

## AZ-203T05-A: Monitor, troubleshoot, and optimize Azure solutions

### OBJECTIVE

In this course students will gain the knowledge and skills needed to ensure applications hosted in Azure are operating efficiently and as intended. Students will learn how Azure Monitor operates and how to use tools like Log Analytics and Application Insights to better understand what is happening in their application. Students will also learn how to implement autoscale, instrument their solutions to support monitoring and logging, and use Azure Cache and CDN options to enhance the end-user experience.

### COURSE TOPICS

#### Module 1: Introduction to Azure Monitor

Azure Monitor is the central service that includes all the tools you need to monitor and optimize your solution.

##### Lessons

- Overview of Azure Monitor

After completing this module, students will be able to:

- Understand how Azure Monitor works
- Know where and how Azure Monitor collects data

#### Module 2: Develop code to support scalability of apps and services

This module covers how applications scale and how to handle some troubleshooting.

##### Lessons

- Implement autoscale
- Implement code that addresses singleton application instances
- Implement code that handles transient faults

After completing this module, students will be able to:

- Understand autoscale patterns and best practices for scaling their solutions
- Use the Azure CLI to communicate with a specific copy of a resource
- Handle transient faults in your solution

#### Module 3: Instrument solutions to support monitoring and logging

This module covers adding code to your app to send the data to Azure Monitor.

##### Lessons

- Configure instrumentation in an app or server by using Application Insights
- Analyze and troubleshoot solutions by using Azure Monitor

After completing this module, students will be able to:

- Add default code to web pages, console apps, and Windows desktop apps to support telemetry
- Use dashboards and other tools to monitor and troubleshoot their app

## Module 4: Integrate caching and content delivery within solutions

This module shows students how to leverage Azure Cache for Redis and Azure CDNs to deliver assets to users more quickly.

### Lessons

- Azure Cache for Redis
- Develop for storage on CDNs

After completing this module, students will be able to:

- Understand how Azure Cache for Redis operates and how to configure and interact with it
- Manage Azure CDN

### PREREQUISITES

- Students should have 1-2 years experience as a developer. This course assumes students know how to code and have a fundamental knowledge of Azure.
- It is recommended that students have some experience with PowerShell or Azure CLI, working in the Azure portal, and with at least one Azure-supported programming language. Most of the examples in this course are presented in C# .NET.

### TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

### COURSE DURATION

Bundle Course in 3 days

Time: 9:00am to 6:00pm

Lunch Time: 1:00pm to 2:00pm

### CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course.