

## Course Details :

### Fundamentals of Cloud Computing

- Introduction to Cloud computing.
- Cloud Environment Architecture
- Cloud Computing Models.

### Infrastructure & Networking

- Introduction to AWS.
- AWS Global Infrastructure
- Introduction to Network Switches & Virtual Private Cloud
- VPC's & Subnets
- Internet gateways, VPC peering & NAT gateways
- IP addressing in AWS.
- Understanding AWS security groups
- Launching our first EC2 instance
- EC2 instance type & pricing Models

### Storage

- Introduction to Block & object storage mechanism
- Introduction to Elastic Block Storage – EBS
- EBS Snapshots
- Instance Store Volumes
- Introduction to Simple Storage Service (S3)
- Features of S3

### Elastic Load Balancers

- Understanding High Availability Configuration
- ELB Configuration

## Elasticity

- **Auto Scaling**

## Identity and Access Management

- **Understanding the IAM policies**
- **IAM User, IAM Policy and IAM Role**

## Relational databases

- **Introduction to relational databases**
- **Creating our first database structure in MySQL**
- **Getting started with DynamoDB**

## Domain Name System

- **Introduction to DNS**
- **Understanding DNS record**
- **Introduction to Route53**

## AWS Lambda and API

- **Getting started with AWS Lambda.**
- **Introduction to API**
- **Understanding working of API**
- **Building our API with API gateway**

## Building Scalable Applications

- **Introduction to Messages Brokers**
- **Understanding SQS**
- **Understanding Simple Notification Service (SNS)**

## The DevOps Section

### Monitoring

- **Understanding CloudWatch**
- **Auditing AWS environmental with CloudTrail**