and configure SQL Server firewall rules
Manage content of an Azure SQL database by using SQL Server Management Studio

After completing this module, students will be able to:

- Describe options for relational database deployment in Azure.
- Use Azure to create, connect to, and manage content of SQL databases.

Module 8: Creating and managing Azure AD

This module explains how to create users, domains, and directories in Azure AD, integrate applications with Azure AD, and use Multi-Factor Authentication.

Lessons

- Overview of Azure AD
- Manage Azure AD authentication

Lab: Create and manage Azure Active Directory tenants

- Create users in Azure AD
- Create a new Azure AD tenant and a custom DNS domain

After completing this module, students will be able to:

- Create and manage Azure AD tenants, domains, and users.
- Manage Azure AD authentication.

วิทยากร: อ.เอกฤทธิ์ ธรรมสกลิต

- MASTER OF BUSINESS ADMINISTRATION (EXECUTIVE) DEGREE
SASIN GRADUATE INSTITUTE OF BUSINESS ADMINISTRATION OF
CHULALONGKORN UNIVERSITY
- MASTER OF SCIENCE, MAJOR IN INFORMATION
Technology Faculty of Information Technology
KING'S MONGKUT INSTITUTE OF TECHNOLOGY LADKRABANG
- BACHELOR OF SCIENCE
KING'S MONGKUT INSTITUTE OF TECHNOLOGY NORTH BANGKOK
- DIPLOMA PROGRAM FOR MANAGEMENT
KELLOGG – NORTHWESTERN UNIVERSITY, UNITED STATE OF AMERICA

Certificate:

- Microsoft Certified professional (MCP)
- Microsoft Certified Systems Administrator (MSCA)
- Microsoft Certified Systems Engineer (MSCE)
- Cisco Certified Network Associate (CCNA)
- Certificate of CompTIA Security+
- Certified Technical training CTT+
- Certified Ethical Hacker
- Certified Hacking Forensic Investigator
- Certified Wireless Network Administrator
- Certified Wireless Security Professional

จำนวนชั่วโมงในการฝึกอบรม : 2 วัน (12 ชั่วโมง)

ช่วงเวลาฝึกอบรม : 9.00 - 16.00 น.

สถานที่ฝึกอบรม :

สถาบันวิทยาการ สวทช.

เลขที่ 73/1 อาคารสำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ (สวทช.)

ถนนพระรามที่ 6 แขวงทุ่งพญาไท เขตราชเทวี กรุงเทพฯ 10400

วิธีการสำรองที่นั่ง :

ติดต่อสำรองที่นั่งล่วงหน้า ในวัน-เวลาราชการ

โทรศัพท์: 0 2644 8150 ต่อ 81886, 81887

โทรสาร: 0 2644 8110

Website: www.NSTDAAcademy.com

E-mail: training@nstda.or.th