Google Cloud Fundamentals for Azure Professionals

Module 1 Introducing Google Cloud

- What is cloud computing?
- Google Cloud Computing architectures
- The Google network
- Google Cloud Regions and Zones
- Google Cloud versus Azure regions and zones
- Open API's
- Multi-layered security approach
- Budgets and Billing

Module 2 Getting Started with Google Cloud

- Google Cloud resource hierarchy
- Comparison to Azure resource hierarchy
- Identity and Access Management (IAM)
- IAM Roles
- Comparison to Azure AD
- Interacting with Google Cloud
- Cloud Marketplace

Module 3 Virtual Machines in the Cloud

- Virtual Private Cloud (VPC) Network
- How Azure VNet differs from Google VPC
- Compute Engine
- Comparing Azure VM and Google Compute Engine
- Important VPC Capabilities
- How typical approaches to load-balancing in Google Cloud differ from those in Azure

Module 4 Storage in the Cloud

- Cloud Storage
- Cloud Storage Interactions
- Comparing Azure Blob Storage with Google Cloud Storage
- Cloud Bigtable
- Cloud SQL and Cloud Spanner
- Cloud Datastore
- Comparing Azure SQL with Google Cloud's managed database services
- Comparing Storage Options

Module 5 Containers in the Cloud

- Containers in the Cloud
- Kubernetes and Kubernetes Engine
- Hybrid and Multi-Cloud
- How Azure Kubernetes Service differ from GKE

Module 6 Applications in the Cloud

- App Engine Standard Environment
- App Engine Flexible Environment
- Comparison to Azure App Service
- Cloud Endpoints and Apigee Edge

Module 7 Developing, Deploying and Monitoring in the Cloud

- Development in the cloud
- Deployment: Infrastructure as code
- How Cloud Deployment Manager differs from Azure Resource Manager
- Monitoring: Proactive instrumentation
- How Cloud Operations differs from Azure application Insights

Module 8 Big Data and Machine Learning in the Cloud

- Google Cloud Big Data Platform
- Dataflow
- BigQuery
- How BigQuery differs from Azure Data Lake Analytics
- Pub/sub and Datalab
- How Cloud Pub/Sub differs from Azure Events Hub
- Google Cloud Machine Learning Platform
- ML APIs
- How GCP's machine-learning APIs differ from Azure's

Module 9 Summary and Review

- Course Review
- The Process of migrating from Azure to Google Cloud
- Next Steps