

SMT. INDIRA GANDHI COLLEGE OF ENGINEERING, GHANSOLI - 400701 (Autonomous)

DEPARTMENT OF CSE(IOTCSBC)



Approved by AICTE, DTE, Government of Maharashtra and Affiliated to University of Mumbai (NAAC A Accredited)

Plot No. 1, Sector 8, Ghansoli, Navi Mumbai -400701, Maharashtra, India Tel: 8080949300/7738921077 website: www.sigce.edu.in

Activity Title	DevOps with Kubernetes
Date	20/09/2025 and 27/09/2025
Venue	Virtual mode
Resource	Mr. Salmon Joy
Person	
Faculty In	Prof. Aasha Kantekar
charge	
Audience	Final year students
Total	30
Participants	
	The primary goals of this hands-on workshop were to equip participants with the fundamental principles and practical skills necessary to implement a modern, automated application delivery pipeline using DevOps methodologies, Kubernetes for orchestration, and Git/GitHub for version control and collaboration.
	Specific objectives included:
	 Understanding the core concepts of DevOps and CI/CD (Continuous Integration/Continuous Deployment). Mastering the Git workflow and utilizing GitHub for team collaboration and repository management. Gaining proficiency in containerization fundamentals with Docker. Learning to deploy, manage, and scale applications using Kubernetes primitives. Implementing a fully automated CI/CD pipeline leveraging Git, containerization, and Kubernetes.
	Key Takeaways and Outcomes
	 Version Control: Participants successfully navigated advanced Git workflows and utilized GitHub for professional, collaborative code management. Infrastructure as Code (IaC): Attendees practiced defining application and Kubernetes infrastructure using declarative YAML files. Continuous Delivery: The workshop culminated in building a working CI/CD pipeline, demonstrating the ability to automate



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the entire software release process from code commit to running application in Kubernetes.

Hands-on Proficiency: High engagement in the hands-on sessions resulted in practical experience with core tools: git, docker, kubectl, and CI/CD pipeline configuration

Photos



