



**Transforming Development
and Operations**

DEVOPS

Your Path to Mastery Begins Here!



www.sevenmentor.com

DEVOPS

Course Mission

Our DevOps course is designed to equip participants with the knowledge and skills essential for implementing and optimizing DevOps practices in modern software development environments. With a focus on automation, collaboration, and continuous improvement, our mission is to empower individuals to bridge the gap between development and operations, fostering agility, efficiency, and innovation within organizations.

DEVOPS STATISTICS:

- Duration: 10 weeks (full-time)
 - Instructor-led sessions: 40 hours
 - Hands-on labs and projects: 30 hours
 - Certification preparation: DevOps Engineer Expert
 - Prerequisites: Basic understanding of software development and system administration concepts
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Journey to Become an **DEVOPS ENGINEER:**



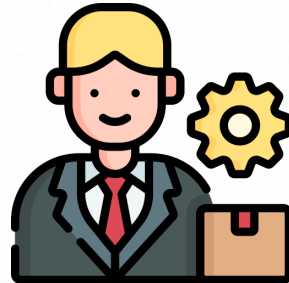
Embark on an enriching journey towards becoming a proficient DevOps engineer, starting with fundamental principles and progressing to advanced techniques. Throughout the course, you'll learn to leverage automation tools, implement continuous integration/continuous deployment (CI/CD) pipelines, and orchestrate containerized applications, gaining the skills needed to streamline software delivery and enhance collaboration between development and operations teams.

Roles after Training Course:

Upon completing the DevOps Training, you'll be qualified for roles such as:



DevOps Engineer



Release Manager



Automation Engineer



Site Reliability Engineer (SRE)



Cloud DevOps Engineer

How to Start a Career in DevOps:

1. **Understand DevOps Principles:** Familiarize yourself with the core principles of DevOps, including automation, collaboration, and continuous integration/continuous deployment (CI/CD).
2. **Learn Essential Tools:** Gain proficiency in popular DevOps tools such as Git, Jenkins, Docker, Kubernetes, and Ansible through online courses, tutorials, and hands-on practice.
3. **Develop Programming Skills:** Enhance your programming skills in languages like Python, Ruby, or Shell scripting to automate processes and build infrastructure as code.

4. **Gain Hands-on Experience:** Participate in real-world projects, internships, or open-source contributions to gain practical experience in implementing DevOps practices and working with relevant tools.
5. **Earn Certifications:** Pursue DevOps certifications such as the DevOps Engineer Expert to validate your expertise and demonstrate your commitment to continuous learning and professional development.
6. **Network and Collaborate:** Engage with the DevOps community by attending meetups, conferences, and online forums to network with professionals, share knowledge, and stay updated on industry trends and best practices.
7. **Stay Curious and Adaptive:** DevOps is an ever-evolving field, so stay curious, keep learning new tools and technologies, and be adaptive to changes in the industry to excel in your DevOps career.

1. Introduction to DevOps

- What is DevOps
- Why DevOps
- SDLC, waterfall, Agile models
- History of DevOps?
- Future of DevOps
- DevOps Goals
- Important terminology
- DevOps perspective
- DevOps and Agile
- Overview DevOps Tools
- Configuration management
- DevOps Prerequisites
- What is CI/CD

2. Application Server Implementation

- Need for application and web server
- Deploy Tomcat Server in different environments
- Setup configure Tomcat with Apache.

3. IDE (VSCode)

- Introduction to VS Code Installation
- Interface and workspace overview
- Install VSCode in Windows and Linux
- Extension and settings
- VSCode shortcut keys
- VSCode and git integration
- VSCode Terminal
- VSCode for developers

4. Version Control System (GIT)

- What is Version Control System?
- Type of Version Control System?
- What is Git?
- Importance of git
- Git Installation with Different environments
- Commands And Operations In Git with GitHub
- (Initialize, Status, Add, Commit, Clone, Pull, Push, Difference, Reset, Log, Show, Tag, Stash, Remove)
- Advanced Git operations (Branching, Merging, Rebasing, Fork Operation)
- Merge vs Rebase, Conflict resolving, deleting remote repositories.
- Git integration with Eclipse, VSCode.

5. Maven

- Introduction to maven
- Maven compare with ant and other tools
- Maven setup in multiple environments
- Maven lifecycle
- Maven repository structure
- Real-time maven settings for the project
- Maven structure coding and implementation with Eclipse

6. Ansible

- Why need configuration management?
- Introduction to tools like ansible, chef, puppet
- What is Ansible?
- How Ansible Works?
- Ansible setup and configuration
- Ansible Inventory Introduction
- Ansible ad-hoc commands
- Managing Ansible Configuration file
- Creating playbooks with structures and conditions
- Managing Ansible Roles
- Real-time servers management
- Ansible vault to protect ansible playbooks
- Troubleshoot Playbooks

7. Docker

- What is Containerization?
- What is Docker?
- Docker setup in multiple environments
- Docker Images
- Running web app in docker container
- Docker file creation and deployment
- Working with Docker hub
- Docker ad-hoc commands like push, pull, etc.
- Dockerfile creation and management
- Create docker image, share with others
- Create Your Own Private Docker Registry onLinux Server

- Manage Docker Volumes
- What is Docker Compose?
Manage containers using Docker Compose files

8. Container Orchestration (Docker Swarm & Kubernetes)

- Container Orchestration
- What is Container Orchestration?
- What is Docker Swarm?
- Working with Docker Swarm Using Ec2 Instance
- Docker Swarm Lab Setup
- Comparison Docker Swarm and Kubernetes
- Introduction of Kubernetes
- Installing Kubernetes Cluster
- Manage Kubernetes Master and Nodes
- What is Pod?
- Managing pod network with Example
- Manage scaling, Label & Selectors
- Replication Controller
- Replica Set
- Deployment
- Resource Quota and horizontal Scaling
- Volume management

9. Jenkins

- Jenkins – Continuous Integration
- Introduction to Jenkins
- Installation and configuration of Jenkins
- Jenkins users and Roles Management
- Jobs in Jenkins
- Jenkin node setup and configuration
- Jenkins integration with GIT (SCM)
- Jenkins Integration with Docker, ansible
- AutoDeployment with Jenkins using git,
- maven and Tomcat server

10. Terraform

- Understand infrastructure as code (IaC) concepts
- Understand Terraform's purpose (vs other IaC)
- Understand Terraform basics
- Introduction to terraform
- Infrastructure Automation
- Install Terraform
- Providers
- Resources
- Basic Syntax
- Terraform Plan, show, Apply, Destroy
- Exploring Terraform Registry
- Terraform Console and Output
- Terraform Variables
- Breaking Out Our Variables and Outputs
- Manage AWS infrastructure using Terraform

11. Monitoring Tools

- Introduction to Nagios XI
- Installation and setup of Nagios
- Adding nodes to Nagios master
- Monitor Windows Servers
- Monitor Linux Servers
- Monitor EC2 Instances
- Monitoring different metrics in Nagios.

12. Grafana and Prometheus

- Download Prometheus and node_exporter
- Install Prometheus node_exporter
- Install and configure Prometheus
- Configure Prometheus for Grafana
- Check Prometheus metrics in Grafana Explore view
- Start building dashboards

13. DevOps Projects

- Project 1. Simple DevOps Project for CI/CD using Jenkins
- Project 2: CI/CD Pipeline using git, Jenkins, Ansible and Docker
- Project 3: AWS Infrastructure Management using Terraform

Your Success Is Our Priority:

Every student at **SevenMentor** gets personalized guidance, Mentorship, and ample opportunities to address individual questions and concerns. All our sessions are designed to be engaging, interactive, and tailored to your learning pace, ensuring you grasp each concept with clarity.



Atul J. Kamble

Cloud Computing, DevOps Trainer
(SevenMentor & Training Pvt. Ltd.)

Atul J. Kamble is currently working as a Cloud Computing, DevOps Trainer at Sevenmentor, Pune. Atul has been training for AWS, Azure, DevOps, Linux since 2016. Atul has working experience with MIT-World Peace University & Packt Publications, UK. He is AWS, Azure Certified in Cloud Computing. He received Master of Technology (M. Tech.) in Information Technology from Walchand College of Engineering, Sangli, India in 2018 and Bachelor of Engineering (B. E.) in Computer Engineering from Government College of Engineering and Research, Pune, India in 2016. His area of interests are Cloud Computing, Big Data, DevOps, Open-Source Technologies, Cloud Infrastructure Solutions & Security.



Amir Patel

Cloud Computing, DevOps Trainer
(SevenMentor & Training Pvt. Ltd.)

Amir Patel is currently working as a Cloud Computing, DevOps Trainer at Sevenmentor, Pune. Amir has been training for AWS, DevOps, Linux since 2009. Amir has working experience with various organisations like Sanjay Ghodawat institute/Vyomlabs/koening solutions. He received Master of Computer Application (M.C.A) in Management from Rajashri college of Engineering, Pune in 2015 and BCA Arts and commerce college Ashta, Sangli, India in 2013. His area of interests are Cloud Computing, DevOps, Open-Source Technologies, Cloud Infrastructure Solutions.



Abhijeet Dahatonde

Senior Technical Trainer
(SevenMentor & Training Pvt. Ltd.)

Abhijeet is a graduate in Information Technology Engineering[BE.IT], Post graduate in IT [MBA-IT]and also Cyber law certified from symbiosis University, International Certified in Cyber Security, Linux Administrator, Windows Administrator, Cisco, CompTIA Global Certifications.

Being a Cyber Security Researcher, Forensic Researcher and Ethical Hacking Expert, Abhijeet has revealed numerous critical vulnerabilities, bugs, loop holes, etc on websites and networks of major corporate and institutions. Currently members of various underground hacking groups, security researchers and communities worldwide. His fanaticism for Security, Sys Administration, Programming and Cloud made him expert in the security,server administration,cloud,DevOps domain.

THINGS THAT SET US APART FROM THE REST:

SevenMentor prepares you well so that you can embark on a rewarding career in Devops through our training.



Hands-On Projects: Gain practical experience by working on real-world projects, building a robust portfolio that will impress potential employers.



Flexibility: Our flexible schedule options allow you to learn at your own pace, making it perfect for both beginners and experienced developers looking to upskill.

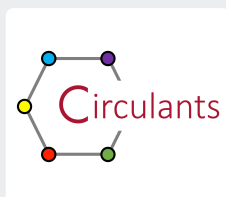
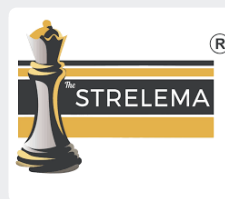


Career Support: We're dedicated to your success! Benefit from career guidance, resume building, interview prep, and job placement



Community: Join a vibrant community of like-minded learners, where you can collaborate, share ideas, and network with peers.

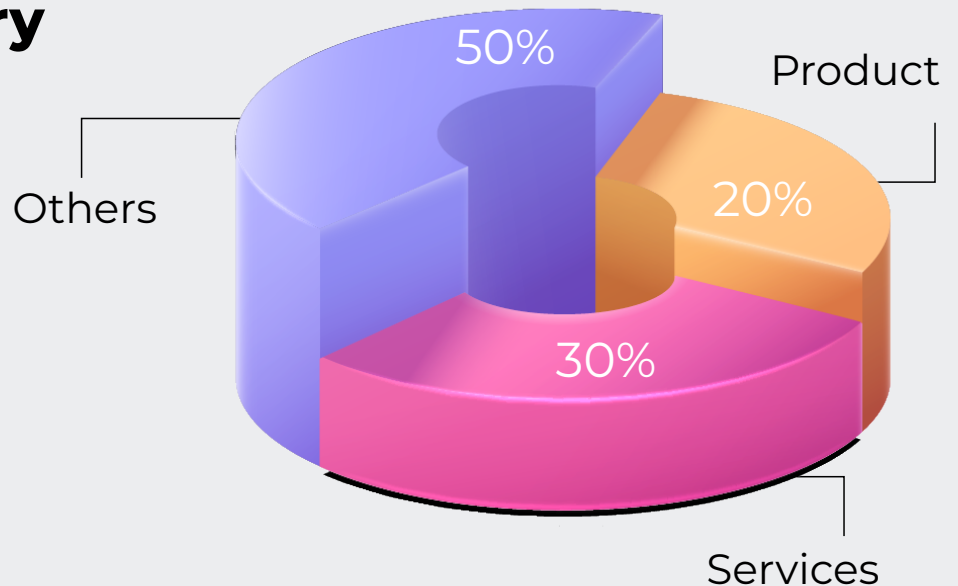
Our Students are at reputed Tech Companies



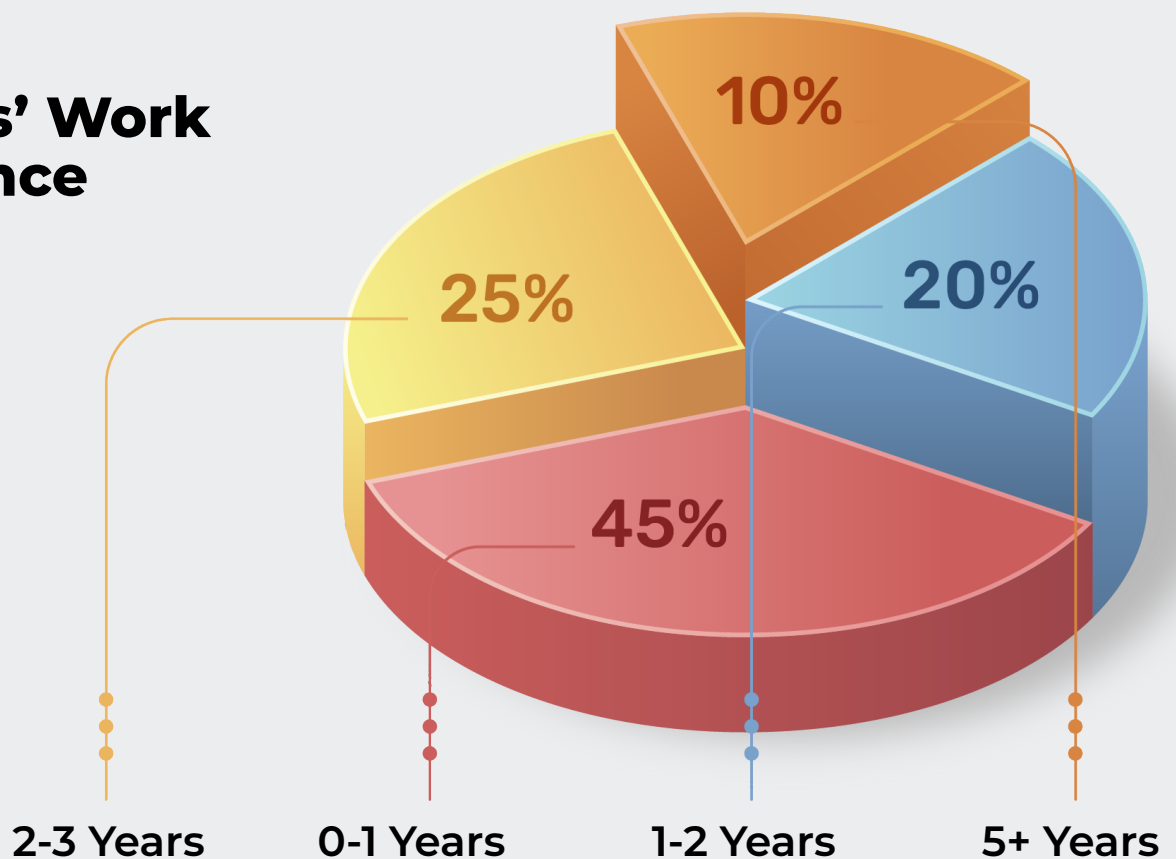
Success is around the corner!

Consider the potential earnings and opportunities that a career in Devops can offer. With Devops you'll be well-positioned to secure a job that provides you with a stable and potentially prosperous future.

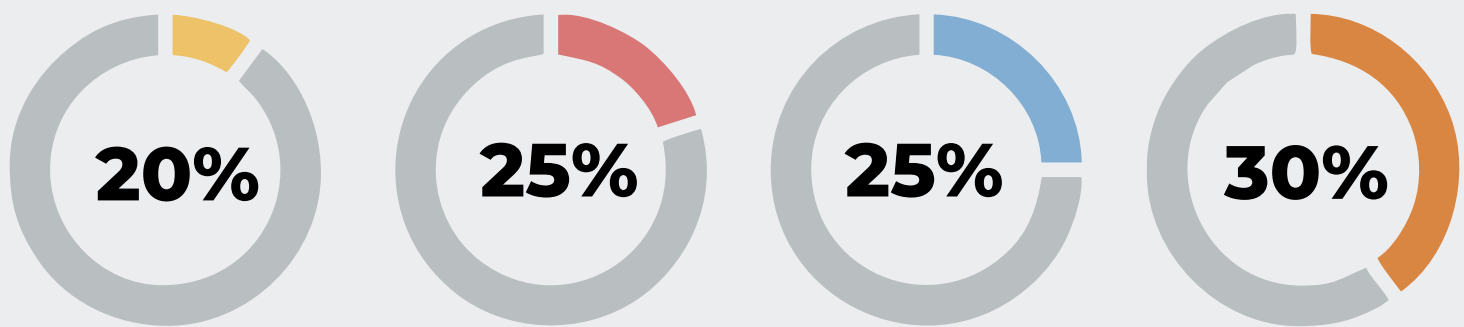
Learners' Industry Background



Learners' Work Experience



Learners' Expertise



Begin Your Journey Towards Better Future:

The global Devops vacancies will grow by 55% and generate 4 million new jobs by 2030.

The global vacancies for Azure will grow by 55% and generate 4 million new jobs by 2030.

Affordable Training without Compromise:

We understand that pursuing your dreams in Devops shouldn't be a financial burden. That's why we've made afford ability a cornerstone of our Devops. We believe that quality education should be accessible to everyone, and we've structured our program to reflect this commitment. Our Devops takes you on an exciting journey but at a substantially low price.

How to become a great Devops ?

- Enroll at **SevenMentor Institute**
- Get hands-on training from **experienced teachers**
- Receive Industry-recognized **Devops Certification**
- Work for leading **MNCs** through our **on-campus interviews**

Success is Just a Call Away!

So if you are ready to code your way to success?
Enroll now at SevenMentor and unlock your potential
as a Azure. Our counsellors are a call away and they
will be more than happy to talk with you. Anyday,
Everyday, we are there for you!

Request For Call Back



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