Who should attend (Audience)

This course is designed for IT Professionals and IT Leaders who are ready to move beyond foundational cloud computing understanding. If your role requires you to demonstrate business benefits of AWS this course is for you.

What is this course about?

This introduction to Amazon Web Services (AWS) training will give you the skills to deliver significant technical and business benefits by fully leveraging AWS. As a secure, flexible, scalable cloud services platform, AWS offers computing power, database storage, content delivery and other functionality to help businesses scale and grow.

Recommended prerequisites

- None

Previous knowledge & experience needed

- Basic understanding of cloud computing concepts
- Knowledge of computing platform environments and networks

Duration

4 Days
8 AM-4 PM Central Daily

Course skill level

- Foundation
- Intermediate
- Advanced

This course qualifies for

1.2 CEUs
23 NASBA CPEs

Technology used during course

- AnyWare Classes use Adobe Connect
- SkyTap Virtual Machines
- AWS Account
- Computing Sandbox
Course Details

Introduction to AWS Cloud Computing:
- Getting started with Amazon Web Services (AWS)
  - Creating accounts and analyzing the cost breakdown
  - Evaluating Service Level Agreements (SLA)
  - Console, command-line tools and API

Overview of the architecture
- EC2
- S3
- EBS
- Beanstalk
- RDS
- VPC
- CloudFront
- SimpleDB
- SQS
- CloudWatch

Achieving Agility with EC2
- Managing the EC2 infrastructure
  - Browsing Amazon Machine Images (AMI)
  - Specifying security groups and key pairs
- Provisioning resources
  - Evaluating Elastic Block Store (EBS) and instance store root devices
  - Assigning elastic IP addresses
  - Mapping instance types to computing needs

Implementing Durable and Reliable Storage
- Storing data in the cloud
  - Persisting off-instance storage with EBS volumes
  - Creating backups with snapshots
  - Achieving high durability with SimpleStorage Service
  - Transmitting data in/out of the Amazon cloud
- Simplifying the database infrastructure
  - Achieving high availability of nonrelational data with SimpleDB
  - Effortlessly implementing a relational database with Relational Database Service (RDS)
- Creating cost-effective distributed solutions
  - Decoupling applications with Simple Queue Service
  - Leveraging CloudFront for high-performance edge cache content delivery
  - Delivering static and streaming content

Adapting EC2 to Your Business Needs
- Customizing virtual machines
  - Modifying existing images
  - Creating new images off of running instances
  - Converting an instance store AMI to an EBS AMI
- Creating an AWS cloud architecture
Handling Dynamic Resource Requirements

- Monitoring from inside or outside of the cloud
  - Visualizing utilization metrics with CloudWatch
  - Setting alarms to send and receive notifications
- Transparently scaling to meet load variations
  - Distributing incoming traffic with elastic load balancing
  - Dynamically adding and removing instances with Auto Scaling
  - Setting capacity thresholds

Hosting Applications with Elastic Beanstalk

- Improving application delivery with Platform as a Service (PaaS)
  - Deploying scalable applications on the AWS cloud
  - Selecting and launching an application environment
- Managing application environments
  - Customizing and configuring platform stacks
  - Provisioning application resources with CloudFormation

AWS Security Features

- Controlling account security
  - Configuring access credentials
  - Managing users with Identity Access Management (IAM)
- Leveraging the Virtual Private Cloud (VPC)
  - Launching EC2 instances in private subnets for extra security
  - Bridging EC2 instances to your internal network with a VPN
  - Organizing EC2 instances in separate subnets with a VPC
Common Questions – Attendance Policy, Contacts

What is the Attendance Policy for IT Academy Classes?
IT Academy attendees are expected to adjust their work schedule to match the IT Academy class hours of 8:00am – 4:00pm. 100% attendance is expected in each IT Academy class. Missing time in class may result in the following:

- No Show=Employees who do not show up for class or arrive more than one (1) hour after the start of class will be advised to reschedule for the next available course.
- Incomplete=Employees missing a half day or more of class-any day of class will be advised to reschedule for the next available course. Employees not available to sit for the post-test will be considered incomplete.

AnyWare Technical Support contact?
AnyWare@LearningTree.com, 1-877-653-8733

IT Academy Classroom Point of Contact?
Christopher Marsh, Christopher.marsh@tn.gov, 615-532-5517

How do I access the new My IT Academy Portal?
1. Log into Edison
2. ELM Learning Home Page
3. Quick Links
4. My IT Academy (last link under Quick Link)

For more FAQs visit the IT Academy AEM Site