**Introduction to cloud computing**

This **introduction to cloud computing** on **Amazon AWS** course takes you from the **AWS basics** to being a competent AWS cloud practitioner. You'll learn general **cloud computing concepts** and AWS from fundamentals right through to advanced concepts. You'll also build hands-on skills using many of the core **Amazon Web Services (AWS)** services. Ideal for **beginners** - absolutely no cloud computing experience is required!

We use a highly visual and effective method of teaching cloud computing and AWS concepts using diagrams and animations (no bullet-point slides!). There are lots of hands-on exercises using an **Amazon Web Services (AWS)** free tier account to give you practical experience.

If you're interested in moving into a high-paying career working with cloud computing services - this is the best way to get started. You'll build knowledge from beginner level to advanced concepts, with plenty of opportunities to practice what you're learning.

**Here's a snapshot of some of the awesome skills you'll learn using this course:**

* Learn fundamental concepts of cloud computing and including storage, database, networking, virtualization, containers, and cloud architecture
* Create an AWS Free Tier account and launch your first virtual servers (Amazon EC2 instances) on the AWS Cloud
* Configure elasticity, high availability and fault tolerance using Amazon EC2 Auto Scaling and Amazon Elastic Load Balancing
* Create and configure storage services and upload files and objects using Amazon EBS, Amazon EFS and Amazon S3
* Launch a relational database on Amazon RDS and a NoSQL database using Amazon DynamoDB
* Automatically deploy infrastructure using code through AWS CloudFormation
* Create a Platform as a Service (PaaS) application on AWS Elastic Beanstalk
* Learn how to use DevOps tools on AWS to automate a continuous integration and continuous delivery (CI/CD) pipeline
* Implement serverless computing and Docker containers on AWS using AWS Lambda and Amazon ECS
* Create serverless event-driven architectures on Lambda
* Create loosely coupled services with Amazon SQS and Amazon SNS

This is a great way to get started with **cloud computing** and also a great starting point for those planning to earn their **AWS Certified Cloud Practitioner** or **AWS Certified Solutions Architect certifications**(you will need additional courses aimed at those AWS certifications).

**In this ultimate guide to cloud computing on AWS the topics you'll learn include**:

**Section 2 - The Building Blocks of Cloud Computing**

Gain an understanding of the fundamental systems on which the cloud is based, including:

* Computer architecture
* Client / server computing
* Storage concepts: block, file, and object
* IP addressing and subnetting basics
* Networking: routers and switches
* Databases
* Server virtualization
* Docker containers
* Application programming interfaces (APIs)

**Section 3 - Introduction to Cloud Computing**

Learn about the key cloud computing concepts:

* Legacy / traditional IT vs cloud computing
* The advantages of cloud computing services
* Cloud computing examples
* Cloud computing service models (IaaS, PaaS, SaaS)
* Cloud computing deployment models (private cloud, public cloud, hybrid cloud, multicloud)

**Section 4 - Demystifying Cloud Computing Architecture**

Complex cloud computing architecture concepts are made easy for you to understand:

* Stateful vs stateless services
* Scaling up vs scaling out
* Load balancing
* High availability and Fault tolerance
* Loose coupling
* Monolithic vs microservices architectures
* Event-driven architectures

**Section 5 - AWS Basics**

In this section you'll learn the basics of Amazon Web Services (AWS) and setup your free tier account:

* AWS Global Infrastructure
* AWS Pricing
* Setting up a free tier account
* AWS Identity and Access Management (IAM)
* Cloud networking - Amazon Virtual Private Cloud (VPC)
* Cloud computing security - security groups and network ACLs
* AWS Public and Private services

**Section 6 - Amazon Elastic Compute Cloud (EC2)**

Learn how to use Amazon AWS's IaaS platform and launch virtual servers on Amazon EC2:

* Launching Amazon EC2 instances
* Create a website on Amazon EC2
* Using IAM Roles with EC2
* Scaling with Amazon EC2 Auto Scaling
* Add high availability with Amazon Elastic Load Balancing

**Section 7 - AWS Storage Services**

Use block, file, and object storage on AWS:

* Amazon Elastic Block Store (EBS)
* Amazon Elastic File System (EFS)
* Amazon Simple Storage Service (S3)

**Section 8 - AWS Databases**

Use managed database services in the AWS Cloud:

* Amazon Relational Database Service (RDS)
* Amazon DynamoDB

**Section 9 - Automation on AWS**

Learn how to automate deployment and management on AWS:

* Deploy infrastructure as code using AWS CloudFormation
* Deploy a Platform as a Service (PaaS) application using AWS Elastic Beanstalk

**Section 10 - DevOps on AWS - Creating a Code Pipeline**

* Build a continuous integration and continuous delivery pipeline
* Use AWS CodeCommit, AWS CodeBuild, AWS CodeDeploy, AWS CodePipeline and AWS CodeStar

**Section 11 - Content Delivery and DNS Services**

* Use Amazon Route 53 for DNS resolution and domain registration
* Use the Amazon CloudFront content delivery network (CDN)

**Section 12 - Containers and Serverless Computing**

You'll learn about Docker containers and serverless computing:

* Using AWS Lambda functions
* Microservices (Docker Containers) on Amazon Elastic Container Service (ECS)

**Section 13 - Application Integration and Loose Coupling**

Implement loose coupling best practices with AWS services:

* Amazon Simple Notification Service (SNS)
* Amazon Simple Queue Service (SQS)

**Section 14 - Get certified on AWS**

Learn how to take the next step in your career with an AWS Certification such as the AWS Certified Cloud Practitioner or AWS Certified Solutions Architect Associate.

**WHAT DO OTHER STUDENTS SAY?**

Check out the excellent course reviews from our happy students:

⭐⭐⭐⭐⭐

*Great experience, clearly presented and lots of hands on practice demos*

⭐⭐⭐⭐⭐

*Awesome, the flow of the session is very good; the trainer started from basics and then gradually moved to advance topics. Highly recommended*

⭐⭐⭐⭐⭐

*I am a second-year CS student at one of the best unis in the UK. This lecturer explained my whole network module in literally 20 mins and I understood more than in my uni lectures. lol*

**MEET YOUR INSTRUCTOR**

*Hi, my name is Neal Davis - I'll be your instructor for this course. Cloud Computing is my Passion - which is why I founded Digital Cloud Training - offering AWS training resources that represent a higher quality standard than is otherwise available in the market. I created this beginner's course to help you understand core cloud computing concepts & the basics of AWS. I enjoy teaching on Udemy as it allows me to leverage my knowledge and hands-on experience that I have built over the last 20 years…Yes, I've been working in the Cloud space since its very inception!*

**OUR SUCCESS IN NUMBERS**

* Over 200,000 students enrolled in our AWS courses
* 4.7 Star instructor ratings from over 25,000 reviews
* Our students pass the AWS exam with an average score of over 85%

**Money-back guarantee**

We are totally confident in the value of this course which comes with a 30-day unconditional money-back guarantee. Get **lifetime access**now - risk-free!

**Who this course is for:**

* Anyone keen to learn more about cloud computing
* Ideal for newbies to cloud computing
* Professionals keen to explore cloud computing services
* Anyone interested in understanding Amazon Web Services (AWS)
* Aspiring developers who want to build applications on AWS
* Students keen to learn the fundamental concepts of cloud computing