WHAT YOU WILL LEARN

After this course, you will get fundamentals ideas, concept and real-life uses of DevOps tools, concepts. You will also cope with the DevOps culture and mindset.

01

Overview of DevOps

● Why DevOps? ● What is DevOps? ● DevOps Market Trends ● DevOps Engineer Skills ● DevOps Delivery Pipeline ● DevOps Ecosystem

02

Version Control with Git

● What is version control? ● What is Git? ● Why Git for your organization? ● Install Git ● Common commands in Git ● Working with Remote Repositories ● Branching and Merging in Github ● Git workflows

03

AWS DevOps and Working with it

● What is AWS? ● AWS Brief introduction and EC2 (server) introduction and launch ● AWS Security and how to host a domain. ● AWS DevOps tools introduction ● AWS CI/CD Pipeline Deployment Automation with the necessary tools

04

Jenkins Integration

● Branching and Merging in Git ● What is Jenkins? ● What is CI? ● Why CI is Required? ● Introduction to Jenkins (With Architecture) ● Why CD is required? ● How to create and run CI/CD Pipeline? ● Jenkins Management ● Adding a slave node to Jenkins ● Pipeline as a Code

05

Continuous Integration using Jenkins

● Jenkins Management ● Adding a slave node to Jenkins ● Building Delivery Pipeline ● Pipeline as a Code

06

Containerization with Docker: Ecosystem and Networking

● Introduction to Docker ● Introduction to Dockerfile and images ● Introduction to Dockerhub and containerization ● Running Hello World in Docker ● Docker Compose ● Managing Containers ● Running Containers ● Introduction to Docker Networking ● Docker Container Networking

07

Configuration Management with Ansible

● What is Ansible ? ● Introduction to Ansible ● Ansible Installation ● Ansible Hosts ● Configuring Ansible Roles ● Write Playbooks

08

Configuration Management with Ansible

● Introduction to Ansible ● Ansible Installation ● Configuring Ansible Roles ● Write Playbooks

09

Containerization using Kubernetes

● Introduction to Kubernetes ● Revisiting Kubernetes Cluster Architecture ● Basic and Installation of Kubernetes ● Creating a Service in Kubernetes ● Installing the Kubernetes Dashboard ● Some more stuffs in Kubernetes

10

Private Cloud Introduction of OpenStack

● Introduction to OpenStack ● Why it's important for large scale companies ● How to install and configure the OpenStack

11

Monitoring

● Zabbix ● Grafana ● CloudWatch

12

Automated cloud infrastructure management(IaC service)

● CloudFormation ● Terraform - Basic and Introduction