Microsoft Azure Readiness: 5-day Workshop

AUDIENCE	Cloud Administrator, DevOps, Developers, Architects, Data Professionals
FORMAT	Instructor-led with hands-on labs
LEVEL	300
WORKSHOP DESCRIPTION	For administrators, this workshop provides an in-depth examination of Microsoft Azure Infrastructure Services (IaaS); covering Virtual Machines and Virtual Networks starting from introductory concepts through advanced capabilities of the platform. The student will learn best practices for configuring virtual machines for performance, durability, and availability using features built into the platform.

For Developers, this workshop is designed to introduce students to developing cloud-based applications using Microsoft Azure. This workshop covers key compute technologies such as Virtual Machines, Functions, Logic Apps, Service Fabric and App Services, as well as teaches how to build a developer environment and compose new applications using platform-as-a-service (PaaS) components including bleeding edge technologies like IoT, Cognitive/AI, ML and much more.

For DevOps, this workshop will focus on how to build effective DevOps teams using Microsoft Azure services. Topics will include automation using Azure Resource Manager, templates, command line tools, REST APIs as well as using the Azure DevOps service for CI/CD, Release Management, Issue Tracking and much more.

For Data professionals, this workshop will cover building modern data focused solutions using Microsoft Azure. Topics may include SQL Server, Azure SQL Database, Cosmos DB, Data Bricks, HD Insight, Data Factory, Data Lake, Machine Learning and much more.

The course will be led by an instructor and will include live and detailed technical demos as well as hands-on labs for the students to practice their skills. |
| WORKSHOP OBJECTIVES | For Administrators:
• Manage Azure subscriptions and resources
• Implement and manage storage
• Deploy and manage virtual machines (VMs)
• Configure and manage virtual networks
• Manage Identities
• Migrate Servers to Azure
• Implementing and Managing Application Services |

- Implement Advanced Virtual Networking
- Secure Identities

For Developers:

- Select the appropriate Azure technology development solution
- Develop for Azure storage
- Develop Azure Platform as a Service solutions
- Implement security in Azure development solutions
- Develop for asynchronous processing
- Develop for autoscaling
- Develop long-running tasks
- Implement distributed transactions
- Enable the search of textual content
- Instrument an app or service and implement logging
- Manage APIs by using API Management
- Configure a message-based integration architecture
- Develop an application message model
- Develop Azure Cognitive Services solutions
- Create and integrate bots
- Create and implement IoT solutions

For DevOps Professionals:

- Design a DevOps Strategy
- Implement DevOps Development Processes
- Implement Continuous Integration
- Implement Dependency Management
- Implement Azure Infrastructure
- Implement Continuous Feedback

For Data Professionals:

- Create a foundational knowledge of Azure Infrastructure as a Service with the resource manager architecture
- Understand how to utilize Azure in a SQL Server Hybrid Cloud environment.
- Leverage Azure Storage for cheap, secure storage of backups and low usage data.
- Understanding basic performance management in Azure SQL Database.
- Designing Databases for Performance
- Understanding the advanced tuning and monitoring features of Azure SQL Database
- Leveraging shared database pools to manage performance across many databases