

AWS Academy Cloud Foundations

Course Overview

AWS Academy Cloud Foundations is intended for students who seek an overall understanding of cloud computing concepts, independent of specific technical roles. It provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.

Course Outline

This 3-day (16-18 June 2022, 21 hours in total) short course will be delivered online in real time with recordings available after each session.

Day 1 – Welcome and AWS Cloud Overview

- **Module 0** – Welcome and Introduction
- **Module 1** - Cloud Concepts Overview
- **Module 2** - Cloud Economics and Billing
- **Module 3** - AWS Global Infrastructure Overview

Days 2 – AWS Core Services

- **Module 4** - Cloud Security
- **Module 5** – Networking and content delivery
- **Module 6** – Compute

Day 3 – Cloud Storage, databases, and Architecture

- **Module 7** - Storage
- **Module 8** - Databases
- **Module 9** - Cloud Architecting

Course Benefits

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

- Define the AWS Cloud
- Explain the AWS pricing philosophy
- Identify the global infrastructure components of AWS
- Describe the security and compliance measures of the AWS Cloud, including AWS Identity and Access Management (IAM)
- Create a virtual private cloud (VPC) by using Amazon Virtual Private Cloud (Amazon VPC)
- Demonstrate when to use Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, and AWS Elastic Beanstalk
- Differentiate between Amazon Simple Storage Service (Amazon S3), Amazon Elastic Block Store (Amazon EBS), Amazon Elastic File System (Amazon EFS), and Amazon Simple Storage Service Glacier (Amazon S3 Glacier)
- Demonstrate when to use AWS database services, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, Amazon Redshift, and Amazon Aurora
- Explain the architectural principles of the AWS Cloud
- Explore key concepts related to Elastic Load Balancing, Amazon CloudWatch, and Amazon EC2 Auto Scaling

Course Type

Introductory course: This is an introductory (level 100) course and is intended for AWS Academy member institutions.

Course Pre-Requisite

This is an entry-level course, but students should possess:

- General IT technical knowledge
- General IT business knowledge

Assessment

The assessment comprises of a combination of in-class quizzes (20% weight) and a final assessment to write a short research report (maximum 500 words, 80% weight) outlining the design of a cloud-based solution for an application of your choice and its critical evaluation, in terms of availability, performance, reliability and security.

Certification

The students will be provided with 50% discount voucher to undertake *AWS certified cloud practitioner* exam. Upon passing the exam, the students will get certified by AWS.



Course Convener



Dr. Mehrdad Amirghasemi

Dr Mehrdad Amirghasemi is a PhD graduated from the University of Wollongong in Computing and Information Technology. He has over four years' experience in software development industry and is an amazon web services (AWS) certified educator and associate. He has been involved in design and implementation of several cloud-based solutions, such as Enterprise Meta-moderation of Innovation (EMI), a platform that enables organizations to leverage a meta-moderation system to propose, rank, and analyse new ideas and innovations, which has been successfully deployed for MTR Hong Kong. He has been involved in an industry engagement grant with AcrossTheCloud Pty Ltd for the TBA21 ocean archive (OA) platform. OA is a place for collecting and cataloguing ocean-focused media and data coming out of commissions, exhibitions, publications and other TBA21-Academy programmes and alongside other people's data.

Fee and Discount

The standard registration fee for this course is \$1,800. However, discount codes are available for the following:

- 10% discount for UOW staff, students and alumni
- 10% discount for 2 or more course enrolments from the same person
- 10%, 15%, 20% discount for group booking with 5-9, 10-15 and 15+ enrolments, respectively, from the same organisation.

Contact

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