

## Course Contents

		Lecture	Digital Training	Exercise & Lab	Knowledge Check
<b>AWS Review (optional)</b>		60 min.			
Lecture	Introduction to the AWS Cloud				
Lecture	Overview of AWS Infrastructure				
Lecture	Running Applications in the Cloud				
Lecture	Introduction to Amazon EC2, Elastic Load Balancing, and Amazon EC2 Auto Scaling				
Lecture	Introduction to Serverless Computing with AWS Lambda				
Lecture	From Monoliths to Microservices				
Lecture	Best Practices				
<b>Module 1 – Welcome to Academy Cloud Developing (ACD)</b>		60 min.			
Lecture	Course Prerequisites, objectives, and overview				
Lecture	AWS Training Portal				
Lecture	Lab Environment				
Lecture	AWS Free Tier (optional)				
Lecture	AWS Educate (optional)				
Activity	AWS Documentation Scavenger Hunt				
<b>Module 2 – Introduction to Developing on AWS</b>		120 min.			15 min.
Lecture	Systems Development Lifecycle				
Lecture	Steps to Get Started Developing on AWS				
Lecture	Working with AWS SDKs				
Lecture	Errors and Exceptions				
Lecture	Introduction to AWS X-Ray				
Lecture	Introduction to Amazon CloudWatch and AWS CloudTrail				
Devops	Devops				
Lab	Introduction to Devops				
Knowledge Check					
<b>Module 3 – Introduction to AWS Identity and Access Management (IAM)</b>		120 min.			15 min.
Lecture	Shared Responsibility Model				
Lecture	Overview of IAM				
Lecture	Authentication with IAM				
Lecture	Authorization with IAM				
Educator Demo	Create an IAM User and IAM Group				
Knowledge Check					
<b>Module 4 – Developing Storage Solutions with Amazon S3</b>		120 min.			15 min.
Lecture	Introduction to Amazon S3				
Lecture	Creating Amazon S3 Buckets				
Lecture	Working with Amazon S3 Objects				
Lecture	Protecting Data and Managing Access to Amazon S3 Resources				
Lab	Developing with Amazon S3 using the AWS SDK				
Knowledge Check					

## Course Contents

		Lecture	Digital Training	Exercise & Lab	Knowledge Check
<b>Microsoft Azure Review (optional)</b>		60 min.			
Lecture	Introduction to the Azure Cloud				
Lecture	Overview of Azure Infrastructure				
Lecture	Running Applications in the Cloud				
Lecture	Introduction to Virtual machines, Load Balancing, and Virtual machines				
Lecture	Auto Scaling				
Lecture	Introduction to Serverless Computing with Function				
Lecture	From Monoliths to Microservices				
Lecture	Best Practices				
<b>Module 1 – Welcome to Academy Cloud Developing (ACD)</b>		60 min.			
Lecture	Course Prerequisites, objectives, and overview				
Lecture	Azure Training Portal				
Lecture	Lab Environment				
Lecture	Azure Free Tier				
(optional) Lecture	Azure Educate (optional)				
Activity	Az Documentation Scavenger Hunt				
<b>Module 2 – Introduction to Developing on Azure</b>		120 min.			15 min.
Lecture	Systems Development Lifecycle				
Lecture	Steps to Get Started Developing on Azur				
Lecture	Working with Azure SDKs				
Lecture	Errors and Exceptions				
Lecture	Introduction to Azur X-Ray				
Lecture	Devops topic				
	Devops				
Lab					
Knowledge Check					
<b>Module 3 – Introduction to AWS Identity and Access Management (IAM)</b>		120 min.			15 min.
Lecture	Shared Responsibility Model				
Lecture	Overview of IAM				
Lecture	Authentication with IAM				
Lecture	Authorization with IAM				
Educator Demo	Create an IAM User and IAM Group				
Knowledge Check					
<b>Module 4 – Developing Storage Solutions Azure Storage</b>		120 min.			15 min.
Lecture	Introduction to Block Storage				
Lecture	Creating Azure Block Storage				
Lecture	Working with Block Storage				
Lecture	Protecting Data and Managing Access to Azure storage Resources				
Lab	Developing with Azure Storage using the Azure SDK				
Knowledge Check					

