Program Structure

General:

Online Video Content

Every week the video content will be released on Monday for which the session schedule is shared in the below table.

Graded Assessments

- The due date from graded assessments will be 7 days from the release date.
- The participant had to submit the graded project in the form of doc/pdf through email on sgprogramsupport@greatlearning.in. The specific instructions will be available for all the assessment.

Query

The participant is requested to submit their query at least 36-48 hours before the live session so that trainer can assist with the query during the session.

Course Name (week)	Topics	Sub Topics covered	Mode of Delivery	Mentor Learning Session/Live Teaching sessions (Weekdays)	Assessments Release Date
				Date and Duration of Session	Graded Quiz and Project
Introduction to Azure - IaaS and Storage (Week 1)	Introduction to Azure & Implement solutions that use virtual machines	Azure Portal and Cloud Shell	Live	01-06-2021 (2 hour)	04-06-2021
		Azure PowerShell and CLI			
		Azure Service Bus, Messaging Q, Notification Service			
		Azure Fund			
		billing and Policy Management Ent Cloud Control Plane			
		Resource Manager			
		Create ARM templates			
		Configure Azure Disk Encryption for VMs			
		App Gateway [Diff LB] and APM Understanding			
		Auto Scaling or Azure Sets			
		Pricing			
		Azure CDN			
		Provision VMs	Online	04-06-2021 (1 hour)	
		Virtual Networks			
		IP Addressing and Endpoints			
		Azure DNS			

		Network Security Groups			
	Develop solutions that use Azure Table storage	Azure Table storage overview / Azure Storage Different types			
		Authorization in Table storage			
		Table service REST API			
	Develop solutions that use Microsoft Azure Blob storage Lessons	Azure Blob storage overview			
		Working with Azure Blob storage			
Monitoring, Logging, Analytics and Azure SQL Data Warehouse (Week 2)	Introduction to Azure Monitor	Overview of Azure Monitor	Online	11-06-2021 (2 hours)	11-06-2021
		Understand how Azure Monitor works			
		Know where and how Azure Monitor collects data			
	Working with Relational Data Stores in the Cloud	Use Azure SQL Database Diff type of DB's and DBPaaS	Online		
		Describe Azure SQL Data Warehouse			
		Creating and Querying an Azure SQL Data Warehouse			
		Use PolyBase to Load Data into Azure SQL Data Warehouse			
	Performing Real-Time Analytics with Stream Analytics	Explain data streams and event processing	Online		
		Data Ingestion with Event Hubs [API, KAFKA, Qbased]			
		Processing Data with Stream Analytics Jobs			
	Instrument solutions to support monitoring and logging Lessons	Configure instrumentation in an app or server by using Application Insights	Live		
		Analyze and troubleshoot solutions by using Azure Monitor			
Batch jobs and deploying scalable containerized solutions (Week 3)	Implement batch jobs by using Azure Batch Services	Azure Batch overview	Live	17-06-2021 (2 hours)	18-06-2021
		Run a batch job by using the Azure CLI and Azure Portal			
		Run batch jobs by using code			
		Manage batch jobs by using the Batch Service API			
	Create containerized solutions	Create an Azure Managed Kubernetes Service (AKS) cluster	Live		
		Create container images for solutions			
		Publish an image to the Azure Container Registry			
		Run containers by using Azure Container Instance or AKS /ASC			
		Implement autoscale	Live		

	Develop code to support scalability of apps and services	Implement code that addresses singleton application instances		18-06-2021 (2 hours)	
		Implement code that handles transient faults			
CosmosDB and Azure SQL - an Overview (Week 4)	Develop solutions that use Azure Cosmos DB storage	Azure Cosmos DB overview	Online	25-06-2021 (2 hours)	25-06-2021
		Managing containers and items			
		Create and update documents by using code			
	Building Globally Distributed Databases with Cosmos DB	Create an Azure Cosmos DB database built to scale	Online		
		Insert and query data in your Azure Cosmos DB database			
		Build a .NET Core app for Cosmos DB in Visual Studio Code			
		Distribute your data globally with Azure Cosmos DB			
	Develop solutions that use a relational database Lessons	Azure SQL overview	Online		
		Create, read, update, and delete database tables by using code			
	Integrate caching and content delivery within solutions	Azure Cache for Redis			
		Develop for storage on CDNs	Live		
Azure Data Platform and Storage accounts (Week 5)	Azure for the Data Engineer	Explain the evolving world of data	Live	01-07-2021 (1 hour)	02-07-2021
		Survey the services in the Azure Data Platform			
		Identify the tasks that are performed by a Data Engineer			
		Describe the use cases for the cloud in a Case Study			
	Working with Data Storage	Choose a data storage approach in Azure	Live	02-07-2021 (2 hour)	
		Create an Azure Storage Account			
		Explain Azure Data Lake storage			
		HDI Clusters			
		Upload data into Azure Data Lake			
Azure DataBricks and Data Factory (Week 6)	Enabling Team Based Data Science with Azure Databricks	Explain Azure Databricks	Live	09-07-2021 (2 hour)	09-07-2021
		Work with Azure Databricks			
		Read data with Azure Databricks			
		Perform transformations with Azure Databricks			
	Orchestrating Data Movement	Explain how Azure Data Factory works	Live		
		Azure Data Factory Components			

	with Azure Data Factory	Azure Data Factory and Databricks			
Management of Azure Data Platforms (Week 7)	Securing Azure Data Platforms	An introduction to security	Online	16-07-2021 (2 hour)	16-07-2021
		Key security components			
		Securing Storage Accounts and Data Lake Storage			
		Securing Data Stores			
		Securing Streaming Data			
	Monitoring and Troubleshooting Data Storage and Processing	Explain the monitoring capabilities that are available	Live		
		Troubleshoot common data storage issues			
		Troubleshoot common data processing issues			
		Manage disaster recovery			
Week 8	Designing for Resiliency and Scale	Design for Optimized Storage and Database Performance	Live	23-07-2021 (2 hours)	23-07-2021
		Identifying Performance Bottlenecks			
		Design a Highly Available Solution			
		Incorporate Disaster Recovery into Architectures			
		Design Backup and Restore strategies			
	Design for Efficiency and Operations	Maximizing the Efficiency of your Cloud Environment			
		Use Monitoring and Analytics to Gain Operational Insights			
		Use Automation to Reduce Effort and Error			