APPLIED TECHNOLOGY ACADEMY

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AWS Technical Essentials Training

Award Winning Training · Applied Technology Academy

In this introductory course, you will learn about AWS products, services, and common solutions. You will learn the fundamentals of identifying AWS services so that you can make informed decisions about IT solutions based on your business requirements.

LEVEL	DURATION	EXPERIENCE	AVERAGE SALARY	LABS
Beginner	**1 Day**	**None**	**$85,666**	**Yes**

Course Overview

What you'll learn:

- Terminology and concepts related to the AWS platform
- How to navigate the AWS Management Console
- Key concepts of AWS security measures and AWS Identity and Access Management (IAM)

After completing this lab, you can:

- Create an Amazon Machine Image (AMI) from a running instance
- Create a load balancer
- Create a launch configuration and an Auto Scaling group
- Automatically scale new instances within a private subnet
- Create Amazon CloudWatch alarms and monitor performance of your infrastructure

Course Outline

- **Module 1: Introduction and History of AWS**
  - This module describes the history and fundamental elements of AWS, and shows you how to navigate the AWS Management Console. The AWS Management Console is the graphical user interface (GUI) to access AWS. AWS is also accessible through the command line interface (AWS CLI) and software development kits (SDKs). This module discusses the AWS global infrastructure and basic principles of deploying on AWS.
  - By the end of this module you will be able to:
  - Describe the history of AWS
  - Recognize the AWS global infrastructure
  - Navigate the AWS Management Console
- **Module 2: Foundational Services**
  - This module describes core AWS around Security, Networking, Servers, and Storage/Database and how they relate to an on-premise environment.
  - AWS Core Services

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  - Regions and Availability Zones (AZ)
  - Amazon Elastic Compute Cloud (EC2)
  - AWS Marketplace
  - Amazon Virtual Private Cloud (VPC)
  - Amazon Storage Services
  - Amazon Simple Storage Service (S3)
  - Amazon Elastic Block Store (EBS)
  - Amazon Glacier
  - Lab 1: Build Your VPC and Launch a Web Server
  - In this lab session, you use Amazon Virtual Private Cloud (VPC) to create your own VPC and add additional components to it to produce a customized network. You will create security groups for your EC2 instance. You configure and customize the EC2 instance to run a web server and launch it into the VPC.
  - Objectives
  - After completing this lab, you can:
  - Create a VPC
  - Create subnets
  - Configure a security group
  - Launch an EC2 instance into a VPC
- **Module 3: AWS Security, Identity, and Access Management**
  - This module describes the importance of security and provides an overview of physical, hardware, software, and network security and the various assurance programs that AWS participates with and describes in more detail:
  - Share Responsibility Model
  - Security Groups
  - AWS IAM Authentication
  - AWS IAM User Management – Groups
  - AWS IAM Authorization
  - AWS IAM Policies
  - AWS IAM Roles
  - AWS IAM Authentication and Authorization
  - AWS IAM Best Practices
  - AWS CloudTrail
- **Module 4: AWS Databases**
  - This module describes the concepts of fundamental AWS database services of SQL and NoSQL databases including:
  - Amazon Relational Database Service (Amazon RDS)
  - DB instances

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  - Security groups
  - RDS interfaces
  - Amazon DynamoDB
  - Amazon DynamoDB data model
  - Supported operations
  - Provisioned throughput
  - Accessing DynamoDB
  - Lab 2: Build Your DB Server and Interact with Your DB Using an App
  - This lab is designed to reinforce the concept of leveraging an AWS-managed database instance for solving relational database needs.
  - Objectives
  - After completing this lab, you can:
  - Launch an Amazon RDS DB instance with high availability
  - Configure the DB instance to permit connections from your web server
  - Open a web application and interact with your database
- **Module 5: AWS Elasticity and Management Tools**
  - This module describes the fundamental elements of Elasticity and AWS Management Tools.
  - Elastic Load Balancing
  - Classic Load Balancer
  - Application Load Balancer
  - Network Load Balancer
  - Amazon CloudWatch
  - Auto Scaling
  - Launch Configurations
  - Auto Scaling Groups
  - Dynamic Scaling
  - AWS Trusted Advisor
  - Lab 3: Scale and Load Balance Your Architecture
  - This module describes the fundamental elements of Elasticity and AWS Management Tools.
  - Elastic Load Balancing
  - Classic Load Balancer
  - Application Load Balancer
  - Network Load Balancer
  - Amazon CloudWatch
  - Auto Scaling
  - Launch Configurations
  - Auto Scaling Groups
  - Dynamic Scaling

  - AWS Trusted Advisor

Intended Audience

- 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

- What experience you need
- Working knowledge of distributed systems
- Familiarity with general networking concepts
- Working knowledge of multi-tier architectures
- Familiarity with cloud computing concepts

Follow-on Courses

- Architecting on AWS
- Developing on AWS
- Systems Operations on AWS

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.