

Cloud Computing & AWS Foundations

Understand the cloud, then build, secure, monitor and clean up real workloads on AWS without surprise bills

Cloud and DevOps · beginner · Live online, instructor-led

This syllabus is a draft awaiting instructor review and may change.

A 40-hour live course in cloud foundations on AWS: IAM, EC2 and Lambda, S3, VPC networking, RDS and DynamoDB, CloudWatch, security basics, cost controls and a deployment lab. Not official AWS training; exam fees are not included.

Length and schedule

40 hours of live teaching, on either schedule:

- Weekday Intensive (Mon–Fri): about 8 weeks before holidays
- Weekend Evening (Sat & Sun evenings): about 10 weeks before holidays

Fees per student, whole course

- Group: Rs. 12,999
- Duo: Rs. 21,999
- One-to-One: Rs. 39,999

Launch fee — GST treatment to be confirmed.

What you will be able to do

- Explain cloud service and deployment models, AWS global infrastructure and the shared responsibility model
- Set up an AWS account safely with MFA, budgets, cost alerts and an awareness of free tier limits
- Grant access with IAM users, groups, roles and least-privilege policies
- Launch and manage EC2 instances, load balancers, Auto Scaling groups and Lambda functions
- Store and protect data in S3, EBS and EFS, and choose between RDS and DynamoDB
- Build a VPC with public and private subnets, route tables and security groups
- Monitor workloads with CloudWatch and CloudTrail and apply core security practices
- Deploy a small web application on AWS, estimate its cost and remove every resource afterwards

Before you start

- Comfortable using a computer, a web browser and installing software
- Basic familiarity with a terminal is helpful; the commands you need are taught in class
- No programming experience required; reading a short script is helpful but not essential
- Your own AWS account for the labs: AWS asks for a payment card when you sign up, and any usage charges on your account are billed to you by AWS
- A laptop running Windows, macOS or Linux with a modern browser (8 GB RAM recommended)

Tools

AWS Management Console, AWS CLI, AWS CloudShell, AWS Budgets and Cost Explorer, AWS Pricing

Calculator, AWS IAM and IAM Identity Center, Amazon EC2, Elastic Load Balancing and Auto Scaling, AWS Lambda, Amazon S3, EBS and EFS, Amazon VPC and Route 53, Amazon RDS and DynamoDB, Amazon CloudWatch and AWS CloudTrail, AWS KMS and Secrets Manager, An SSH client and Visual Studio Code

Syllabus

Module 1: Cloud concepts and a cost-safe AWS account

What the cloud is, how AWS is organised, and how to set up an account that cannot surprise you with a bill.

1. What cloud computing is (2 h)
2. AWS global infrastructure and the shared responsibility model (2 h)
3. Account safety, budgets and free tier limits (2 h)

Module 2: Identity and access management

Control who can do what in an AWS account, and stop using the root user.

4. Users, groups, roles and policies (2 h)
5. Least privilege lab and doubt-clearing (2 h)

Module 3: Compute: EC2, load balancing and Lambda

Run applications on virtual machines, spread traffic across them, and run code without servers.

6. EC2 instances, AMIs and key pairs (2 h)
7. Elastic Load Balancing and Auto Scaling (2 h)
8. Serverless compute with Lambda, and doubt-clearing (2 h)

Module 4: Storage: S3, EBS and EFS

Store objects, disks and shared files, and keep them private and affordable.

9. S3 buckets, objects and access (2 h)
10. EBS, EFS, storage classes and doubt-clearing (2 h)

Module 5: Networking: VPC, security groups and DNS

Build the private network your applications run in and control what can reach them.

11. VPCs, subnets and route tables (2 h)
12. Security groups, network ACLs and NAT (2 h)
13. DNS, content delivery and networking doubt-clearing (2 h)

Module 6: Databases: RDS and DynamoDB

Run managed relational and NoSQL databases and choose between them.

14. Managed relational databases with Amazon RDS (2 h)
15. DynamoDB, choosing a database and doubt-clearing (2 h)

Module 7: Monitoring and security

See what your workloads are doing, record who changed what, and apply core security practices.

16. CloudWatch metrics, logs and alarms, and CloudTrail (2 h)
17. Security essentials (2 h)
18. Course review and doubt-clearing (2 h)

Module 8: Deployment lab

Put everything together: deploy, monitor, estimate and then clean up a small web application.

19. Deployment lab: building the application stack (2 h)

20. Final presentations, clean-up review and final assessment (2 h)

Final project

Deploy, monitor and tear down a small web application on AWS. You receive a simple web application and its database script. Working in your own account, you deliver:- An architecture diagram and a short design note: which services you chose, why, and what you deliberately left out.- A custom VPC with public and private subnets, route tables and security groups that allow only the traffic the application needs.- The application running on EC2 behind a load balancer, with an IAM role (not access keys) for any AWS access it needs.- A managed database in RDS in a private subnet, with credentials stored in Secrets Manager, and static files served from an S3 bucket that is not public by default.- CloudWatch metrics, a log group and at least two alarms, plus CloudTrail enabled for the account.- A cost estimate made with the AWS Pricing Calculator, a screenshot of your budget and alerts, and a clean-up checklist showing every resource you created and how you deleted it. Reviewed live in the final week: you walk through the architecture, show the application and its monitoring working, answer questions about your choices, and confirm the clean-up.

Certificate

- At least 80% attendance
- All assignments submitted
- Projects passed
- Final assessment passed (60%)

A ZORK Academy course completion certificate; paying for the course does not by itself earn it.

Next step

Book a free consultation: <https://zorkacademy.online/consultation?course=cloud-computing-aws>

We help you prepare for work; we do not guarantee jobs, placements or salaries.