



Sub Committee for Curriculum Development **IT Infrastructure Management**

Course Name: Devops
(UG/PG): PG

Number of Credits: 2

Level: 4

Learning Objective(s):

To equip students with knowledge and skill about development and administrating the systems and services

Pedagogy:

1) Class discussion followed by practical

Pre-learning:

Basics of Development and Operating System

Course Outline:

S.No	Topic	Hours
1	Concepts - Scalability, Availability, Continuous Integration, Automation and Deployments	2
2	SysOps - AWS, Azure & Google Cloud	2
3	Intro to Web Services: APIs, REST, SOAP, JSON	3
4	Puppet for Configuration Management.	3
5	Jenkins for Automated Installation and Deployment.	3
6	GIT for SCM and Versioning	4
7	Containers - Dockers	3
8	Build Tools: Ant / Maven	3
9	Testing tools: Selenium / Arquillian / Fit	4
10	Jazz.net	3
	Total	30

Books Recommended:

- 1) Architecting High Performing, Scalable and Available Enterprise Web Applications By Shailesh Kumar Shivakumar
- 2) A Beginner's Tutorial for Understanding and Implementing ASP.NET Web API Rahul Rajat Singh
- 3) ASP.NET Web API 2: Building a REST Service from Start to Finish By Jamie Kurtz, Brian Wortman
- 4) Puppet 3 Beginner's Guide By John Arundel
- 5) Jenkins: The Definitive Guide by John Ferguson Smart
- 6) Jenkins Continuous Build System By Jesse Bowes
- 7) <https://git.wiki.kernel.org/index.php/GitDocumentation>-Git Documentations
- 8) Ant in Action BY Author: Steve Loughran, Erik Hatcher
- 9) Maven: The Definitive Guide Author: Sonatype Company
- 10) Jazz singer's handbook: the artistry and mastery of singing jazz By Michele Weir
- 11) Docker Cookbook by Sébastien Goasguen

Suggested Evaluation Methods:

- 1) Lab based Evaluations
- 2) Class Test
- 3) Class Assignments
- 4) Viva-Voce

Parallel/Similar courses the existing curriculum:

S.No	Name of the course	Institute where it was offered
	Not offered	-

Name of Member	Harshad Gune	Dr Rajashree Jain	Dr. Tejaswini Apte		
Designation	Dy. Director	Assoc.Prof	Asst.Prof		
Org. / Inst.	SICSR	SICSR	SICSR		
Signature					

Name of the Experts:

- 1) Dr. Prsenjit Sen
- 2) Dr.Ajey
- 3) Mr. Rohit Srivatsava
- 4) Mr. Sudhanva Joglekar
- 5) Dr.(Mrs) Rajashree Jain
- 6) Dr. (Mrs) Tejaswini Apte
- 7) Prof.Priti Kulkarni