Course Title: Introduction to Cloud Computing (40 hours)

Week 1: Introduction to Cloud Computing (10 hours)

- ➢ What is Cloud Computing?
- ➢ Benefits of Cloud Computing
- ➢ Cloud Service Models: IaaS, PaaS, SaaS
- ➢ Cloud Deployment Models: Public, Private, Hybrid
- ➢ Cloud Providers: AWS, Azure, Google Cloud, etc.
- ➢ Hands-on: Setting up a cloud account and navigating the console

Week 2: Infrastructure as a Service (IaaS) (10 hours)

- ➢ Virtual Machines
- ➢ Networking in the cloud
- ➢ Storage in the cloud
- ➢ Hands-on: Creating and managing virtual machines, setting up network configurations, and managing storage in the cloud

Week 3: Platform as a Service (PaaS) (10 hours)

- ➢ What is PaaS?
- ➢ Benefits of PaaS
- ➢ Types of PaaS offerings
- ➢ Hands-on: Deploying and managing applications on a PaaS platform

Week 4: Software as a Service (SaaS) and Cloud Security (10 hours)

- ➢ What is SaaS?
- ➢ Benefits of SaaS
- ➢ Types of SaaS offerings
- ➢ Cloud security: Identity and Access Management, Data Encryption, Compliance
- ➢ Hands-on: Exploring SaaS offerings and implementing security measures in the cloud

Assessment:

Quizzes at the end of each week

Final project: Deploy an application in the cloud using the concepts learned in the course.

Note: This syllabus is only a suggestion and can be adjusted based on the level of the students and their prior knowledge of cloud computing.