

Course Durations: 30 Hours

Course Mode: Online/Offline

## About Company:

EduNextgen extended arm of Product Innovation Academy is a growing entity in education and career transformation, specializing in today's most in-demand skills. A platform with blended learning programs supported by in-trend technology platforms for learning. Engaging organizations for learning development objectives.

Training courses are designed and updated by renowned industry experts. Our blended learning approach combines online classes, instructor-led live virtual classrooms and virtual teaching assistance.

## About The Course:

The course DevOps Advance Certification is designed for deep understand about the DevOps and its Tools. Present age software develop management is refereeing DevOps and this technology will use for other managements as well. DevOps is one of the best methodology for move the career and get better position and salary in the market.

This course will help you to master the complete DevOps, also it helps you gain an in-depth knowledge of concepts such as About DevOps, Jira, GitHub, Jenkins, Nexus, Chef, Docker, Ansible etc. The course is bundled with Industry Grade Use Case, Quiz, Assignments and Hands-on.

## Participants will get the Access to:

- Cover DevOps Components
- Hands on Experience
- Industry Grade Use Cases
- Step by Step DevOps Tools Setup
- Live Support (24x7)

## Why This Course:

- LMS Access
- Cloud Lab
- 50+ Assignments
- 100+ Quizzes
- Live Support via Mail, Call and Screen Sharing
- Course Completion Certificate

## Batch Schedule:

Weekend: 3 Hours per day (Online), 4 Hours per day (Offline)

Weekday: 2 Hours per day (Online), 2 Hours per day (Offline)

## Course Curriculum

### **Module 1: Introduction to DevOps and its Necessities (3 Hours)**

This module will help you to understand what is DevOps, why it is so important, different skills and tools and its trends. Below topics are covered in this module:

- What is DevOps?
  - Why DevOps?
  - DevOps Culture and Mindset
  - Who can be a DevOps Engineer?
  - Breaking the Silos
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### **Module 2: Key Concepts of DevOps and DevOps Processes (3 Hours)**

This module will help you to understand the DevOps Ecosystem and Different Methodologies and some best Practices. Below topics are covered in this module:

- Agile, Waterfall and DevOps
  - DevOps Methodologies
  - DevOps Best Practices
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### **Module 3: Virtualization Tool: Vagrant (3 Hours)**

This module will help you to understand about Virtualization, setting up the Development Environment using Vagrant and some useful Vagrant Commands. Below topics are covered in this module:

- What is Vagrant?
  - Vagrant vs Docker
  - Vagrant Installation and Configuration
  - Important Vagrant Commands
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### **Module 4: Source Control Management Tools (3 Hours)**

This module will help you to understand Source Code Management using GIT, Version Control and its Operations. Below topics are covered in this module:

- Version Control Systems (VCS)
  - Distributed vs Centralized VCS/SCM
  - Introduction to GIT
  - GIT Installation and Configuration
  - Working Locally with GIT
  - Collaborating with GIT
  - Branching and Merging
  - How to undo changes in GIT?
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## Module 5: Understanding CI/CD and Introduction to Jenkins (3 Hours)

This module will help you to understand about Continuous Integration through Jenkin, why does CI needed, Creating First Jenkin Job and understating Jenkins Plugins. Below topics are covered in this module:

- Introduction to Continuous Integration
- Why and what is Jenkins?
- Installation and Configuration
- Jenkins Access Control and Security
- Your first Jenkins job
- Understanding Jenkins Plugins
- Job Scheduling, Polling and Post-commit hooks
- Understanding Build Pipeline View
- Setting up a Maven based Java build in Jenkins

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## Module 6: Configuration Management: Chef (3 Hours)

This module will help you to understand about Chef Fundamentals, Chef Environment, Chef Cookbooks and Knife Commands. Node Object and Search, Data-bags, Roles, Deploying Nodes in Production and using the Open Source Chef. Below topics are covered in this module:

- Configuration Management
- Introduction to Chef
- Chef Server
- Chef Workstation
- Bootstrapping Chef nodes
- Working with Knife
- Recipes, Cookbooks and Resources
- Writing your first Chef Recipe
- Working with Run List
- Important Chef Resources
- OHA! and Node Object
- Chef Attributes
- Chef Data Bags

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## Module 7: Containerization using Docker (3 Hours)

This module will help you to understand about Containers, Difference between VM and Container, Docker Fundamentals, Image Distribution, Docker Containers. Networking Concepts in Docker, Using Docker Volume and Creation of a Dockerfile. Below topics are covered in this module:

- Why and what is Docker?
- Docker vs VMs
- Docker Installation
- Docker Architecture
- Images and Containers

- Docker Commands
  - Docker Networking
  - Docker Volumes
  - Understanding Docker file
  - Introduction to Docker Clusters
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## Module 8: Continuous Monitoring (3 Hours)

This module will help you to understand Monitoring through Nagios of entire IT Infrastructure to ensure for working properly of Systems, Applications, Services, and Business Processes. Below topics are covered in this module:

- Making a case for Monitoring
  - Introduction of Nagios
  - Nagios Setup
  - Commands and Notifications
  - Nagios Plugins
  - Configuring Nagios to Monitor Webserver
  - Load Balancer
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## Module 9: Puppet (3 Hours)

This module will help you to understand what is Puppet, Puppet infrastructure, Puppet Run Cycle, Puppet Language and Organizing a Puppet Environment. Below topics are covered in this module:

- Introduction to Puppet
  - Puppet Architecture
  - Basic Terminologies
  - Puppet Language
  - Puppet Modules
  - Node Classification
  - Puppet Environment
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## Module 10: JIRA (3 Hours)

This module will help you to track the issues using JIRA, why to use JIRA, Configuring JIRA, and managing JIRA Instance. Below topics are covered in this module:

- Create a New JIRA Project
  - Create a New Issue in JIRA
  - Project Components and Versions
  - Import Issues into JIRA
  - Understand Issue in JIRA
  - Operate and Work with Issues
  - Link Issues to Other Resources
  - Manage and Configure Screens in JIRA
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- Create New Screens and Fields
- Controlling Field Behaviors
- Apply Field Configuration to Specific Issue Types and Projects
- Workflow Steps and Transitions
- Manage the User and Group Membership
- Connect JIRA to LDAP
- Set up mail servers, notification e-mails, as well as processing e-mails from users
- Search data in JIRA with basic and advanced (JQL) search options using filters, dashboards, and gadgets