



KONGU ENGINEERING COLLEGE
(Autonomous)
PERUNDURAI - 638060
INTERNAL QUALITY ASSURANCE CELL

Approval for Value Added Course (One-/ Two Credits)

CER No 99-100
ISO 9001:2015

Academic Year: 2021-2022 Even Semester

DEPARTMENT OF CSE

Date: 25-04-2022

1	Academic Year	: 2021-2022	Semester : Even	
2	Course Title	: DevOps Technologies	Credit(s): Two	
	Type of Course	: New Course		
3	• If "Already offered course"	: Course Code: <u>NIL</u> Version: <u>NIL</u>		
4	Course Coordinator(s)	1. Dr. N. Krishnamoorthy 2. Mr. T. Kumaravel		
5	Course offered by	: External experts		
6	Name and designation of external resource persons	Mr Hariharan Krishnamurthi Cloud Engineer at Coda, a Presidio Cloud Company		
7	Details about external organization	Global knowledge aims to transform Business Initiatives with Disruptive technologies and Innovative ideas. It is committed to accelerate the Development journey's on Multi Cloud, Digital transformation (AI/ML/Block chain/Analytics) and Infrastructure. We give organizations the insights to anticipate what customers want and act instantly to deliver on those demands. So they can achieve the goal of every modern business: staying one step ahead of a fast-changing world.		
8	Course fee for external experts	Max. number of students/Batch	Course fee / student	
	Rs 6000/-	30	200	
9	No. of days	No. of hours		
	Period			
	From	To	Lecture	Practical
	7	27-04-2022	31-05-2022	30
			07-06-2022	20
				50
10	Pre-requisites for offering the course	: Basic Operating System commands (Linux or Windows)		

2022

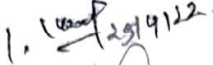
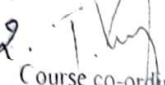
11		Course offered to	Programme	Branch	Year/Semester
			B E/B Tech	All Branches	III / VI
			Day 1	Jenkins overview_ Installation introduction	Jenkins dashboard_ Git
			Day 2	Installation of Jenkins and Jenkins Dashboard Access	
			Day 3	Git plugin install_ Integrate Jenkins with GitHub_ User management_ Role strategy plugin	
			Day 4	Git Plugin installation and Managing Repository using Git	
			Day 5	New project_ Freestyle project_ Jenkins pipeline	
			Day 6	Pipeline overview_ Jenkins file_ Create and run Jenkins pipeline	
			Day 7	Integration of Jenkins with GitHub.	
			Day 8	CI / CD Pipeline_ Stages_ Best practices_ CI / CD Pipeline KPI	
			Day 9	Creation of Users.	
			Day 10	Puppet overview_ Puppet architecture	
			Day 11	Managing the Roles and Folders using DevOps Technologies.	
			Day 12	Installing puppet_ Manifest file	
			Day 13	Create a New project. Create a Free style Project.	
12.	Course Main Contents	Day 14	Puppet with Git_ Version control_ Git repo_ Distributing puppet manifests		
		Day 15	Installation of Puppet.		
		Day 16	Applying changes automatically_ Puppet resources_ Files_ Packages		
		Day 17	Developing a Manifest file.		
		Day 18	Services_ Users and Cron resources_ Exec resource_ Variables, Expressions and Facts_ Arrays		
		Day 19	Integration with Git Repository.		
		Day 20	Hiera overview_ Need of Hiera		
		Day 21	Developing a Puppet Mainfest Files.		
		Day 22	Installing hiera_ Types of Hiera_ Querying Hiera_ Modules		
		Day 23	Installation of Puppet Resources and Creation of Variables and Arrays.		
		Day 24	Forge module_ Modules in Manifest_ Standard modules_ Writing your own Module		
		Day 25	Creating a Module.		
13.	Course Outcomes	The students are able to get the deep insight in the below areas: • Have knowledge about Jenkins Installation and configuration • Have basic knowledge of Puppet • Have knowledge about infrastructure management • Create a basic Configuration Management & Create a new project and manage it.			
14.	Course Assessment (Min. 2)	S. No.	Type		Max. Marks
		1	Multiple Choice Question		50 Marks
		2	Mini Project		50 Marks

Preamble
Unit

- | | |
|----|--|
| 15 | Verified that the content of this course is not offered to students partially/fully in regular curriculum of respective programme of the student.
Certify that the course content, credits and grade are approved in the BOS meeting or approved by internal BOS members and will be ratified in the next BOS meeting |
| 16 | Any other details |


(Signature of the HOD
after verification)

The above proposal may kindly be approved.

1.  29/9/22
2. 
Course co-ordinator(s)
1. Dr. N. KRISHNAMOORTHY
2. T. K. K. K. K. K.


HOD


Chief Coordinator/Academic

- Encl:
1. Copy of the syllabus of the course
2. Financial proposal from the external organization (if any)

Two credit Course
18VAC093- DevOps Technologies

Course Schedule

Day 1	Jenkins overview_ Installation_ Jenkins dashboard_ Git introduction
Day 2	Installation of Jenkins and Jenkins Dashboard Access
Day 3	Git plugin install_ Integrate Jenkins with GitHub_ User management_ Role strategy plugin
Day 4	Git Plugin installation and Managing Repository using Git
Day 5	New project_ Freestyle project_ Jenkins pipeline
Day 6	Pipeline overview_ Jenkins file_ Create and run Jenkins pipeline
Day 7	Integration of Jenkins with GitHub.
Day 8	CI / CD Pipeline_ Stages_ Best practices_ CI / CD Pipeline KPI
Day 9	Creation of Users.
Day 10	Puppet overview_ Puppet architecture
Day 11	Managing the Roles and Folders using DevOps Technologies.
Day 12	Installing puppet_ Manifest file
Day 13	Create a New project. Create a Free style Project.
Day 14	Puppet with Git_ Version control_ Git repo_ Distributing puppet manifests
Day 15	Installation of Puppet.
Day 16	Applying changes automatically_ Puppet resources_ Files_ Packages
Day 17	Developing a Manifest file_ Services_ Users and Cron resources_ Exec resource_ Variables, Expressions and Facts_ Arrays_ Integration with Git Repository.
Day 18	Hiera overview_ Need of Hiera
Day 19	Developing a Puppet Mainfest Files.
Day 20	Installing hiera_ Types of Hiera_ Querying Hiera_ Modules
Day 21	Installation of Puppet Resources and Creation of Variables and Arrays.
Day 22	Forge module_ Modules in Manifest_ Standard modules_ Writing your own Module
Day 23	Creating a Module.

Coordinator Sign

KONGU ENGINEERING COLLEGE, PERUNDURAI-638060
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Two Credits Course on DevOps Technologies – 18VAC093

Attendance Percentage

Year:2021-22 (Even)

Sem: VI

S.No	Roll No	Name of the Student	Year & Section	Total No. of Hours	Attended Hours	Attendance Percentage
1.	19MTR004	AKASH.G	III-A-MTS	50	20	40
2.	19MTR006	ARAVINDHAN.D	III-A-MTS	50	25	50
3.	19MTR028	JEYARAMAN.R	III-A-MTS	50	22	44
4.	19CSR061	HARSHINY A	III-B-CSE	50	45	90
5.	19CSR063	HEMALATHA P	III-B-CSE	50	45	90
6.	19CSR066	ISHWARYA S	III-B-CSE	50	46	92
7.	19CSR073	JEEVIKA P S	III-B-CSE	50	47	94
8.	19CSR080	KAVIBHARATHI.B	III-B-CSE	50	48	96
9.	19CSR087	KAVYAPRIYA J G	III-B-CSE	50	50	100
10.	19CSR088	KEERTHANA R	III-B-CSE	50	50	100
11.	19CSR090	KOUSALYA R V	III-B-CSE	50	50	100
12.	19CSR092	KOWSIKA C	III-B-CSE	50	45	90
13.	19CSR093	KRITHIKA THARANI A S	III-B-CSE	50	47	94
14.	19CSR096	MAAMATHI K	III-B-CSE	50	48	96
15.	19CSR098	MADHESAN G	III-B-CSE	50	46	92
16.	19CSR099	MADHUMITHA E	III-B-CSE	50	50	100
17.	19CSR105	MATHIARASI N	III-B-CSE	50	45	90
18.	19CSR106	MITHUN K V	III-B-CSE	50	44	88
19.	19CSR110	MONISHA A	III-B-CSE	50	48	96
20.	19CSR112	MUTHUPRIYANKA R	III-B-CSE	50	50	100
21.	19CSR114	NAISHAD M	III-B-CSE	50	40	80
22.	19EIR051	MURUGAN.S	III-B-E&I	50	21	42
23.	19EIR053	NANDHITHA.S	III-B-E&I	50	23	46
24.	19EIR065	RAVI VARMA.P	III-B-E&I	50	23	46
25.	19EIR077	SATHIYA SEELAN.L	III-B-E&I	50	20	40
26.	19EIR087	SRIDHAR.S	III-B-E&I	50	22	44
27.	19CSR133	PONMATHI K	III-C-CSE	50	40	80
28.	19CSR140	PRAVEEN B	III-C-CSE	50	42	84
29.	19CSR157	RICHARD JOYAL G	III-C-CSE	50	50	100
30.	19CSR169	SANDHIYA D	III-C-CSE	50	45	90

1. *[Signature]* 10/02/2022

2. *[Signature]*
Course Coordinators

1. *[Signature]*

2. *[Signature]* T. KUMARQUEL.

[Signature]
12/02/22
HOD/CSE

KONGU ENGINEERING COLLEGE, PERUNDURAI-638060
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Technologies – 18VAC093

S.No	Roll No	Name of the Student	Year & Section	Test Attendance
			III-A-MTS	ABSENT
1.	19MTR004	AKASH.G	III-A-MTS	ABSENT
2.	19MTR006	ARAVINDHAN.D	III-A-MTS	ABSENT
3.	19MTR028	JEYARAMAN.R	III-B-CSE	PRESENT
4.	19CSR061	HARSHINY A	III-B-CSE	PRESENT
5.	19CSR063	HEMALATHA P	III-B-CSE	PRESENT
6.	19CSR066	ISHWARYA S	III-B-CSE	PRESENT
7.	19CSR073	JEEVIKA P S	III-B-CSE	PRESENT
8.	19CSR080	KAVIBHARATHI.B	III-B-CSE	PRESENT
9.	19CSR087	KAVYAPRIYA J G	III-B-CSE	PRESENT
10.	19CSR088	KEERTHANA R	III-B-CSE	PRESENT
11.	19CSR090	KOUSALYA R V	III-B-CSE	PRESENT
12.	19CSR092	KOWSIKA C	III-B-CSE	PRESENT
13.	19CSR093	KRITHIKA THARANI A S	III-B-CSE	PRESENT
14.	19CSR096	MAAMATHI K	III-B-CSE	PRESENT
15.	19CSR098	MADHESAN G	III-B-CSE	PRESENT
16.	19CSR099	MADHUMITHA E	III-B-CSE	PRESENT
17.	19CSR105	MATHIARASI N	III-B-CSE	PRESENT
18.	19CSR106	MITHUN K V	III-B-CSE	PRESENT
19.	19CSR110	MONISHA A	III-B-CSE	PRESENT
20.	19CSR112	MUTHUPRIYANKA R	III-B-CSE	PRESENT
21.	19CSR114	NAISHAD M	III-B-CSE	PRESENT
22.	19EIR051	MURUGAN.S	III-B-E&I	ABSENT
23.	19EIR053	NANDHITHA.S	III-B-E&I	ABSENT
24.	19EIR065	RAVI VARMA.P	III-B-E&I	ABSENT
25.	19EIR077	SATHIYA SEELAN.L	III-B-E&I	ABSENT
26.	19EIR087	SRIDHAR.S	III-B-E&I	ABSENT
27.	19CSR133	PONMATHI K	III-C-CSE	PRESENT
28.	19CSR140	PRAVEEN B	III-C-CSE	PRESENT
29.	19CSR157	RICHARD JOYAL G	III-C-CSE	PRESENT
30.	19CSR169	SANDHIYA D	III-C-CSE	PRESENT

1. Conf 10/8/2022
2. T-Kay 8/22

Course Coordinators

Dr. N. K. Lakshmanamurthy
Mr. T. Komaraveel

HOD/CSE

KONGU ENGINEERING COLLEGE, PERUNDURAI-638060
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Two Credits Course on DevOps Technologies – 18VAC093

Assessment Marks

Year:2021-22 (Even)

Sem: VI

S.No	Roll No	Name of the Student	Year & Section	Test I (50)	Test2(50)	Total(100)
1.	19MTR004	AKASH.G	III-A-MTS	AB	AB	AB
2.	19MTR006	ARAVINDHAN.D	III-A-MTS	AB	AB	AB
3.	19MTR028	JEYARAMAN.R	III-A-MTS	AB	AB	AB
4.	19CSR061	HARSHINY A	III-B-CSE	44	40	84
5.	19CSR063	HEMALATHA P	III-B-CSE	46	40	86
6.	19CSR066	ISHWARYA S	III-B-CSE	47	40	87
7.	19CSR073	JEEVIKA P S	III-B-CSE	48	41	89
8.	19CSR080	KAVIBHARATHI.B	III-B-CSE	48	42	90
9.	19CSR087	KAVYAPRIYA J G	III-B-CSE	46	46	92
10.	19CSR088	KEERTHANA R	III-B-CSE	45	42	87
11.	19CSR090	KOUSALYA R V	III-B-CSE	47	42	89
12.	19CSR092	KOWSIKA C	III-B-CSE	47	45	92
13.	19CSR093	KRITHIKA THARANI A S	III-B-CSE	40	50	90
14.	19CSR096	MAAMATHI K	III-B-CSE	43	40	83
15.	19CSR098	MADHESAN G	III-B-CSE	46	45	91
16.	19CSR099	MADHUMITHA E	III-B-CSE	43	40	83
17.	19CSR105	MATHIARASI N	III-B-CSE	41	50	91
18.	19CSR106	MITHUN K V	III-B-CSE	41	49	90
19.	19CSR110	MONISHA A	III-B-CSE	42	48	90
20.	19CSR112	MUTHUPRIYANKA R	III-B-CSE	48	45	93
21.	19CSR114	NAISHAD M	III-B-CSE	39	41	80
22.	19EIR051	MURUGAN.S	III-B-E&I	AB	AB	AB
23.	19EIR053	NANDHITHA.S	III-B-E&I	AB	AB	AB
24.	19EIR065	RAVI VARMA.P	III-B-E&I	AB	AB	AB
25.	19EIR077	SATHIYA SEELAN.L	III-B-E&I	AB	AB	AB
26.	19EIR087	SRIDHAR.S	III-B-E&I	AB	AB	AB
27.	19CSR133	PONMATHI K	III-C-CSE	42	37	79
28.	19CSR140	PRAVEEN B	III-C-CSE	48	30	78
29.	19CSR157	RICHARD JOYAL G	III-C-CSE	48	45	93
30.	19CSR169	SANDHIYA D	III-C-CSE	46	35	81

1. *[Signature]*
10/10/2022

2. *[Signature]*
10/10/22

Course Coordinators

1. Dr. N. U. Lakshmi Amma

2. Mr. T. KUMARAVEL

[Signature]
12/10/22

HOD/CSE