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| **Course Outcomes** | |
| CO1 | Understand different actions performed through Version control tools like Git. |
| CO2 | Experiment with building and automating test cases using Maven & Gradle |
| CO3 | Diagnose Continuous Integration and Continuous Testing and Continuous Deployment  using Jenkins |
| CO4 | Analyse the configuration management using Ansible |
| CO5 | Experiment to leverage Cloud-based DevOps tools using AWS |

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| **Lab** | **Program** | **CO** |
| 1. | Build a branching model to help your team understand the Git workflow for faster integration of work. | CO1 |
| 2. | Maven and Gradle environmental setup for java applications. | CO2 |
| 3. | Create Jenkins job and pipeline it from GitHub repo to run using build. | CO3 |
| 4. | Building a CI/CD Pipeline with Jenkins. | CO3 |
| 5. | Dockerizing Jenkins Pipeline. | CO3 |
| 6. | Deploy web app in AWS EC2 using Ansible. | CO4 |
| 7. | Deploy Angular/React/Java/Python or any other Application in Docker Container. | CO5 |
| 8. | Use Jenkins to set up a distributed pipeline that will compile and test a Maven project on two different slave nodes respectively. | CO3 |

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| **Software or Services Required** |
| * Git * Maven * Jenkins |

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| **Subject In-charge** | **Head of the Department** |