

# Course Outline

## Module 1: Creating Web Applications using PaaS

This module provides an overview of Azure App Service Web Apps for hosting web applications, REST APIs, and a mobile back end. Topics include the following: - Using shell commands to create an App Service Web App - Creating Background Tasks - Using Swagger to document an API.

This course also includes an explanation of how Logic Apps help to build solutions that integrate apps, data, systems, and services across enterprises or organizations by automating tasks and business processes as workflows.

After completing this module, students will be able to:

- Use shell commands to create an App Service Web App
- Create Background Tasks
- Use Swagger to document an API

## Module 2: Creating Apps and Services Running on Service Fabric

This module provides an overview of Azure Service Fabric as a distributed systems platform that makes it easy to package, deploy, and manage scalable and reliable microservices and containers. This module also addresses the challenges in developing and managing cloud native applications. Additional topics include: • Creating a reliable service • Creating a Reliable Actors app • Working with Reliable collections

After completing this module, students will be able to:

- Create a reliable service
- Create a Reliable Actors app
- Hands-on with Reliable collections

## Module 3: Using Azure Kubernetes Service

This module focuses on the Microsoft Azure Kubernetes Service (AKS) for deploying and managing a Kubernetes cluster in Azure. Topics include how to reduce operational overhead of managing Kubernetes by offloading much of that responsibility to Azure, such as health monitoring and maintenance.

Additional topics include:

- Azure Container Registry
- Azure Container Instances

After completing this module, students will be able to:

- Understand the Azure Container Registry
- Use Azure Container instances