

AWS Cloud Practitioner CLF-C02 Certification Course

Build essential AWS cloud skills and pass the CLF-C02 exam with confidence. Designed for beginners and IT professionals.

IT Certifications Instructor: Roberto Lopez • 5 sections • 50 lessons • 17.25h total

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About this course

The AWS Certified Cloud Practitioner CLF-C02 is a foundational certification that validates your understanding of cloud concepts and AWS services. Many professionals struggle to get started with AWS due to its vast ecosystem and fast-changing landscape. This course cuts through the noise and provides a structured path to grasp what matters most for the exam and real-world use.

You'll learn core cloud principles, key AWS services for compute, storage, networking, and security, along with pricing, billing, and compliance basics. The course includes clear video lessons, real-world case studies, and practice questions to prepare you for the CLF-C02 exam format and content.

Course curriculum

Foundations and Preparation

- **Understanding Cloud Computing and Its Business Impact (18m)**
Break down cloud computing concepts and why they matter for modern businesses.
- **Introduction to AWS and Its Global Infrastructure (25m)**
Explore AWS regions, availability zones, and how its infrastructure supports reliable services.
- **Setting Up and Navigating Your AWS Account (12m)**
A hands-on guide to creating an account, using the management console, and basic navigation.
- **Overview of Core AWS Service Categories (18m)**
Get familiar with the main types of AWS services and what each category covers.
- **AWS Pricing Models and Billing Basics (15m)**
Learn how AWS pricing works, including pay-as-you-go, reserved instances, and cost explorer tools.
- **Security and Compliance Fundamentals in AWS (22m)**
Cover the shared responsibility model and key compliance frameworks relevant to AWS.
- **Exam Format, Objectives, and Creating Your Study Plan (20m)**
Understand the CLF-C02 exam structure and build a personalized study schedule.

Core Concepts

- **Compute Services: EC2, Lambda, and Containers (25m)**
Step through AWS compute options and when to use each for different workloads.
- **Storage Solutions: S3, EBS, and EFS (22m)**
Compare AWS storage services and their use cases for data management.
- **Database Services: RDS, DynamoDB, and Redshift (20m)**
Explore managed database offerings and how to choose based on application needs.
- **Networking Essentials: VPC, Subnets, and Route Tables (28m)**
Build a foundational understanding of AWS virtual networking and connectivity.
- **Identity and Access Management (IAM) Deep Dive (25m)**
Master IAM users, roles, policies, and best practices for secure access control.
- **Monitoring with CloudWatch and CloudTrail (18m)**
Learn to track resource performance and activity using AWS monitoring tools.
- **Automation and Infrastructure as Code with CloudFormation (22m)**
Introduction to automating AWS resource provisioning using templates.
- **Application Integration: SQS, SNS, and API Gateway (20m)**
Understand services for building decoupled, scalable application architectures.
- **Security Services: GuardDuty, WAF, and Shield (15m)**
Overview of AWS security tools for threat detection and protection.
- **Cost Management Tools and Strategies (18m)**
Use AWS Budgets, Cost Explorer, and tags to monitor and optimize spending.

Deep Dive

- **Designing for High Availability and Fault Tolerance (28m)**
Apply AWS services to build resilient systems that handle failures gracefully.
- **Scalability with Auto Scaling and Elastic Load Balancing (25m)**
Configure resources to automatically adjust to demand for performance and cost efficiency.
- **Data Transfer and Migration Approaches (22m)**
Explore methods for moving data to and from AWS, including Snow Family and DMS.
- **Building Serverless Applications with AWS (30m)**
Step-by-step guide to designing and deploying serverless solutions using Lambda and related services.
- **Overview of Machine Learning and AI Services (18m)**
Introduce AWS AI/ML services like SageMaker and Rekognition and their practical applications.
- **IoT and Edge Computing Services in AWS (15m)**
Learn about AWS IoT Core, Greengrass, and how to connect devices at the edge.
- **DevOps Practices and Tools on AWS (22m)**
Cover CI/CD pipelines, infrastructure automation, and monitoring in a DevOps context.
- **Compliance and Governance Frameworks (20m)**
Understand how AWS supports compliance with standards like HIPAA, GDPR, and SOC.

Advanced Application

- **Case Study: Building an E-commerce Platform on AWS (32m)**
Walk through a real-world scenario of designing and deploying a scalable e-commerce site.
- **Implementing High-Availability Architectures (25m)**
Apply multi-AZ and multi-region strategies to ensure continuous application availability.
- **Disaster Recovery Planning and Execution (28m)**
Design and implement DR plans using AWS services for minimal data loss and downtime.
- **Multi-Account Strategies with AWS Organizations (22m)**
Learn to manage multiple AWS accounts for security, billing, and organizational needs.
- **Advanced Security: Encryption, KMS, and Secrets Manager (25m)**
Deep dive into data protection techniques and key management best practices.
- **Performance Optimization for AWS Workloads (20m)**
Use CloudWatch metrics and AWS tools to identify and resolve performance bottlenecks.
- **Cost-Saving Strategies: Savings Plans and Reserved Instances (18m)**
Analyze and apply cost optimization techniques to reduce AWS spending effectively.
- **Using AWS Trusted Advisor and Health Dashboard (15m)**
Leverage built-in AWS tools for recommendations on cost, performance, and security.
- **Hybrid Cloud and On-Premises Integration (22m)**
Connect AWS with on-premises environments using Direct Connect, VPN, and Storage Gateway.
- **Container Services: ECS, EKS, and Fargate (25m)**
Compare container management options and deploy applications using AWS container services.
- **Serverless Best Practices and Patterns (20m)**
Review common serverless design patterns and tips for building efficient applications.

- **Data Analytics Services: Athena, Glue, and QuickSight (28m)**
Explore AWS tools for data processing, ETL, and visualization to derive insights.

Implementation and Next Steps

- **Exam Day Preparation and Mental Strategies (12m)**
Tips for staying calm, managing time, and approaching exam questions effectively.
- **Practice Exam Questions with Detailed Analysis (32m)**
Work through sample questions and understand the reasoning behind correct answers.
- **Time Management Techniques During the Test (15m)**
Learn how to allocate time per question and handle difficult sections.
- **Common Exam Pitfalls and How to Avoid Them (18m)**
Identify frequent mistakes and develop strategies to prevent them on test day.
- **Post-Certification: Career Paths and Role Opportunities (20m)**
Explore job roles and career directions that benefit from AWS Cloud Practitioner knowledge.
- **Advancing to AWS Associate and Professional Levels (22m)**
Plan your next steps in AWS certification, including paths like Solutions Architect or Developer.
- **AWS Community Resources and Learning Platforms (12m)**
Discover forums, blogs, and official AWS resources to continue your learning journey.
- **Building a Portfolio with Hands-On AWS Projects (25m)**
Create practical projects to demonstrate your skills and enhance your resume.
- **Networking and Community Engagement in Cloud (15m)**
Connect with other professionals and participate in AWS events and groups.
- **Future Trends in Cloud Computing: 2026 and Beyond (18m)**
Look at emerging technologies and how AWS is evolving to meet future demands.
- **Maintaining Certification and Recertification Process (12m)**
Understand the renewal requirements for the AWS Cloud Practitioner certification.
- **Final Review and Knowledge Check (22m)**
Summarize key concepts and test your readiness before sitting for the exam.
- **Next Steps: Applying Your Skills in Real Projects (15m)**
Practical advice on using AWS knowledge in your current job or new opportunities.

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