



Haridwar Centre

National Institute of Electronics and Information Technology

(An ISO 9001:2015 certified Organization)

Ministry of Electronics and Information Technology

Government of India

Online Course Prospectus

DevOps Engineering with AWS & Docker

Course Description

The objective of this course is to enable students to enhance their knowledge in modern software development and IT operations using DevOps practices. The course focuses on automation, continuous integration, continuous delivery, cloud computing, and containerization technologies. Students will gain hands-on experience with tools like Git, Docker, Jenkins, Kubernetes, and AWS to build scalable and efficient systems. This course is best suited for individuals who want to build a career as a DevOps Engineer, Cloud Engineer, or Site Reliability Engineer (SRE).

[Click
Here to
Register](#)

OR

Scan QR Code



Who can attend?

Anyone who is interested to build their career in DevOps, Cloud Computing, or Software Deployment.

- Beginners
- Students (Engineering / IT / CS)
- Working professionals (Developers / Sys Admins)
- Anyone interested in automation & cloud

Course Content for DevOps

Module No.	Module Name	Topics Covered
Module 1	Introduction to DevOps	<ul style="list-style-type: none">• Introduction to DevOps & SDLC• Traditional vs DevOps model• DevOps lifecycle• Roles & responsibilities
Module 2	Linux Fundamentals	<ul style="list-style-type: none">• Linux basics• File system• Commands• User & permission management• Package management• Shell scripting
Module 3	Version Control (Git)	<ul style="list-style-type: none">• Git & GitHub• Repository creation• Branching & merging• Pull requests• Collaboration workflows
Module 4	Continuous Integration (Jenkins)	<ul style="list-style-type: none">• CI/CD concepts• Jenkins installation• Pipeline creation• Git integration• Automated build & testing
Module 5	Docker (Containerization)	<ul style="list-style-type: none">• Docker architecture• Images & containers• Dockerfile• Docker Compose• Networking & volumes
Module 6	Kubernetes (Orchestration)	<ul style="list-style-type: none">• Kubernetes basics• Pods• Deployments• Services

		<ul style="list-style-type: none"> • Scaling • ConfigMaps & Secrets
Module 7	Cloud Computing (AWS)	<ul style="list-style-type: none"> • Cloud concepts • AWS services • EC2 • S3 • IAM • VPC basics
Module 8	Configuration Management	<ul style="list-style-type: none"> • Ansible basics • Playbooks • Roles • Automation • Server provisioning
Module 9	Monitoring & Logging	<ul style="list-style-type: none"> • Monitoring tools • Prometheus • Grafana • Logging basics • Alerts & dashboards
Module 10	CI/CD Project	<ul style="list-style-type: none"> • End-to-end pipeline (Git → Jenkins → Docker → Kubernetes → AWS) • Real-world deployment
Exercise	Practical Implementation	<ul style="list-style-type: none"> • Designing and deploying DevOps pipeline for real-world applications

Prerequisite

- ❖ Candidate must possess knowledge of computer.
- ❖ Basic understanding of programming (optional but helpful)

Duration

- ❖ 8 Weeks

The internship/industrial training programme includes about 80 Hrs of intensive interactive instructor-led online sessions and about 120 Hrs of practical assignments that student can perform at their end. In some training programmes, the facility of virtual lab can also be extended subject to availability.

Certificate

E-Certificate will be issued to each participant after completion of the training. Participant needs to maintain minimum 75% attendance during the online classes and is required to score minimum 50% marks in the online test in order to successfully complete the course.

Minimum Requirements

- ❖ Candidate must have latest computer/laptop with preferably 8 GB RAM or higher.
- ❖ Internet connection
- ❖ Software/Tools:
 - Git
 - Docker
 - Jenkins
 - Kubernetes (Minikube / K8s cluster)
 - AWS Free Tier AccountGit

How to Apply

Interested candidates may apply online on the link <https://nielit.gov.in/haridwar/content/online-courses> after submitting the Course Fee in following account:

Name	:	NIELIT Haridwar
Account Number	:	44306909591
IFSC Code	:	SBIN0012852
Bank Name	:	State Bank of India
Branch	:	Shivalik Nagar, Haridwar

NOTE: Copy of transaction slip is required to be uploaded at the time of filling online form. Candidate may keep a copy of the same for future reference.

Terms and Conditions

1. In case, any registered candidate could not attend the online session due to technical issue at their side there will not be any refund of the course fee and the sessions will not be repeated.
2. In case, the online course is cancelled/postponed due to some technical issue at NIELIT side and new date is not convenient to the candidate, our liability is limited to the refund of the course fee and NIELIT shall not be responsible for any consequential damages.

Course Coordinator

Mr. Kailash Chandra Joshi

Ph: 8171710289

[Email : haridwar@nielit.gov.in](mailto:haridwar@nielit.gov.in)

Faculty Profile

Mr. Rajat Singh Chandrol, B.Tech (CSE) having 4+ years of teaching experience



NIELIT Haridwar is the Regional Centre of NIELIT in the state of Uttarakhand and is situated in SIDCUL Haridwar. It is well known for the advanced training programmes in the areas of Future Skills such as **Cloud Computing, Machine Learning, Artificial Intelligence, Internet of Things, MATLAB, Big Data, Embedded Systems etc** in addition to the various **National Skill Qualification Framework (NSQF)** aligned long-term and short-term courses in Electronics & Information Technology. The Centre has **MOUs** with various prestigious institutions and Universities of Uttarakhand for academic collaboration, technical support, summer/industrial training and internships of the students. The Centre provides a conducive learning environment with the state-of-the-art infrastructure and expert faculties.

National Institute of Electronics and Information Technology

(An ISO 9001:2015 certified organization)

Ministry of Electronics & Information Technology,
Government of India

Scan QR Code to
join our Whatsapp Group



NIELIT Haridwar

2nd Floor, Government Polytechnic Building,
Plot No- 6C, Sector -11, Near Pentagon Mall,
SIDCUL, Haridwar, Uttarakhand- 249403

Office Nos: 01334-235617, 235054

Mobile: +91-9368349990 (Call & Whatsapp)

Email: haridwar@nielit.gov.in

Website: <https://www.nielit.gov.in/haridwar/index.php>

