Course description
AWS Technical Essentials introduces you to essential AWS services and common solutions. The course covers the fundamental AWS concepts related to compute, database, storage, networking, monitoring, and security. You will start working in AWS through hands-on course experiences. The course covers the concepts necessary to increase your understanding of AWS services, so that you can make informed decisions about solutions that meet business requirements. Throughout the course, you will gain information on how to build, compare, and apply highly available, fault tolerant, scalable, and cost-effective cloud solutions.

- Course level: Fundamental
- Duration: 8 hours

Activities
This course includes presentations, hands-on labs, demonstrations, videos, and knowledge checks

Course objectives
In this course, you will learn to:
- Describe terminology and concepts related to AWS services
- Navigate the AWS Management Console
- Articulate key concepts of AWS security measures and AWS Identity and Access Management (IAM)
- Distinguish among several AWS compute services, including Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, Amazon Elastic Container Service (Amazon ECS), and Amazon Elastic Kubernetes Service (Amazon EKS)
- Understand AWS database and storage offerings, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, and Amazon Simple Storage Service (Amazon S3)
- Explore AWS networking services
- Access and configure Amazon CloudWatch monitoring features

Intended audience
This course is intended for:
- Individuals responsible for articulating the technical benefits of AWS services to customers
- Individuals interested in learning how to get started with AWS
- SysOps administrators
- Solutions architects
- Developers

Prerequisites
We recommend that attendees of this course have:
- IT experience
- Basic knowledge of common data center architectures and components (servers, networking, databases, applications, and so on)
- No prior cloud computing or AWS experience required
Course outline

Course Introduction

Module 1: Introduction to Amazon Web Services
- Introduction to Cloud Computing
- Introduction to AWS Cloud Services
- Security in the AWS Cloud
- Introduction to AWS IAM
- Hands-On Lab: Introduction to AWS Identity and Access Management (IAM)

Module 2: AWS Compute
- Compute as a service in AWS
- Introduction to Amazon Elastic Compute Cloud
- Amazon EC2 instance lifecycle • AWS container services
- What is serverless?
- Introduction to AWS Lambda

Module 3: AWS Networking
- Introduction to Amazon Virtual Private Cloud (Amazon VPC)
- AWS Direct Connect
- Amazon VPC routing
- AWS Routing Table Demonstration
- Amazon VPC security
- Hands-On Lab: Create a VPC and Relaunch the Corporate Directory Application in Amazon EC2

Module 4: AWS Storage
- AWS storage types
- Amazon EC2 instance storage and Amazon Elastic Block Store (Amazon EBS)
- Object storage with Amazon S3

Module 5: Databases
- Benefits of databases in AWS
- Amazon Relational Database Service
- Purpose-built databases
- Introduction to Amazon DynamoDB
- Hands-On Lab: Configure a Web Application to use an Amazon S3 Bucket and DynamoDB Table

Module 6: Monitoring, Load Balancing and Scaling
- Monitoring
- Load Balancing
- Scaling
- Hands-On Lab: Configure High Availability for Your Application

Module 7: Course Summary