

AWS Certified Machine Learning Specialty (MLS-C01)

Introduction

The AWS Certified Machine Learning - Specialty (MLS-C01) examination is intended for individuals who perform a development or data science role. This exam validates an examinee's ability to build, train, tune, and deploy machine learning (ML) models using the AWS Cloud.

It validates an examinee's ability to design, implement, deploy, and maintain ML solutions for given business problems. It will validate the candidate's ability to:

- Select and justify the appropriate ML approach for a given business problem.
- Identify appropriate AWS services to implement ML solutions.
- Design and implement scalable, cost-optimized, reliable, and secure ML solutions.

Course Objective

This course teaches you about core aspects such as:

- Selecting and justifying the appropriate ML approach for a given business problem
- Identifying appropriate AWS services to implement ML solutions
- Designing and implementing scalable, cost-optimized, reliable, and secure ML solutions

Course Outline

Domain 1: Data Engineering

- 1.1 Create data repositories for machine learning.
- 1.2 Identify and implement a data-ingestion solution.
- 1.3 Identify and implement a data-transformation solution.

Domain 2: Exploratory Data Analysis

- 2.1 Sanitize and prepare data for modeling.
- 2.2 Perform feature engineering.
- 2.3 Analyze and visualize data for machine learning.

Domain 3: Modeling

- 3.1 Frame business problems as machine learning problems.
- 3.2 Select the appropriate model(s) for a given machine learning problem.
- 3.3 Train machine learning models.
- 3.4 Perform hyperparameter optimization.
- 3.5 Evaluate machine learning models.

Domain 4: Machine Learning Implementation and Operations

- 4.1 Build machine learning solutions for performance, availability, scalability, resiliency, and fault Tolerance.
- 4.2 Recommend and implement the appropriate machine learning services and features for a given problem.
- 4.3 Apply basic AWS security practices to machine learning solutions.
- 4.4 Deploy and operationalize machine learning solutions.

Prerequisites

The successful candidate likely has 1–2 years of hands-on experience developing, architecting, or running ML/deep learning workloads on the AWS Cloud, along with:

- The ability to express the intuition behind basic ML algorithms
- Experience performing basic hyperparameter optimization
- Experience with ML and deep learning frameworks
- The ability to follow model-training best practices
- The ability to follow deployment and operational best practices

Target Audience

Job roles that can benefit from Machine Learning certification training courses are:

- Data Analysts
- Data Engineers
- Cloud Computing Professionals
- Solutions Architects
- Cloud Solution Architects
- Enterprise Architects
- IT Professionals
- Cloud Administrators
- Business Analysts
- Data Scientists
- Software Developers
- Programming Professionals
- AI Developers
- AI Designers
- Anybody who needs a proper understanding of various Machine Learning concepts
- Professionals looking to clear relevant Machine Learning certification exams

Duration

- 24 Hours Training Course