Step into the future of technology with our 3-Month Cloud Computing . This program is tailored for beginners and professionals looking to gain expertise in cloud technologies, focusing on core concepts, hands-on implementation, and industry-relevant projects. Learn to design, deploy, and manage cloud-based solutions to meet modern business demands.

Month 1: Fundamentals of Cloud Computing

Week 1: Introduction to Cloud Computing

- What is Cloud Computing?
- Cloud Service Models: IaaS, PaaS, SaaS
- Cloud Deployment Models: Public, Private, Hybrid, Community
- Benefits and Challenges of Cloud Adoption
- Hands-on Activities:
- Explore Cloud Platforms (AWS Free Tier, Azure, Google Cloud).
- Create and Manage Your First Virtual Machine.

Week 2: Core Cloud Services

- Compute Services: EC2, Azure Virtual Machines, Google Compute Engine
- Storage Services: S3, Blob Storage, Google Cloud Storage
- Networking in Cloud: VPC, Load Balancers, and Firewalls
- Hands-on Projects:
- Deploy a Simple Web Application Using a Cloud Server.

Week 3: Introduction to Databases in the Cloud

- Managed Databases: RDS, Azure SQL Database, Cloud SQL
- NoSQL Databases: DynamoDB, CosmosDB, Firestore
- Hands-on Projects:
- Set Up a Cloud Database and Connect It to a Front-End Application.

Week 4: Security and Compliance

- Shared Responsibility Model
- Identity and Access Management (IAM)
- Data Security in the Cloud (Encryption, Backup Strategies)
- Hands-on Projects:
- Implement IAM Policies and Secure Access to Your Cloud Resources.

Month 2: Advanced Cloud Concepts

Week 1: Automation and Scalability

- Introduction to Cloud Automation Tools (CloudFormation, Terraform)
- Autoscaling and Load Balancing Concepts
- Hands-on Projects:
- Create an Auto-Scaling Group for a Web Application.

Week 2: Serverless Computing

- What is Serverless Computing?
- Services: AWS Lambda, Azure Functions, Google Cloud Functions
- Real-Life Applications of Serverless Architectures
- Hands-on Projects:
- Build a Serverless Function to Process Uploaded Images.

Week 3: Monitoring and Optimization

- Monitoring Tools: CloudWatch, Azure Monitor, Google Cloud Operations
- Cost Management in the Cloud
- Performance Optimization Techniques
- Hands-on Projects:
- Monitor Cloud Resources and Optimize for Cost and Performance.

Week 4: Containers and Microservices

- Introduction to Containers and Docker
- Orchestrating Containers with Kubernetes
- Use Cases for Microservices in Cloud Environments
- Hands-on Projects:
- Deploy a Containerized Application Using Kubernetes.

Month 3: Capstone Project and Career Preparation

Week 1: Real-World Cloud Applications

- Cloud-Native Application Development
- Integration of Multiple Cloud Services
- Case Studies: Netflix, Dropbox, Airbnb Cloud Architectures
- Hands-on Projects:
- Design a Multi-Tier Application Using Cloud Services.

Week 2: Cloud Deployment and DevOps

- CI/CD Pipelines for Cloud-Based Applications
- Infrastructure as Code (IaC) Principles
- Hands-on Projects:
- Deploy an Application Using CI/CD on a Cloud Platform.

Week 3: Capstone Project

- Planning a Cloud Solution for a Real-World Scenario:
- Examples: E-commerce Platform, Healthcare Solution, Learning Management System
- Building, Testing, and Deploying the Project
- Documenting and Presenting the Solution

Week 4: Industry Readiness

- Building a Portfolio of Cloud Projects

- Certifications Overview (AWS, Azure, Google Cloud Certifications)
- Mock Interviews and Career Counseling

Key Features of the Program

- Hands-On Learning: Weekly projects to build real-world skills.
- Cloud Diversity: Exposure to AWS, Azure, and Google Cloud.
- Industry-Relevant Projects: Capstone projects based on real-world problems.
- Career Support: Resume building, mock interviews, and certification guidance.

Join Today to master cloud technologies and take your career to the next level!