

AWS MLA-C01 Exam Preparation

AWS MLA-C01 ML Engineer Associate. Structured labs, practice questions, and mock exams.

[IT Certifications](#) Instructor: Brian Taylor • 5 sections • 48 lessons • 13.75h total

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About this course

This course is for IT professionals and cloud engineers who need to pass the AWS Certified Machine Learning Engineer Associate (MLA-C01) exam. We provide structured learning paths and realistic practice questions. Includes hands-on labs, detailed walkthroughs, video lessons, study guides, and mock exams.

Course curriculum

Section 1: Foundations and Exam Overview

- **Understanding the MLA-C01 Exam Structure (12m)**
Learn the key domains and question formats to set a clear study plan from the start.
- **Setting Up Your AWS Lab Environment (8m)**
Step-by-step guide to configure a free-tier AWS account for hands-on practice.
- **Core Machine Learning Concepts for the Exam (18m)**
Review essential ML theory and how it maps to AWS services, with real-world examples.
- **Time Management Strategies for the Exam (10m)**
Practical tips to pace yourself and avoid common timing pitfalls during the test.
- **How to Analyze Exam Question Types (15m)**
Break down multiple-choice, multiple-response, and scenario-based questions with sample cases.
- **Building a Personalized Study Schedule (9m)**
Downloadable template to plan your study sessions based on your current knowledge level.
- **Avoiding Common Exam Prep Mistakes (11m)**
Learn from others' errors, focus on high-yield topics and avoid wasting time on outdated material.

Section 2: Core AWS ML Services Deep Dive

- **AWS SageMaker Fundamentals for MLA-C01 (22m)**
Hands-on walkthrough of SageMaker Studio, training jobs, and model deployment.
- **Working with Amazon SageMaker Pipelines (16m)**
Step-by-step guide to automating ML workflows using SageMaker Pipelines.
- **AWS Glue and Data Preparation for ML (14m)**
Learn how to clean and transform data using AWS Glue, with a real data case study.
- **Amazon Redshift for ML Data Storage (13m)**
Configure Redshift clusters optimized for machine learning workloads.
- **AWS Lambda for ML Inference Automation (17m)**
Build serverless inference functions with Lambda and API Gateway.
- **Using Amazon S3 for ML Data Lakes (12m)**
Best practices for organizing and securing ML data in S3 buckets.
- **AWS IAM and Security for ML Workloads (19m)**
Implement least-privilege access controls for ML pipelines and models.
- **Monitoring ML Models with Amazon CloudWatch (15m)**
Set up dashboards and alerts to track model performance and drift.
- **Cost Optimization for AWS ML Services (20m)**
Practical strategies to reduce costs on SageMaker, Redshift, and other services.
- **Real Question Drill: SageMaker Scenarios (25m)**
Analyze and solve practice questions focused on SageMaker use cases.

Section 3: ML Model Development and Training

- **Building and Training Models with SageMaker (24m)**
End-to-end example of training a model using built-in algorithms.
- **Hyperparameter Tuning with SageMaker (18m)**
Use automatic model tuning to optimize your ML models efficiently.
- **Bringing Your Own Model to SageMaker (16m)**
Package custom models for deployment using SageMaker containers.
- **Feature Engineering in AWS ML Services (20m)**
Apply feature engineering techniques using SageMaker Processing Jobs.
- **Data Labeling with SageMaker Ground Truth (14m)**
Set up labeling workflows for supervised learning projects.
- **Model Evaluation and Validation Strategies (17m)**
Learn metrics and methods to validate model performance before deployment.
- **Handling Imbalanced Datasets in AWS (15m)**
Techniques for dealing with class imbalance using AWS tools.
- **Practice Session: Model Training Questions (21m)**
Work through real exam questions on model development and training.

Section 4: Deployment, Monitoring, and Advanced Topics

- **Deploying Models to SageMaker Endpoints (19m)**
Step-by-step deployment guide with real-time and batch inference options.
- **A/B Testing and Canary Deployments in AWS (16m)**
Implement safe rollout strategies for new ML models.
- **Automating ML with SageMaker Model Monitor (22m)**
Detect data drift and model degradation automatically.
- **Using AWS Step Functions for ML Orchestration (18m)**
Coordinate complex ML workflows across multiple AWS services.
- **Integrating ML with AWS IoT for Edge Computing (20m)**
Deploy models to edge devices using AWS IoT Greengrass.
- **Security Best Practices for Deployed Models (17m)**
Protect endpoints with VPCs, encryption, and access controls.
- **Scaling ML Inference with Auto Scaling (15m)**
Configure auto-scaling for SageMaker endpoints to handle traffic spikes.
- **Real Case Study: End-to-End ML Project (30m)**
Analyze a full project from data ingestion to deployment, with exam questions.
- **Advanced Troubleshooting for ML Services (23m)**
Debug common issues in training, deployment, and monitoring.
- **Exam Drill: Deployment and Monitoring Questions (28m)**
Solve challenging scenario-based questions on deployment topics.

Section 5: Practice Tests and Final Review

- **Full-Length Mock Exam Part 1 (35m)**
Simulate the first half of the MLA-C01 exam with timed questions.
- **Full-Length Mock Exam Part 2 (35m)**
Complete the second half of the mock exam and review answers.
- **Reviewing Your Mock Exam Results (12m)**
Learn how to analyze your performance and identify weak areas.
- **Targeted Practice on Weak Domains (20m)**
Focus on specific topics where you need more practice, with extra questions.
- **Final Exam Strategy Session (14m)**
Last-minute tips and mindset preparation for exam day.
- **Downloading and Using Exam Dumps Ethically (10m)**
How to use real questions for practice without violating AWS policies.
- **Creating Your Own Practice Questions (16m)**
Build custom quizzes to reinforce knowledge using provided templates.
- **Group Study and Peer Review Tips (11m)**
Collaborate with others to discuss questions and share insights.
- **Post-Exam: Next Steps and Career Growth (13m)**
Plan your next AWS certifications and ML career path.
- **Accessing Additional Resources and Updates (8m)**
Get links to official AWS docs, communities, and future course updates.
- **Final Q&A and Common Concerns (15m)**
Address student questions about exam logistics and preparation.
- **Congratulations and Exam Day Checklist (9m)**
A checklist to ensure you're ready for the big day.
- **Bonus: Interview Prep for ML Engineer Roles (25m)**
Practice common interview questions and how to showcase your certification.

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