Cloud Audit Academy for Federal and DoD Workloads - Course Syllabus

High level expectations of the course:

- A basic understanding of security, networking, and AWS services is strongly recommended.
- This course is based on NIST SP 800-171 and other U.S. Government security and compliance frameworks such as NIST SP 800-53 and the Cybersecurity Maturity Model Certification (CMMC).
- This course covers how AWS can help address and audit compliance.
- This course focuses on security and auditing concepts when operating Federal and DoD workloads in AWS.
- Security and compliance requirements, controls, scenarios, and AWS services and best practices described in this course are dynamic, illustrative examples, and not exhaustive.

Learning Objectives:

By the end of this course, you will be able to

- Describe how NIST SP 800-171, related frameworks, and DoD Assessment Methodology apply to customer operations in AWS.
- Identify the relative responsibilities of AWS and customers to comply with U.S. Government security and compliance requirements based on the AWS Shared Responsibility Model.
- Recognize how to leverage AWS services to demonstrate and audit compliance with NIST SP 800-171 and related frameworks.

Modules:

The course is made up of the following six modules each organized by NIST control families and requirements, applicability to AWS, and corresponding sample audit test plans. AWS best practices and interactive experiences are also included in each module.

1. Introduction to Federal and DoD Workloads in AWS
2. Access Control (AC) & identification and Authentication (IA)
3. Audit and Accountability (AU) & Incident Response (IR)
4. Risk Assessment (RA) & Security Assessment (CA)
5. System and Communications Protection (SC)
6. Configuration Management (CM) & Maintenance (MA)

AWS Services:

As a part of the learning objectives, the course will also cover AWS services and tools that support the NIST control families and U.S. Government security and compliance requirements including:

- AWS Audit Manager
- AWS Identity and Access Management
- AWS Organizations
- AWS CloudTrail
- AWS Config
- Amazon CloudWatch
- Amazon GuardDuty
- AWS Security Hub
- Amazon Simple Notification Service
- Amazon Inspector
- AWS Systems Manager
- Amazon Virtual Private Cloud
- AWS Key Management System
- Amazon Simple Storage Service
- Amazon Elastic Block Store