SCTR's PUNE INSTITUTE OF COMPUTER TECHNOLOGY,PUNE

AY 2021-22

CURRICULAR PLANNING AND IMPLEMENTATION

NAAC 1.1.1

Table of Contents

SECTION 1

Syllabus

1.1 First Year Engineering

TABLE -1 First Engineering _Structure for Semester-I														
Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107001	Engineering Mathematics-I	03	--	01	30	70	25	--	--	125	03	--	01	04
107002/ 107009	Engineering Physics / Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
102003	Systems in Mechanical Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
111006	Workshop[α]	--	02	--	--	--	--	25	--	25	--	01	--	01
	Total	16	10	01	150	350	25	125	--	650	16	05	01	22
101007	Audit Course 1[&]	02	Environmental Studies-I											
Induction Program : 2 weeks at the beginning of semester-I and 1 week at the beginning of semester-II														
TABLE -2 First Engineering_ Structure for Semester-II														
Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107008	Engineering Mathematics-II	04	--	01	30	70	25	--	--	125	04	--	01	05
107002/ 107009	Engineering Physics/ Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
102012	Engineering Graphics [Ω]	01	02	01	--	50	25		--	75	01	01		02
110013	Project Based Learning[§]	--	04	--	--	--	25	50	--	75	--	02	--	02
	Total	15	12	02	120	330	75	125	--	650	15	05	02	22
101014	Audit Course 2[&]	02	Environmental Studies-II											
107015		--	Physical Education-Exercise and Field Activities											

Go to homepage 1

TABLE -1 First Engineering _Structure for Semester-I														
Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107001	Engineering Mathematics-I	03	--	01	30	70	25	--	--	125	03	--	01	04
107002/ 107009	Engineering Physics / Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
102003	Systems in Mechanical Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
111006	Workshop[α]	--	02	--	--	--	--	25	--	25	--	01	--	01
	Total	16	10	01	150	350	25	125	--	650	16	05	01	22
101007	Audit Course 1[&]	02	Environmental Studies-I											

Induction Program : 2 weeks at the beginning of semester-I and 1 week at the beginning of semester-II

TABLE -2 First Engineering_ Structure for Semester-II														
Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credits			
		Theory	Practical	Tutorial	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
107008	Engineering Mathematics-II	04	--	01	30	70	25	--	--	125	04	--	01	05
107002/ 107009	Engineering Physics/ Engineering Chemistry	04	02	--	30	70	--	25	--	125	04	01	--	05
103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	03	02	--	30	70	--	25	--	125	03	01	--	04
110005/ 101011	Programming and Problem Solving / Engineering Mechanics	03	02	--	30	70	--	25	--	125	03	01	--	04
102012	Engineering Graphics[Ω]	01	02	01	--	50	25		--	75	01	01		02
110013	Project Based Learning[§]	--	04	--	--	--	25	50	--	75	--	02	--	02
	Total	15	12	02	120	330	75	125	--	650	15	05	02	22
101014	Audit Course 2[&]	02	Environmental Studies-II											
107015		--	Physical Education-Exercise and Field Activities											

Go to homepage 1

1.2 Second Year Engineering

Savitribai Phule Pune University
Second Year of Computer Engineering (2019 Course) (With effect from Academic Year 2020-21)

Semester-III

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	Mid-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
210241	Discrete Mathematics	03	-	01	30	70	-	-	-	100	03	--	01	04
210242	Fundamentals of Data Structures	03	-	-	30	70	-	-	-	100	03	-	-	03
210243	Object Oriented Programming	03	-	-	30	70	-	-	-	100	03	-	-	03
210244	Computer Graphics	03	-	-	30	70	-	-	-	100	03	-	-	03
210245	Digital Electronics and Logic Design	03	-	-	30	70	-	-	-	100	03	-	-	03
210246	Humanity and Social Science	-	-	01	-	-	-	-	-	-	-	-	-	-
210247	Data Structures Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210248	OOP and Computer Graphics Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210249	Digital Electronics Lab	-	02	-	-	-	25	-	-	25	-	01	-	01
210250	Business Communication Skills Lab	-	02	-	-	-	25	-	-	25	-	01	-	01
210251	Audit Course 3	-	-	-	-	-	-	-	-	-	-	-	-	-
										Total Credit	15	06	01	22
	Total	15	12	02	150	350	100	100	-	700	-	-	-	-

Semester-IV

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	Mid-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
210252	Mathematics III	03	-	01	30	70	-	-	-	100	03	--	01	04
210253	Data Structures and Algorithms	03	-	-	30	70	-	-	-	100	03	-	-	03
210254	Software Engineering	03	-	-	30	70	-	-	-	100	03	-	-	03
210255	Microprocessor	03	-	-	30	70	-	-	-	100	03	-	-	03
210256	Principles of Programming Languages	03	-	-	30	70	-	-	-	100	03	-	-	03
210257	Data Structures and Algorithms Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210258	Microprocessor Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210259	Code of Conduct	-	-	01	-	-	-	-	-	-	-	-	-	-
210260	Project Based Learning	-	04	-	-	-	50	-	-	50	-	02	-	02
210261	Audit Course 4	-	-	-	-	-	-	-	-	-	-	-	-	-
										Total Credit	15	06	01	22
	Total	15	12	02	150	350	100	100	-	700	-	-	-	-

Savitribai Phule Pune University

Second Year of Computer Engineering (2019 Course) (With effect from Academic Year 2020-21)

Semester-III

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	Mid-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
210241	Discrete Mathematics	03	-	01	30	70	-	-	-	100	03	--	01	04
210242	Fundamentals of Data Structures	03	-	-	30	70	-	-	-	100	03	-	-	03
210243	Object Oriented Programming	03	-	-	30	70	-	-	-	100	03	-	-	03
210244	Computer Graphics	03	-	-	30	70	-	-	-	100	03	-	-	03
210245	Digital Electronics and Logic Design	03	-	-	30	70	-	-	-	100	03	-	-	03
210246	Humanity and Social Science	-	-	01	-	-	-	-	-	-	-	-	-	-
210247	Data Structures Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210248	OOP and Computer Graphics Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210249	Digital Electronics Lab	-	02	-	-	-	25	-	-	25	-	01	-	01
210250	Business Communication Skills Lab	-	02	-	-	-	25	-	-	25	-	01	-	01
210251	Audit Course 3	-	-	-	-	-	-	-	-	-	-	-	-	-
										Total Credit	15	06	01	22
	Total	15	12	02	150	350	100	100	-	700	-	-	-	-

Semester-IV

Course Code	Course Name	Teaching Scheme (Hours/Week)			Examination Scheme and Marks						Credit			
		Theory	Practical	Tutorial	Mid-Sem	End-Sem	TW	PR	OR	Total	TH	PR	TUT	Total
210252	Mathematics III	03	-	01	30	70	-	-	-	100	03	--	01	04
210253	Data Structures and Algorithms	03	-	-	30	70	-	-	-	100	03	-	-	03
210254	Software Engineering	03	-	-	30	70	-	-	-	100	03	-	-	03
210255	Microprocessor	03	-	-	30	70	-	-	-	100	03	-	-	03
210256	Principles of Programming Languages	03	-	-	30	70	-	-	-	100	03	-	-	03
210257	Data Structures and Algorithms Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210258	Microprocessor Lab	-	04	-	-	-	25	50	-	75	-	02	-	02
210259	Code of Conduct	-	-	01	-	-	-	-	-	-	-	-	-	-
210260	Project Based Learning	-	04	-	-	-	50	-	-	50	-	02	-	02
210261	Audit Course 4	-	-	-	-	-	-	-	-	-	-	-	-	-
										Total Credit	15	06	01	22
	Total	15	12	02	150	350	100	100	-	700	-	-	-	-

1.3 Third Year Engineering

Savitribai Phule Pune University
Third Year of Computer Engineering (2019 Course)
(With effect from Academic Year 2021-22)

Home

Semester V

Course Code	Course Name	Teaching Scheme (Hours/week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral	Total	Lecture	Practical	Tutorial	Total
310241	Database Management Systems	03	-	-	30	70	-	-	-	100	03	-	-	03
310242	Theory of Computation	03	-	-	30	70	-	-	-	100	03	-	-	03
310243	Systems Programming and Operating System	03	-	-	30	70	-	-	-	100	03	-	-	03
310244	Computer Networks and Security	03	-	-	30	70	-	-	-	100	03	-	-	03
310245	Elective I	03	-	-	30	70	-	-	-	100	03	-	-	03
310246	Database Management Systems Laboratory	-	04	-	-	-	25	25	-	50	-	02	-	02
310247	Computer Networks and Security Laboratory	-	02	-	-	-	25	-	25	50	-	01	-	01
310248	Laboratory Practice I	-	04	-	-	-	25	25	-	50	-	02	-	02
310249	Seminar and Technical Communication	-	-	01	-	-	50	-	-	50	-	-	01	01
	Total	**15**	**10**	**01**	**150**	**350**	**125**	**50**	**25**	**700**	**15**	**05**	**01**	**21**
310250	Audit Course 5												**Grade**	
										Total Credit	**15**	**05**	**01**	**21**

310245 Elective I Options:
- 310245(A) Internet of Things and Embedded Systems
- 310245(B) Human Computer Interface
- 310245(C) Distributed Systems
- 310245(D) Software Project Management

310250 Audit Course 5 Options:
- 310250 (A) Cyber Security
- 310250 (B) Professional Ethics and Etiquettes
- 310250 (C) Learn New Skills
- 310250 (D) Engineering Economics
- 310250 (E) Foreign Language

Laboratory Practice I
Assignments from **Systems Programming and Operating System** and **Elective I**

Savitribai Phule Pune University

Third Year of Computer Engineering (2019 Course)

(With effect from Academic Year 2021-22)

Home

Semester VI

Course Code	Course Name	Teaching Scheme (Hours/week) $$			Examination Scheme and Marks						Credit Scheme			
		$$ Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral	Total	Lecture	Practical	Tutorial	Total
310251	Data Science and Big Data Analytics	04	-	-	30	70	-	-	-	100	03	-	-	03
310252	Web Technology	04	-	-	30	70	-	-	-	100	03	-	-	03
310253	Artificial Intelligence	04	-	-	30	70	-	-	-	100	03	-	-	03
310254	Elective II	04	-	-	30	70	-	-	-	100	03	-	-	03
310255	Internship**	-	-	-	-	-	100 **	-	-	100	-	-	-	04 **
310256	Data Science and Big Data Analytics Laboratory	-	04	-	-	-	50	25	-	75	-	02	-	02
310257	Web Technology Laboratory	-	02	-	-	-	25	-	25	50	-	01	-	01
310258	Laboratory Practice II	-	04	-	-	-	50	25	-	75	-	02	-	02
	Total	**12**	**10**	**-**	**120**	**280**	**225**	**50**	**25**	**700**	**12**	**09**	**-**	**21**
310259	Audit Course 6												Grade	
										Total	**12**	**09**	**-**	**21**

310254 Elective II Options:

310254(A) Information Security
310254(B) Augmented and Virtual Reality
310254(C) Cloud Computing
310254(D) Software Modeling and Architectures

310259 Audit Course 6 Options:

310259(A) Digital and Social Media Marketing
310259(B) Sustainable Energy Systems
310259(C) Leadership and Personality Development
310259(D) Foreign Language
310259(E) Learn New Skills

Laboratory Practice II:

Assignments from **Artificial Intelligence** and **Elective II**.

**** Internship:**

Internship guidelines are provided in course curriculum sheet.

$$ Hours/Week for Theory Course in Third Year of Engineering, Semester VI:

As per the apex bodies' recommendations and guidelines, it is need of the day to train the pre-final year students for the industrial readiness through internship. As per the guidelines of AICTE, the duration of internship is 4-6 weeks after completion of semester V and before commencement of semester VI, so it is apparent that the contact hours of the TE students need to be managed meticulously. It becomes mandatory as per the structure that 4 credits for internship must earned by the students. **Per semester, 15 weeks duration that is suggested ideally by the affiliated university will eventually reduce to fruitful 12 weeks after the implementation of the revised curriculum (2019 Course). With the evaluatory introduction of internship in the structure, we are left with the choice of 4 theory courses in the sixth semester with 12 weeks instead of traditional 15 weeks.** To balance the credits and to achieve the minimum required contact hours, it is the reasonable choice to allot 4 hours / week for each theory course of the sixth semester of Third year of Engineering. The additional one lecture/ week will definitely be instrumental in achieving the largest of minimum contact hours. As such there is no correspondence of weekly load and credits earned, the credit allotted per course remain intact despite of the change. **So it is almost imperative that the commencement of VI Semester need to be approx. 3 weeks beyond the schedule.**

BE Computer Engineering 2019 Course tentative Curriculum structure:

Savitribai Phule Pune University
Fourth Year of Computer Engineering (2019 Course)
(With effect from Academic Year 2022-23)

Semester VII

Course Code	Course Name	Teaching Scheme (Hours/week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral\Pre	Total	Lecture	Practical	Tutorial	Total
410241	Design and Analysis of Algorithms	03	-	-	30	70	-	-	-	100	3	-	-	3
410242	Machine Learning	03	-	-	30	70	-	-	-	100	3	-	-	3
410243	Blockchain Technology	03	-	-	30	70	-	-	-	100	3	-	-	3
410244	Elective III	03	-	-	30	70	-	-	-	100	3	-	-	3
410245	Elective IV	03	-	-	30	70	-	-	-	100	3	-	-	3
410246	Laboratory Practice III	-	04	-	-	-	50	50	-	100	-	2	-	2
410247	Laboratory Practice IV	-	02	-	-	-	50	-	-	50	-	1	-	1
410248	Project Stage I	-	02	-	-	-	50	-	-	50	-	2	-	2
										Total Credit	15	05	-	20
	Total	15	08	-	150	350	150	50	-	700	15	05	-	20
410249	Audit Course 7													Grade

Elective III	Elective IV
410244(A) Pervasive Computing 410244(B) Multimedia Techniques 410244(C) Cyber Security and Digital Forensics 410244(D) Object Oriented Modeling and Design 410244(E) Digital Signal Processing	410245(A) Information Retrieval 410245(B) GPU Programming and Architecture 410245(C) Mobile Computing 410245(D)Software Testing and Quality Assurance 410245(E) Compilers
Laboratory Practice III: Laboratory assignments Courses- 410241, 410242, 410243	**Laboratory Practice IV:** Laboratory assignments Courses- 410244, 410245

Audit Course 7(AC7) Options:
AC7- I MOOC- Learn New Skills
AC7- II Entrepreneurship Development
AC7- III Botnet of Things
AC7- IV 3D Printing
AC7- V Industrial Safety and Environment Consciousness

Savitribai Phule Pune University
Final Year of Computer Engineering (2019 Course)
(With effect from Academic Year 2022-23)
Semester VIII

Course Code	Course Name	Teaching Scheme (Hours/week)			Examination Scheme and Marks						Credit Scheme			
		Lecture	Practical	Tutorial	Mid-Sem	End-Sem	Term work	Practical	Oral/Pre	Total	Lecture	Practical	Tutorial	Total
410250	High Performance Computing	03	-	-	30	70	-	-	-	100	03			03
410251	Deep Learning	03	-	-	30	70	-	-	-	100	03			03
410252	Elective V	03	-	-	30	70	-	-	-	100	03			03
410253	Elective VI	03	-	-	30	70	-	-	-	100	03			03
410254	Laboratory Practice V	-	02	-	-	-	50	50	-	100		01		01
410255	Laboratory Practice VI	-	02	-	-	-	50	-	-	50		01		01
410256	Project Stage II	-	06	-	-	-	100	-	50	150		06		06
										Total Credit	12	08	-	20
	Total	12	10	-	120	280	200	50	50	700	12	08	-	20
410257	Audit Course 8											Grade		

Elective V	Elective VI
410252(A) Natural Language Processing 410252(B) Image Processing 410252(C) Software Defined Networks 410252(D) Advanced Digital Signal Processing 410252(E) Open Elective I	410253(A) Pattern Recognition 410253(B) Soft Computing 410253(C) Business Intelligence 410253(D) Quantum Computing 410253(E) Open Elective II
Lab Practice V: Laboratory assignments Courses- 410250, 410251	**Lab Practice VI:** Laboratory assignments Courses- 410252, 410253

Audit Course 8(AC8) Options:
AC8- I Usability Engineering
AC8- II Conversational Interfaces
AC8- III Social Media and Analytics
AC8- IV MOOC- Learn New Skills
AC8- V Emotional Intelligence

Go to homepage 1

SECTION 2

Academic Calendar

2.1 University Calendar

Savitribai Phule Pune University
(Formerly University of Pune)

Circular No. 278 of 2021

Revised Dates of Commencement and Conclusion of Engineering, Architecture and Pharmacy for the Academic Year 2021-2022
For Affiliated Colleges/Recognised Institutes

It is hereby informed that, the revised dates of commencement and conclusion of the Courses, under the faculty of Engineering, Architecture and Pharmacy for the academic year 2021-22 shall be as under :

Name of the Faculty	Name of the Courses	Year	Revised 2021 - 2022			
			First Term		Second Term	
			Commencement	Conclusion	Commencement	Conclusion
Science & Technology	Engineering	TE, BE	02/08/2021	30/11/2021	03/01/2022	26/04/2022
	B.Architecture	III, IV & V	15/06/2021	04/12/2021	03/01/2022	30/04/2022
		II	20/08/20201	10/12/2021	03/01/2022	30/04/2022
	B. Pharmacy	III & IV	17/08/2021	18/12/2021	03/01/2022	10/05/2022
		II	23/08/2021	18/12/2021	03/01/2022	10/05/2022
	M. Pharmacy	II	23/08/2021	18/12/2021	03/01/2022	15/05/2022

NOTE

1. **All Programmes shall be conducted in Online Mode until further notice.**
2. **In view of prevailing COVID-19 situation in the Country, Colleges / Institutes shall required to follow the guidelines / instructions issued by the Government of Maharashtra from time to time.**

Deputy Registrar
(P.G. Admission)

Ganeshkhind, Pune-07
Ref. No. PGS/ 3578
Date: 29/09/2021

Copy to:
The Heads of all University Departments, Savitribai Phule Pune University, Pune.
The Principals of all Affiliated Colleges, Savitribai Phule Pune University, Pune.
The Directors of all Recognized Institutes, Savitribai Phule Pune University, Pune.

Copy to: for information
The Members of the Management Council, Savitribai Phule Pune University, Pune.
The Registrar, Savitribai Phule Pune University, Pune.
The Deans of Faculties, Savitribai Phule Pune University, Pune.

Go to homepage 1

Sr. No.	Name of the Faculty	Name of the Courses	Year	2021 - 2022			
				First Term		Second Term	
				Commencement	Conclusion	Commencement	Conclusion
3	Humanities	Arts & Fine Arts	I, III	15/06/2021	20/10/2021	15/11/2021	30/04/2022
			II	01/07/2021	20/10/2021	15/11/2021	30/04/2022
		Mental,Moral and Social Sciences	I, III	15/06/2021	20/10/2021	15/11/2021	30/04/2022
			II	01/07/2021	20/10/2021	15/11/2021	30/04/2022
		Law : UG & PG	III, IV & V	01/07/2021	11/12/2021	01/01/2022	20/05/2022
		B.A. LL.B. 5 Yrs	II	11/10/2021	31/01/2022	05/2/2022	31/05/2022
		LL.B. 3 Years	II	11/10/2021	31/01/2022	05/2/2022	31/05/2022
4	Inter-disciplinary Studies	Education (B.Ed.)	II	15/09/2021	06/01/2022	17/01/2022	10/05/2022
		Education (M.Ed.)	II	15/09/2021	06/01/2022	17/01/2022	10/05/2022
		Physical Education (B.P.Ed.)	II	15/09/2021	06/01/2022	17/01/2022	10/05/2022
		Physical Education (M.P.Ed.)	II	15/09/2021	06/01/2022	17/01/2022	10/05/2022

NOTE

1. In view of prevailing COVID-19 situation in the Country, Colleges / Institutes shall required to follow the guidelines / instructions issued by the Government of Maharashtra time to time.
2. In case the Principal of the Affiliated Colleges require to give additional holiday in exceptional circumstances, he may do by the compensative the same by keeping the college working on Sunday.
3. The college are required to complete the theory and practical remaining syllabus of current term of academic year 2020-21.

14/5/2021.

Uttam R. Chavan
Deputy Registrar
(P.G.Admission)

Ganeshkhind, Pune-07
Ref. No. PGS/ 1961
Date: 14/05/2021

Copy to:
The Heads of all University Departments, Savitribai Phule Pune University, Pune.
The Principals of all Affiliated Colleges, Savitribai Phule Pune University, Pune.
The Directors of all Recognized Institutes, Savitribai Phule Pune University, Pune.

Copy to: for information
The Members of the Management Council , Savitribai Phule Pune University, Pune.
The Registrar, Savitribai Phule Pune University, Pune.
The Deans of Faculties, Savitribai Phule Pune University, Pune.
The Director, Examinations & Evaluation, Savitribai Phule Pune University, Pune.

Go to homepage 1

2.2 Institute Calendar

Academic Calendar for A.Y. 2021-22 (Semester -I)

Week	Month	Day							#W. Day	Activities
		Mon	Tue	Wed	Thu	Fri	Sat	Sun		
1.	June	14	15	16	17	18	19	20	6	15th Commencement (TE & BE)
2.		21	22	23	24	25	26	27	6	
3.		28	29	30					2	
3.	July				01	02	03	04	4	
4.		05	06	07	08	09	10	11	6	
5.		12	13	14	15	16	17	18	6	
6.		19	20	21	22	23	24	25	6	21st Bakri Id,
7.		26	27	28	29	30	31		5	
7.	Aug							01	0	
8.		02	03	04	05	06	07	08	6	2nd Commencement of TE & BE
9.		09	10	11	12	13	14	15	5	15th Independence Day
10.		16	17	18	19	20	21	22	5	20th Commencement of SE & ME-II
11.		23	24	25	26	27	28	29	6	
12.		30	31						1	
12.	Sep			01H	02	03	04	05	4	
13.		06	07	08	09	10	11	12	6	10th Ganesh Chaturthi
14.		13	14	15	16	17	18	19	6	19th-Ananth Chaturdasi
15.		20	21	22	23	24	25	26	6	
16.		27	28	29	30				3	
16.	Oct					01	02H	03	2	2nd-, Gandhi Jayanthi
17.		04	05	06	07	08	09	10	6	5th Commencement of ME-I
18.		11	12	13	14H	15	16	17	6	14th Navami, 15th-Dasara
19.		18	19	20	21	22	23	24	6	20th Conclusion of TE & BE
20.		25	26H	27	28	29	30	31	6	30th Last Date for Lateral Entry Admission to SE
20.	Nov	01	02	03	04	05	06H	07	0	1 –5: Diwali Holidays
21		08	09	10	11	12	13	14	6	12th Conclusion of SE & MEII
22.		15	16	17	18	19H	20H	21	5	15th Commencement TE & BE, 19th Guru Nanak Jayanti
23.		22	23	24	25	26	27	28	1	25th Last Date for Cancellation of Seats
24.		29	30						6	30th Conclusion of SE, TE, BE, & ME II

Sr No	Activity	1st Term			2nd Term		
		FE#	TE-BE	ME	FE	SE-BE	ME I & II
1	Commencement						
2	Conclusion						
3	Practical/Oral/Project						
4	Theory						
5	Vacation(staff)						

Note 1:In case, the Principal/Directors of the Affiliated Colleges / Recognized Institutes requires to give additional holiday in exceptional circumstances, he/she may do so by compensating the same by keeping the College working on Sundays.

Note 2:To comply with academic requirements, colleges may utilize holidays including Sunday for F. E. Student exceptional circumstances, he/she may do so by compensating the same by keeping the College working on Sundays.

I/c Principal
SCTR's Pune Institute of Computer Technology

Go to homepage 1

Academic Calendar (2021-22 – SEM II)

	Month	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Activities
2				01H	02	03	04	05	3rd Commencement of SE, TE, BE, & ME II
3	Dec 2021	06	07	08	09	10	11	12	10th Comm of FE (Few batches on 3/12 & 7/12) & ME -I
4		13	14	15	16	17	18	19	13th Commencement of FE (Term-I)
5		20	21	22	23	24	25H	26	25th Christmas
6		27	28	29	30	31			
7	Jan 2022	31					01	02	
8		03	04	05	06	07	08	09	3rd Comm of SE & ME -II(Term II), 3-8 FE Induction
9		10	11	12	13	14H	15	16	10th FE Commencement., 14th: Makar Sankranti
10		17	18	19	20	21	22	23	8-10 DSE Practical exam.
		24	25	26H	27	28	29	30	26th: Republic Day, 24-29 SE Insem, 27-31 Int Audit
11	Feb	28	01	02	03	04	05	06	
12		07	08	09	10	11	12	13	
13		14	15	16	17	18	19	20	17-24 BE Endsem , 19th C. Shivaji Maharaj Jayanti
14		21	22	23	24	25	26	27	21-25 Feedback 1, 21-25 TE End Sem (Term-I)
15	Mar		01H	02	03	04	05	06	1st Mahashivaratri ,
16		07	08	09	10	11H	12	13	10-12 ICEI, 8 - 12 SE End Sem (Term-I)
17		14	15	16	17	18H	19	20	18th Holi 2nd Day; 19-23 UT-I (TE & BE) Offline
18		21	22	23	24	25	26	27	25-27 InC
19		28	29	30	31				28/3 - 1/4 UT I (SE), 4/4 – 8/4 SE-BE In sem
19	Apr					01	02H	03	2nd Gudi Padwa, 8-10 Credenz, 9th Rangavarsha
20		04	05	06	07	08	09	10	11th Con of FE and ME -I, 12th ISO Ext Audit
21		11	12	13H	14H	15H	16	17	14th - Ambedkar Jayanthi, 15th Good Friday
22		18	19	20	21	22	23	24	19-21 Addiction, 25-29 UT-II (TE & BE),
23		25	26	27	28	29	30		30th Conclusion of TE & BE (Term-II)
24	May							01	1st - Maharashtra Day, 2nd Final Defaulters list
25		02	03H	04	05	06	07	08	3rd Ramzan, 9-13 UT II(SE), 5-28 Pract exam
26		09	10	11	12	13	14	15	15th Conclusion of SE & ME II(Term II)
27		16	17	18	19	20	21	22	
28		23	24	25	26	27	28	29	23-28 SPPU phase I exams.
		30	31						31st Conclusion of ME I
29	June			01H	02	03	04	05	
30		06	07	08	09	10	11	12	
31		13	14	15	16	17	18	19	
32		20	21	22	23	24	25	26	Revision (20-30) BE (20-30)
33		27	28	29	30				SPPU Offline Examinations
34	July	30th Conclusion FE							
35									

Makar Sankranti-F	14-01-2022	Bakri Id Id uz Zuha- S	10-07-2022	Diwali Bali Padya T	25-11-2022
Republic Day - W	26-01-2022	Raksha Bandhan Th	11-08-2022	Bhaubeej W	26-10-2022
Chat Shivaji Jayt 3 Sa	19-02-2022	Independence day-M	15-08-2022	Gurunanak Jay-T	08-11-2022
MahaShivratri - T	01-03-2022	Ganesh Chaturthi-W	31-08-2022	Christmas – S	25-12-2022
Holi (2nd Day)- F	18-03-2022	Anant Chat_1st Day- F	09-09-2022	Ram Navami- W	21-04-2022
Gudipadwa- 1st Sa	02-04-2022	Mahatma Gandhi Jay- S	02-10-2022	Id-e-Milad-Tu	19-10-2022
Ambedkar Jayanti-Th	14-04-2022	Dasara, Ghatastapa W	05-10-2022	Mahalay -M	
Good Friday - F	15-04-2022	Dhantrayodashi F	21-10-2022	AkshatritiyaBasav Jay-W	
Maharashtra day-S	01-05-2022	Diwali Laxmi Puja Sa	22-11-2022	Parsi New Year-M	
Ramzan Id Id ul Fitr-T	03-05-2022	Diwali Bali Padya M	24-11-2022	Muharram - Th	19-08-2022

I/c Principal
SCTR's Pune Institute of Computer Technology

Go to homepage 1

Ref. NO. :- PICT/Comp/13082021/02

Society for Computer Technology & Research's

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043

Department of Computer Engineering

2.3 Department Calendar

Academic Calendar: 2021-22

Date: 13/08/2021 **UG and PG (SE, TE, BE, ME)** **Semester-I**

S.N.	Description	Day	Date
1.	Department Meeting and Review of Committees	Saturday	10-07-2021
2.	* Commencement of TE, BE Teaching	Monday	19-07-2021 ✓
3.	**#Bakri Id (Holiday)**	**Wednesday**	**21-07-2021** ✓
4.	$BE Project synopsis submission	Tuesday	03-08-2021
5.	Internal Audit (ISO)	Tuesday	10-08-2021
6.	* Commencement of SE, ME-II Teaching	Friday	20-08-2021 ✓
7.	$Mid Semester Feedback	Thu to Tue	26-08 to 31-08-2021
8.	Data Science -Tableau hands on workshop	Fri to Sat	27-08 to 28-08-2021
9.	BE Project Internal Review 1	Mon to Sat	30-08 to 04-09-2021
10.	ME Project Abstract Submission	Mon to Wed	30-08 to 08-09-2021
11.	Competitive coding sessions (UG, PG).	Every Saturday	04-09 to 13-11-2021
12.	Unit Test I (TE-BE)	Mon to Sat	06-09 to 11-09-2021
13.	$Certificate course on "Data structure and Object Oriented Programming with C++".	06-09 to 11-11-2021	
14.	**#Ganesh Chaturthi**	**Friday**	**10-09-2021** ✓
15.	*Commencement of Direct Second Year, ME-I Teaching	**As per SPPU Guidelines**	
16.	* SE, TE and BE In-semester Examination		
17.	$ Xperience Seminar Series (ME)	Friday	17-09-2021
18.	ME Project Synopsis Submission	Mon to Wed	20-09 to 29-09-2021
19.	ME Seminar II- Review 1	Mon to Fri	27-09 to 01-10-2021
20.	Unit Test I (SE)	Mon to Fri	27-09 to 01-10-2021
21.	ME Project Synopsis Presentation	Thu to Fri	30-09 to 8-10-2021
22.	**#Mahatma Gandhi Jayanti (Holiday)**	**Saturday**	**02-10-2021** ✓
23.	$ End Semester Feedback	Thu to Fri	04-10 to 6-10-2021
24.	Unit Test II (TE-BE)	Mon to Sat	11-10 to 16-10-2021
25.	Final Defaulter List (TE, BE)	Wednesday	13-10-2021
26.	**#Dasara (Holiday)**	**Friday**	**15-10-2021** ✓
27.	Mock Oral/Practical Examination (TE,BE)	Mon to Sat	11-10 to 16-10-2021
28.	BE Project Internal Review II	Mon to Sat	11-10 to 16-10-2021
29.	$ TE Final Seminar Presentation	Mon to Fri	11-10 to 15-10-2021
30.	$Probable Detention List (TE, BE)	Thursday	14-10-2021
31.	*Conclusion of Teaching (TE-BE) (Semester I)	Wednesday	20-10-2021 ✓
32.	$ Xperience Seminar Series (ME)	Friday	22-10-2021
33.	ME Seminar II- Review 2	Mon to Sat	25-10 to 30-10-2021
34.	**# Diwali (Holiday)**	**Mon to Fri**	**01-11 to 06-11-2021**
35.	Mock Oral/Practical Examination (SE)	Mon to Fri	8-11 to 12-11-2021
36.	Unit Test II (SE)	Mon to Fri	8-11 to 12-11-2021
37.	Final Defaulter List (SE)	Monday	08-11-2021
38.	$Probable Detention List (SE)	Tuesday	09-11-2021
39.	*Conclusion of Teaching (SE and ME-II) (Semester I)	Friday	12-11-2021 ✓
40.	*Commencement of TE, BE Teaching(A.Y:2021-22 Semester II)	Monday	15-11-2021 ✓
41.	BE Project Report Submission (Term I)	Thursday	18-11-2021
42.	$ Xperience Seminar Series (ME)	Thursday	18-11-2021
43.	**#Guru Nanak Jayanti (Holiday)**	**Friday**	**19-11-2021** ✓
44.	ME Project Stage I Presentation	Mon to Sat	29-11 to 4-12-2021
45.	**#Christmas (Holiday)**	**Saturday**	**25-12-2021** ✓
46.	* Theory End Semester and Practical Examination (SE-BE) (Semester I)	**As per SPPU Guidelines**	
47.	* Conclusion of Teaching (ME-I) (Semester I)		
48.	* Theory and Practical Examination (ME) (Semester I)		
49.	*Commencement of SE & ME-II (Term II)	Monday	03-01-2022 ✓

* Subject to University Instruction, $ Tentative dates. # Holidays: Subject to change as per directives of SPPU/DTE. In-sem and end sem exams (For SE, TE & BE) timetable will be as per SPPU instruction from time to time

Prof. M.S.Takalikar (HOCD)

INSTITUTE OF COMPUTER TECHNOLOGY * PUNE * PUNE-43

Dr. R. Sreemathy (I/c Principal)

Dr. P.T. Kulkarni (Director)

Go to homepage 1

PICT/COMP/24052022/02

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043

Department of Computer Engineering

Academic Calendar: 2021-22

Date: 15/01/2022 **UG and PG (SE, TE, BE, ME)** **Semester-II**

S.N.	Description	Day	Date
1.	*Commencement of ME-II Teaching	Monday	03-01-2022
2.	*Commencement of SE,TE and BE Teaching	Monday	03-01-2022
3.	DSE Practical Exam	Sat & Mon	08-01 & 10-01-2022
4.	**#Makar Sankranti (Holiday)**	**Friday**	**14-01-2022**
5.	Certificate course on "Advanced Web Development using MEAN and MERN Framework"	Every Saturday	15-01 to 05-03-2022
6.	SE In Semester Examination (Semester I)	Mon to Sat	24-01 to 29-01-2022
7.	Certificate course on "Joy of Learning Python"	Mon to Sat	24-01 to 26-03-2022
8.	**#Republic Day (Holiday)**	**Wednesday**	**26-01-2021**
9.	ISO Internal Audit	Thu to Mon	27-01 to 31-01-2022
10.	$ Xperience Seminar Series (ME)	Friday	28-01-2022
11.	PG Seminar III Review I	Mon to Fri	14-02 to 18-02-2022
12.	*SPPU End semester Examination BE (Semester I)	Thu to Thu	17-02 to 24-02-2022
13.	Mid Semester Feedback	Mon to Fri	21-02 to 25-02-2022
14.	*SPPU End semester Examination TE (Semester I)	Mon to Fri	21-02 to 25-02-2022
15.	$ Xperience Seminar Series (ME)	Friday	25-02-2022
16.	**#Maha Shivratri (Holiday)**	**Tuesday**	**01-03-2022**
17.	Report writing guideline Session (ME)	Tue to Mon	02-03 to 08-03-2022
18.	$BE Project Internal Review III	Mon to Sat	07-03 to 12-03-2022
19.	*SPPU End semester Examination SE (Semester I)	Tue to Sat	08-03 to 12-03-2022
20.	ICEI Conference 2022	Thu to Sat	10-03 to 12-03-2022
21.	$BE Project Internal Review IV	Mon to Sat	14-03 to 19-03-2022
22.	**#Holi second day (Holiday)**	**Friday**	**18-03-2022**
23.	Unit Test I (TE-BE)	Tue to Mon	19-03 to 23-03-2022
24.	InC 2022	Fri to Sun	25-03 to 27-03-2022
25.	$ Xperience Seminar Series (ME)	Friday	25-03-2022
26.	Unit Test I (SE)	Mon to Sat	28-03 to 01-04-2022
27.	$Final Review of Dissertation work with Demo (ME II)	Mon to Sat	04-04 to 09-04-2022
28.	*In-Semester Examination (SE- BE) (Semester II)	Mon to Fri	04-04 to 08-04-2022
29.	$IEEE Credenz Annual Event	Fri to Sun	08-04 to 10-04-2022
30.	$Certificate course on Mathematical Foundations for Block chain	As per schedule	09-04-2022
31.	Rangvarsha 2022	Saturday	09-04-2022
32.	ISO External periodic Audit	Tuesday	12-04-2022
33.	**#Dr.Babasaheb Ambedkar Jayanti (Holiday)**	**Thursday**	**14-04-2022**
34.	**#Good Friday (Holiday)**	**Friday**	**15-04-2022**
35.	End Semester Feedback	Mon to Fri	18-04 to 23-04-2022
36.	PG Seminar III Review II	Mon to Sat	18-04 to 23-04-2022
37.	$ Mock Lab Practical /Oral Examination (TE-BE)	Mon to Sat	18-04 to 23-04-2022
38.	Addiction'22	Tue to Thu	19-04 to 21-04-2022
39.	$ BE Project Final Report Submission	Mon to Sat	25-04 to 30-04-2022
40.	Unit Test II (TE-BE)	Mon to Fri	25-04 to 29-04-2022
41.	*Conclusion of Teaching TE (Semester II)	Tuesday	26-04-2022
42.	$ Xperience Seminar Series (ME)	Friday	29-04-2022
43.	*Conclusion of Teaching BE (Semester II) TE ?	Saturday	30-04-2022
44.	Dissertation Report Submission(ME-II)	Mon to Sat	02-05 to 07-05-2022
45.	$ Final Defaulter List	Mon to Sat	02-05 to 07-05-2022
46.	**#Ramzan Id (Holiday)**	**Tuesday**	**03-05-2022**
47.	Unit Test II (SE)	Mon to Fri	09-05 to 13-05-2022
48.	*Mock Lab Practical /Oral Examination (SE)	Mon to Sat	09-05 to 14-05-2022
49.	*Conclusion of Teaching SE and ME-II (Semester II)	Sunday	15-05-2022
50.	*SPPU Practical/Oral Examination (Semester II)	As per schedule	05-05 to 28-05-2022
51.	*End-Semester Examination (SE-BE) (Semester II)	As per SPPU schedule	
52.	* Practical Examination (ME) (Semester II)		
53.	* Theory Examination(ME) (Semester II)		
54.	*Commencement of SE, TE, BE and ME Teaching(A.Y:2022-23 Sem I)		

* Subject to University Instruction, $ Tentative dates. # Holidays: Subject to change as per directives of SPPU/DTE. In-sem and end sem exams (For SE, TE & BE) timetable will be as per SPPU instruction from time to time.

Dr. Geetanjali V. Kale (HOD)

PUNE INSTITUTE OF COMPUTER TECHNOLOGY PUNE-43

Dr. R. Sreemathy (I/c Principal)

Dr. P.T. Kulkarni (Director)

Go to homepage 1

SECTION 3

List of Courses

3.1 Electronics and Telecommunication Engineering

FE Semester I				
Program Code	**Program Name**	**Course Code**	**Name of Course**	**Pattern**
	UG :First Yr.	107001	Engineering Mathematics-I	2019
	UG :First Yr.	107002/ 107009	Engineering Physics / Engineering Chemistry	2019
	UG :First Yr.	102003	Systems in Mechanical Engineering	2019
	UG :First Yr.	103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	2019
	UG :First Yr.	110005/ 101011	Programming and Problem Solving / Engineering Mechanics	2019
	UG :First Yr.	111006	Workshop	2019
	UG :First Yr.	101007	Audit Course 1:Environmental Studies-I	2019
FE Semester II				
	UG :First Yr.	107008	Engineering Mathematics-II	2019
	UG :First Yr.	107002/ 107009	Engineering Physics/ Engineering Chemistry	2019
	UG :First Yr.	103004 / 104010	Basic Electrical Engineering / Basic Electronics Engineering	2019
	UG :First Yr.	110005/ 101011	Programming and Problem Solving / Engineering Mechanics	2019
	UG :First Yr.	102012	Engineering Graphics	2019
	UG :First Yr.	110013	Project Based Learning	2019
	UG :First Yr.	101014	Audit Course 2:Environmental Studies-II	2019
	UG :First Yr.	107015	Physical Education-Exercise and Field Activities	2019
SE Semester III				
Program Code	**Program Name**	**Course Code**	**Name of Course**	**Pattern**
627137210	UG-E&TC	207005	Engineering Mathematics III	2019
627137211	UG-E&TC	204181	Electronic Circuits	2019
627137212	UG-E&TC	204182	Digital Circuits	2019
627137213	UG-E&TC	204183	Electrical Circuits	2019
627137214	UG-E&TC	204184	Data structures	2019
627137215	UG-E&TC	204185	Electronic Circuit Lab	2019
627137216	UG-E&TC	204186	Digital circuits Lab	2019
627137217	UG-E&TC	204187	Electrical Circuit Lab	2019
627137218	UG-E&TC	204188	Data Structures Lab	2019
627137219	UG-E&TC	204189	Electronic Skill Development	2019
627137220	UG-E&TC	204190	Mandatory Audit Course 3	2019
			Audit course option A - Technical English For Engineers	2019
			Audit course option B - Ecology and Environment	2019
			Audit course option C - Ecology and Society	2019
			Audit course option D - German I	2019
			Audit course option E - Science, Technology and Society	2019

Go to homepage 1

627137244	UG-E&TC	404186	Lab Practice - 1 (RMT & Cloud Computing)	2019
627137245	UG-E&TC	404187	Lab Practice - 2 (VLSI Design & Elective -3)	2019
627137246	UG-E&TC	404188	Project Stage - I	2019
627137247	UG-E&TC	404189	Mandatory Audit Course 7	2019
			Audit course option A - Management Information System	2019
			Audit course option B - Patent Search & Analysis	2019
			Audit course option C - Knowledge Management	2019
			Audit course option D - Energy Economics & Policy	2019
			Audit course option E - Educational Leadership	2019
			Audit course option F - Human Resource Development	2019
			BE Semester VIII	
627137247	UG-E&TC	404190	Fiber Optic Communication	2019
627137248	UG-E&TC	404191	Elective - 5	2019
			1. Biomedical Signal Processing	2019
			2. Industrial Drives & Automation	2019
			3. Android Development	2019
			4. Embedded System Design	2019
			5. Mobile Computing	2019
627137249	UG-E&TC	404192	Elective - 6	2019
			1. System on Chip	2019
			2. Nano Electronics	2019
			3. Remote Sensing	2019
			4. Digital Marketing	2019
			5. Open Elective	2019
627137250	UG-E&TC	404193	Innovation & Entrepreneurship	2019
627137251	UG-E&TC	404194	Digital Business Management	2019
627137252	UG-E&TC	404195	Fiber Optic Lab	2019
627137253	UG-E&TC	404196	Lab Practice - 3 (Elective - 5)	2019
627137254	UG-E&TC	404197	Project Stage - II	2019

Go to homepage 1

4

SECTION

Load Allocation

4.1 Load Allocation

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, DHANKAWADI, PUNE– 43

SUBJECT & LOAD ALLOCATION TO FACULTY

DEPARTMENT: COMPUTER ENGINEERING

ACADEMIC YEAR: 2021 - 2022 **SEM:** II

W.E.F.: 02-03-2022

Sr No	Name of the Teacher	Details of the Teaching Load							Total Load Hrs./ Wk.
		Subject	Class	Load Hrs./ Wk.	Practical Subject Name	Class	Load Hrs./Wk.		
							Practical / Tutorial	Project/ Dissertation & Seminar	
1.	Dr. M. S. Takalikar	CoC	SE	2	DISS SEMINAR-I SEMINAR-III	ME-CE ME-DS ME-CE		4 2 1	9
2.	Dr. S. A. Joshi	CoC	SE	1	Project SEMINAR-I SEMINAR-III	BE ME-CE ME-DS		4 2 1	8
3.	Dr. B. A. Sonkamble	CoC	SE	1	DISS SEMINAR-I SEMINAR-III	ME-DS ME-CE ME-DS		4 2 1	8
4.	Dr. G. P. Potdar	DSA OR	SE ME-CE	3 4	DSAL Project SEMINAR-III	SE BE ME-DS	4	2 1	14
5.	Dr. S. S. Sonawane	DS&BDA	TE	4	DSBDAL DISS SEMINAR-III	TE ME-DS ME-CE	4	4 1	13
6.	Dr. A. S. Ghotkar	DS &BDA IP	TE ME-CE ELE	4 5	DSBDAL SEMINAR-III	TE ME-DS	4	1	14
7.	Dr. G. V. Kale	SCOA	BE	3	DSBDAL LP-II SEMINAR-III	TE ME-DS ME-DS	4 4	1	13
8.	Prof. R. A. Kulkarni	DS&BDA	TE	4	DSBDAL DISS LP-II	TE ME-CE ME-CE	4 4	4	16
9.	Dr. A. R. Deshpande	CoC RS	SE ME-DS- ELE	1 5	Project DISS LP-II	BE ME-DS ME-CE	4	2 4	16
10.	Prof. K. C. Waghmare	DSA DWM	SE ME-DS	3 4	DSAL DISS	SE ME-CE	8	4	17
11.	Prof. A. G. Phakatkar	CoC ML	SE ME-CE	1 4	DSAL Project DISS	SE BE ME-DS	4	4 4	17
12.	Prof. P. P. Joshi	DS&BDA	TE	4	DSBDAL Project LP-II DISS	TE BE ME-DS ME-CE	4 4	4 2	18
13.	Prof. P. A. Jain	On Medical leave							
14.	Prof. M. S. Wakode	CoC ICS	SE BE	2 3	DSBDAL LP-III DISS	TE BE ME-CE	8 4	2	19

Go to homepage 1

15	Prof. P. S. Vidap	DSA	SE	3	DSAL LP-III Project	SE BE BE	8 4	4	19
16	Prof. P. R. Patil	CC	TE	4	LP-II LP-IV Project	TE BE BE	8 4	2	18
17	Dr. P. S. Game	SCOA SC	BE ME-DS	3 4	Project SEMINAR-III DISS	BE ME-CE ME-DS		4 1 4	16
18	Dr. A. R. Buchade	CoC CC	SE BE	1 3	LP-II Project DISS SEMINAR-III	TE BE ME-CE ME-CE	8	2 4 1	18
19	Prof. S. N. Girme	MP	SE	3	MPL LP-IV Project	SE BE BE	8 4	2	17
20	Prof. R. S. Paswan	MP	SE	3	MPL LP-III Project	SE BE BE	8 4	2	17
21	Prof. H. P. Channe	SML ML	TE-HONS BE	4 3	DSBDAL HONS-SEM Project	TE BE BE	4	2 4	
22	Prof. A. D. Bundele	WT	TE	4	WTL LP-III Project	TE BE BE	8 4	2	18
23	Prof. A. A. Chandorkar	CoC SCOA	SE BE	1 3	DSBDAL LP-IV Project	TE BE BE	8 4	2	18
24	Prof. Y. A. Handge	SE	SE	3	LP-II LP-III Project	TE BE BE	8 4	2	17
25	Prof. V. V. Bagade	CoC SSM	SE ME-CE	1 4	DSBDAL Project	TE BE	8	4	17
26	Prof. M. S. Chavan	HCI SE	BE SE	3 3	PBL LP-IV	SE BE	8 4		18
27	Prof. D. D. Kadam	MP AIBDA-HONS	SE BE	3 3	MPL LP-IV HONS-SEM Project	SE BE BE BE	4 4	2 2	
28	Prof. B. D. Zope	DSA	SE	3	DSAL LP-III Project	SE BE BE	8 4	2	17
29	Prof. R. V. Bidwe	MP	SE	3	MPL LP-IV Project	SE BE BE	8 4	2	17
30	Prof. S. P. Shintre	CoC AIBDA-HONS	SE BE	1 4	DSBDAL HONS-SEM LP-III	TE BE BE	8 4	2	19
31	Prof. P. J. Jambhulkar	PPL	SE	3	PBL LP-IV Project	SE BE BE	8 4	2	18
32	Prof. P. S. Joshi	AI	TE	4	PPSL LP-II	FE TE	10 4		18

Go to homepage 1

33.	Prof. U. S. Pawar	CoC HCI	SE BE	1 3	DSAL LP-IV Project	TE BE BE	8 4	2	18
34	Prof. Rutuja A. Kulkarni	PPL ML	SE BE	3 3	PBL LP-III Project	SE BE BE	4 4	4	18
35	Prof. S. S. Shevtekar	CC	TE	4	LP-II LP-IV Project	TE BE BE	8 4	2	18
36	Prof. B. P. Masram	CC	TE	4	LP-II LP-III Project	TE BE BE	8 4	2	18
37	Prof. M. R. Jansari	SE	SE	3	PBL LP-IV Project	SE BE BE	8 4	4	19
38	Prof. V. S. Gaikwad	WT	TE	4	WTL LP-IV Project	TE BE BE	8 4	2	18
39	Prof. S. H. Pisey	PPS	FE	8	PPSL	FE	10		18
40	Prof. P. R. Rajmane	SE ICS	SE BE	3 3	PBL Project	SE BE	8	2	16
41	Prof. Kopal Gangrade	PPS	FE	8	PPSL	FE	10		18
42	Prof. Swapnil Shendge	PPL	SE	3	PBL HONS-SEM Project	SE BE BE	8	2 4	17
43	Prof. Anjali Deshpande	CoC ML	SE BE	1 3	DSAL Project	SE BE	12	2	18
44	Prof. P. A. Khadkikar	PPL SCOA	SE BE	3 3	DSAL LP-IV	SE BE	8 4		18
45	Prof. Laxmi Pawar	WT HCI	TE BE	4 3	WTL LP-IV	TE BE	8 4		19
46	Prof. Navnath Jadhav	ICS	BE	3	DSBDAL HONS-SEM Project	TE BE BE	8	2 4	17
47	Prof. Madhuri Mane	AI	TE	4	MPL LP-II LP-IV	SE TE BE	4 8 4		20
48	Prof. Piyush Kankal	WT	TE	4	WTL LP-III	TE BE	8 8		20
49	Prof. Tushar Pinjan	AI	TE	4	LP-II LP-III Project	TE BE BE	8 4	4	20
50	Prof. Shweta Shah	CoC ICS	SE BE	1 3	LP-III Project	BE BE	12	2	18
51	Prof. P. R. Navghare	ML	BE	3	PBL LP-III	SE BE	12 4		19
52	Prof. P. T. Kohok	AI	TE	4	LP-II LP-IV Project	TE BE BE	4 8	2	18

Go to homepage 1

53.	Prof. S. R. Kudagi	CoC	SE	1	DSAL PBL Project	SE SE BE	4 8	4	17

HOD

Department of Computer Engineering

PUNE INSTITUTE OF COMPUTER TECHNOLOGY • PUNE-43

Principal

PICT, Pune

I/c Principal

SCTR's Pune Institute of Computer Technol

SCTR's Pune Institute of Computer Technolo

Go to homepage 1

5

SECTION

Time Table

5.1 Class Time Table

ISO 9001 : 2015 Certified

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43.

CLASS TIMETABLE

Academic Year	2021-22
Department	CE
Room Number	A1-211

Semester	II
Class	SE-I
W.E.F.	02/03/2022

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00 - 10:00	DSAL-E1, F1 PBL- G1, H1,	EM III – G1,H1 COC- E1,F1	SE	DSAL-E1, F1 PBL- G1, H1,	Remedial Session	Mentor Meeting
10:00 - 11:00		EM III – E1,F1 COC- G1,H1	PPL		Remedial Session	
11:00 - 11:15	BREAK					
11:15 - 12:15	MP	DSAL- G1,H1 MPL-E1,F1	EM-III	MP	DSAL- G1,H1 PBL-E1,F1	Audit Course
12:15 - 1:15	DSA		DSA	PPL		
01:15 - 02:00	LUNCH BREAK					
02:00 - 03:00	EM-III	PPL	PBL-E1,F1 MPL-G1,H1	DSA	EM-III	Professional Development
03:00 - 04:00	SE	MP		Remedial Session	SE	Professional Development

Theory

SUBJECT	STAFF
EM-III	Prof. V. B. Tanpure
DSA	Prof. K.C. Waghmare
SE	Prof. Y. A. Handage
MP	Prof. D. D. Kadam
PPL	Prof. Rutuja. A. Kulkarni

Class Coordinator	Prof. D. D. Kadam	
Subject Coordinator	Subject	Name of the Staff
	EM-III	Prof. V. B. Tanpure
	DSA	Prof. P. S. Vidap
	SE	Prof. Y. A. Handage
	MP	Prof. R. S. Paswan
	PPL	Prof. P. J. Jambhulkar
	DSAL	Prof. B. D. Zope
	MPL	Prof. R. V. Bidwe
	COC	Prof. V. V. Bagade
Audit Course Coordinator	Prof. S S Shendge	

Practical

SUBJECT	STAFF	LAB
DSAL		
E1	Prof. S. R. Kudagi	A1-208
F1	Prof. U. S Pawar	A1-209
G1	Prof. P. S. Vidap	A1-208
H1	Prof. K. C. Waghmare	A1-209
MPL		
E1	Prof. R. S. Paswan	A1-202
F1	Prof. D. D. Kadam	A1-203
G1	Prof. R. S. Paswan	A1-202
H1	Prof. D. D. Kadam	A1-203
PBL		
E1	Prof. S. R. Kudagi	A1-204
F1	Prof. M. R. Jansari	A1-216
G1	Prof. Rutuja. A. Kulkarni	A1-204
H1	Prof. P. R. Rajmane	A1-216
COC		
E1	Dr. S. A. Joshi	A1-307
F1	Prof. V. V. Bagade	A1-111
G1	Dr. A. R. Deshpande	A1-307
H1	Prof. S. P. Shintre	A1-111
EM-III		
E1	Prof. N. A. Gadade	A1-211
F1	Prof. V. B. Tanpure	A1-213
G1	Prof. N. A. Gadade	A1-211
H1	Prof. V. B. Tanpure	A1-213

HOCD

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

PUNE INSTITUTE OF COMPUTER TECHNOLOGY PUNE-43

ISO 9001 : 2015 Certified

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43.

CLASS TIMETABLE

Academic Year	2021-22
Department	CE
Room Number	A1-211

Semester	II
Class	SE-I
W.E.F.	02/03/2022

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00 - 10:00	DSAL-E1, F1 PBL- G1, H1,	EM III – G1,H1 COC- E1,F1	SE	DSAL-E1, F1 PBL- G1, H1,	Remedial Session	Mentor Meeting
10:00 - 11:00		EM III – E1,F1 COC- G1,H1	PPL		Remedial Session	
11:00 - 11:15	BREAK					
11:15 - 12:15	MP	DSAL- G1,H1 MPL-E1,F1	EM-III	MP	DSAL- G1,H1 PBL-E1,F1	Audit Course
12:15 - 1:15	DSA		DSA	PPL		
01:15 - 02:00	LUNCH BREAK					
02:00 - 03:00	EM-III	PPL	PBL-E1,F1 MPL-G1,H1	DSA	EM-III	Professional Development
03:00 - 04:00	SE	MP		Remedial Session	SE	Professional Development

Theory

SUBJECT	STAFF
EM-III	Prof. V. B. Tanpure
DSA	Prof. K.C. Waghmare
SE	Prof. Y. A. Handage
MP	Prof. D. D. Kadam
PPL	Prof. Rutuja. A. Kulkarni

Class Coordinator	Prof. D. D. Kadam	
Subject Coordinator	Subject	Name of the Staff
	EM-III	Prof. V. B. Tanpure
	DSA	Prof. P. S. Vidap
	SE	Prof. Y. A. Handage
	MP	Prof. R. S. Paswan
	PPL	Prof. P. J. Jambhulkar
	DSAL	Prof. B. D. Zope
	MPL	Prof. R. V. Bidwe
	COC	Prof. V. V. Bagade
Audit Course Coordinator		Prof. S S Shendge

Practical

SUBJECT	STAFF	LAB
DSAL		
E1	Prof. S. R. Kudagi	A1-208
F1	Prof. U. S Pawar	A1-209
G1	Prof. P. S. Vidap	A1-208
H1	Prof. K. C. Waghmare	A1-209
MPL		
E1	Prof. R. S. Paswan	A1-202
F1	Prof. D. D. Kadam	A1-203
G1	Prof. R. S. Paswan	A1-202
H1	Prof. D. D. Kadam	A1-203
PBL		
E1	Prof. S. R. Kudagi	A1-204
F1	Prof. M. R. Jansari	A1-216
G1	Prof. Rutuja. A. Kulkarni	A1-204
H1	Prof. P. R. Rajmane	A1-216
COC		
E1	Dr. S. A. Joshi	A1-307
F1	Prof. V. V. Bagade	A1-111
G1	Dr. A. R. Deshpande	A1-307
H1	Prof. S. P. Shintre	A1-111
EM-III		
E1	Prof. N. A. Gadade	A1-211
F1	Prof. V. B. Tanpure	A1-213
G1	Prof. N. A. Gadade	A1-211
H1	Prof. V. B. Tanpure	A1-213

HOCD

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

5.2 Lab Time Table

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43.

ISO 9001 : 2015 Certified

LAB TIME TABLE

Academic Year	2021-22
Department	CE
Lab No	A1-209

Semester	II
W.E.F.	02/03/2022
Lab Name	Programming Lab -II

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00- 10:00	DSAL F1	DSAL H3	WTL N2	DSAL F1	DSAL H3	
10:00- 11:00						
11:00- 11:15	BREAK					
11:15- 12:15	DSAL F2	DSAL H1	DSAL F3	DSAL F2	DSAL H1	
12:15- 01:15						
01:15- 02:00	LUNCH BREAK					
02:00- 03:00	DSAL F3	DSAL H2	LP-III S2	LP-III S2	DSAL H2	
03:00- 04:00						
04:00- 04:15	BREAK					
04:15– 05:15		DSAL F4	DSAL H4	DSAL F4	DSAL H4	
05:15– 06:15						

Total Load= 38 Hrs

Subject Coordinator	
Subject	Name of the Staff
DSAL	Dr. S. D. Kale
WTL	Prof. A. D. Bundele
LP-III	Prof. M. S. Wakode

Practical

SUBJECT	STAFF	Batch
DSAL	Prof. K. C. Waghmare	H4, H1
	Prof. P. A. Khadkikar	F4
	Prof. U. S. Pawar	F1
	Prof. A. A. Deshpande	H2, F3, H3
	Prof. P. S. Vidap	F2
WTL	Prof. V. S. Gaikwad	N2
LP-III	Prof. M. S. Wakode	S2

HOCD

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43.

ISO 9001 : 2015 Certified

LAB TIME TABLE

Academic Year	2021-22
Department	CE
Lab No	A1-209

Semester	II
W.E.F.	02/03/2022
Lab Name	Programming Lab -II

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00- 10:00	DSAL F1	DSAL H3	WTL N2	DSAL F1	DSAL H3	
10:00- 11:00						
11:00- 11:15	BREAK					
11:15- 12:15	DSAL F2	DSAL H1	DSAL F3	DSAL F2	DSAL H1	
12:15- 01:15						
01:15- 02:00	LUNCH BREAK					
02:00- 03:00	DSAL F3	DSAL H2	LP-III S2	LP-III S2	DSAL H2	
03:00- 04:00						
04:00- 04:15	BREAK					
04:15– 05:15		DSAL F4	DSAL H4	DSAL F4	DSAL H4	
05:15– 06:15						

Total Load= 38 Hrs

Subject Coordinator	
Subject	Name of the Staff
DSAL	Dr. S. D. Kale
WTL	Prof. A. D. Bundele
LP-III	Prof. M. S. Wakode

Practical

SUBJECT	STAFF	Batch
DSAL	Prof. K. C. Waghmare	H4, H1
	Prof. P. A. Khadkikar	F4
	Prof. U. S. Pawar	F1
	Prof. A. A. Deshpande	H2, F3, H3
	Prof. P. S. Vidap	F2
WTL	Prof. V. S. Gaikwad	N2
LP-III	Prof. M. S. Wakode	S2

HOCD

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

ISO 9001 : 2015 Certified

PUNE INSTITUTE OF COMPUTER TECHNOLOGY

DHANKAWADI, PUNE – 43.

5.3 Faculty Time Table

STAFF TIME TABLE

Academic Year	2021-22
Department	CE

Semester	II
W.E.F.	02/03/2022

Name of the staff: Prof. P. P. Joshi

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00 - 10:00	PROJECT P3 (A1-310)	DSBDAL M4 (A2-303)	PROJECT P1 (A1-111)			
10:00 - 11:00						
11:00 - 11:15	BREAK					
11:15 - 12:15		DSBDA TE-4 (A1-309)		DSBDAL M4 (A2-303)		
12:15 - 01:15						
01:15 - 02:00	LUNCH BREAK					
02:00 - 03:00			DSBDA TE-4 (A1-309)			
03:00 - 04:00				DSBDA TE-4 (A1-311)		

Allocated Load (in Hrs.)	
Theory	04
Practical	04
Project	04
Total	**12**

HOCD

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

ISO 9001 : 2015 Certified

PUNE INSTITUTE OF COMPUTER TECHNOLOGY

DHANKAWADI, PUNE – 43.

STAFF TIME TABLE

Academic Year	2021-22
Department	CE

Semester	II
W.E.F.	02/03/2022

Name of the staff: Prof. P. P. Joshi

Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
09:00 - 10:00	PROJECT P3 (A1-310)	DSBDAL M4 (A2-303)	PROJECT P1 (A1-111)			
10:00 - 11:00						
11:00 - 11:15	BREAK					
11:15 - 12:15		DSBDA TE-4 (A1-309)		DSBDAL M4 (A2-303)		
12:15 - 01:15						
01:15 - 02:00	LUNCH BREAK					
02:00 - 03:00			DSBDA TE-4 (A1-309)			
03:00 - 04:00				DSBDA TE-4 (A1-311)		

Allocated Load (in Hrs.)	
Theory	04
Practical	04
Project	04
Total	**12**

HOCD

PUNE INSTITUTE OF COMPUTER TECHNOLOGY PUNE-43

PRINCIPAL

I/c Principal
SCTR's Pune Institute of Computer Technology

SECTION 6

Course Plan

6.1 Course Plan

AY 2021-22

COURSE PLAN

COMPUTER ENGINEERING DEPARTMENT

Go to homepage 1

1.2 TE-Theory of Computation

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 4110

Department of Computer Engineering
S.No.-27, Pune Satara Road, Dhankawadi, Pune-411043

Course Plan
(A.Y. 2021-22)

Class: T.E.	**Semester:** I
Subject Code: 310242	**Subject Name:** Theory of Computation
Teaching scheme	**University Examination Scheme**
Theory: 3 Hours /week	**Mid- Sem(TH) :**30 Marks **End Sem(TH):** 70Marks
Continuous assessment: Unit Test I & II	
Name of the Faculty: prof. Ratnamala Paswan	
Designation: Assistant Professor	
Department of the Faculty: Computer Engineering	
Email ID:rspaswan@pict.edu	

Course Objectives:

- To introduce the students to basics of Theory of Computation.
- To study abstract computing models to provide a formal connection between algorithmic problem solving and theory of languages.
- To understand grammar, push down automata and Turing machine for language processing and algorithm design.
- To learn about the theory of computability and complexity for algorithm design.

Course Outcome: (COs)
After completion of the course, Students will be able to

310242.1	Understand constructs of formal language and apply it to design Finite Automata & its Variants
310242.2	Construct Regular Expression to represent Regular language and understand Pumping Lemma for Regular Expression
310242.3	Design Context Free Grammar CFG and learn to simplify & normalize the given CFG.
310242.4	Design and analyze PDA, Deterministic Turing Machine for formal languages.
310242.5	To Demonstrate the understanding of key notions such as computability, decidability, undecidability, complexity classes through examples.

Go to homepage 1

Co-Po articulation matrix

	PO1	PO2	PO3	PO4	PO 5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO-1	3	3	2	2	1	-	-	-	-	-	-	2
CO-2	3	3	2	2	1	-	-	-	-	-	-	1
CO-3	3	3	2	2	1	-	-	-	-	-	-	1
CO-4	3	3	3	2	1	-	-	-	-	-	-	2
CO-5	3	3	3	3	1	-	-	-	-	-	-	1

Course Delivery Method: This course is taught *using* Virtual Whiteboard, Presentations and Videos.

Midterm Attainment

CO1, CO2	Unit Test I
CO3, CO4, CO5	Unit Test II, Presentation

Course attainment

Academic Year	% Distinction		% First class		% Pass class		CO Attainment
	Unit Test	UA	Unit Test	UA	Unit Test	UA	UA+Unit test
2020-21	93	99.67	96	99.67	97	99.99	1
2019-20	34	40	43	60	73	93	0.87
2018-19	28	46	37	63	63	93	0.94
Average	**51.67**	**61.89**	**58.67**	**74.22**	**77.67**	**95.33**	0.94

Achieved attainment (last three years average)

Target (%)

Class	Target for AY 2020-21		Target for AY 2021-22	
	Unit Test	SPPU	Unit test	SPPU
Distinction	35	39	51	61
First class	44	55	58	74
Pass class	75	94	77	95

Reasons for gap(if any)

Nil

Action planned to reduce the gap

NA

Pre – Requisites

- Discrete Mathematics

Syllabus as per SPPU

Theory of Computation (310241)

Unit I : Formal Language Theory and Finite Automata **7H**

Finite Automata(FA): Informal Picture of FA, Finite State Machine (FSM), Language accepted by FA, Definition of Regular Language.

FA without output: Deterministic and Nondeterministic FA(DFA and NFA), epsilon- NFA, , inter-conversion, Minimization of DFA

FA with output: Moore and Mealy machines -Definition, models, Interconversion.

Case Study: FSM for vending machine, spell checker

Unit II : Regular Expressions (RE) **7H**

Introduction, Operators of RE, Precedence of operators, Algebraic laws for RE, Language to Regular Expressions, Equivalence of REs, **Conversions**: RE to NFA, DFA to RE using Arden;s Theorem, Pumping Lemma for Regular languages, Closure and Decision properties of RE, Myhill-Nerode Theorem.

Case Study: RE in text search and replace

Unit III : Context Free Grammars (CFG) and Languages **7H**

Basic Elements of Grammar, Formal Definition of Context Free Grammar, Sentential form, , Derivation and Derivation Tree/ Parse tree, Context Free Language(CFL), Ambiguous Grammar, writing grammar for language. **Simplification of CFG**: Eliminating unit productions, useless production, useless symbols, and C-productions, **Normal Forms**- Chomsky normal form, Greibach normal form, Pumping Lemma for CFG, Closure properties of CFL, Decision properties of CFL, Chomsky Hierarchy, Cock-Young -Kasami Algorithm.

Case Study- Parser, CFG for Palindromes, Parenthesis Match

Unit IV: Push Down Automata(PDA) **7H**

Introduction, Formal Definition of PDA, Equivalence of Acceptance by Finite State & Empty stack, Non Deterministic PDA(NPD), PDA and CFL, Equivalence of PDA and CFG, PDA vs. CFL, Deterministic CFL.

Case Study- Parsing and PDA:Top Down Parsing, Bottom Up Parsing Simulation showing use of PDA

Unit V : Turing Machines **7H**

Turing Machine Model, Formal Definition of TM, Language Acceptability by Turing Machines, Design of TM, Description of TM, Technique for TM construction, Computing Function with TM, Variants of Turing Machines, TM's Halting Problem, Halting vs Looping, Turing Recognizable Language, Reducibility, Recursion Theorem, the model of Linear Bounded Automata.

Case Study- Algorithm using TM

Unit VI : Computability and Complexity Theorem **7H**

Computability Theory: Decidable and undecidable Problems, Church Turing Thesis

Reducibility: Undecidable Problem that is recursively enumerable, simple undecidable problem.

Complexity Classes: Time and Space measures, The Class P, examples of problem in P, The Class NP , examples of problem in NP, P problem vs. NP problem, NP completeness and NP hard Problems

Case Study: Travelling Salesperson Problem, Post Correspondence Problem(PCP)

Teaching Plan

Unit	Topics and Subtopics	Approx. Lectures	Topic wise Reference
Unit I: Formal Language Theory and Finite Automata	Revision of discrete mathematics and introduction of subject.	01	T1,R6,R7,R3,
	Introduction to Formal language, introduction to language translation logic, Essentials of translation, Alphabets and languages, Finite representation of language, Finite Automata (FA): AnInformal Picture of FA, Finite State Machine (FSM)	01	
	Language accepted by FA, Definition of Regular Language, Deterministic and Nondeterministic FA(DFA and NFA),epsilon-NFA	01	
	Problem solving on DFA &NFA	01	
	Moore and Mealy machines -Definition, models, inter-conversion.	01	
	Problem solving Moore and Mealy machines	01	
	Case Study: FSM for vending machine, spell checker	01	
UNIT II: Regular Expressions (RE)	Introduction, Operators of RE, Precedence of operators	01	T1,T2,R2,R7
	Algebraic laws for RE, Language to Regular Expressions, Equivalence of REs	01	
	RE to DFA Conversions: RE to DFA	01	
	Conversions: RE to NFA, DFA to RE using Arden;s Theorem	02	
	Pumping Lemma for Regular languages, Closure and Decision properties of RE, Myhill-Nerode Theorem.	02	
	Demonstration of: RE in text search and replace		
	Basic Elements of Grammar	01	T1,T2,R6,R7

Unit III: Context Free Grammars (CFG) and Languages	Formal Definition of Context Free Grammar, Sentential form	01	
	Problem solving on CFG Derivation and Derivation Tree/ Parse tree, Context Free Language(CFL), Ambiguous Grammar, writing grammar for language	02	
	Simplification of CFG: Eliminating unit productions, useless production, useless symbols, and ϵ-productions, **Normal Forms**- Chomsky normal form, Greibach normal form, Pumping Lemma for CFG,	02	
	Closure properties of CFL, Decision properties of CFL, Chomsky Hierarchy, Cock-Young -Kasami Algorithm	01	
	Case Study- Parser, CFG for Palindromes, Parenthesis Match		
UNIT IV: Push Down Automata(PDA	Introduction, Formal Definition of PDA	01	T1,T2,R2,R7, R5
	Equivalence of Acceptance by Finite State & Empty stack	01	
	Problem solving/ Design PDA	01	
	PDA vs. CFL, Deterministic CFL.	01	
	Equivalence of PDA and CFG,	01	
	Case Study- Parsing and PDA:Top Down Parsing, Bottom Up Parsing Simulation showing use of PDA	02	
UNIT V: Turing Machines	Turing Machine Model, Formal Definition of TM	01	T1,T2,R4,R7
	Language Acceptability by Turing Machines	01	
	Design of TM	01	
	Description of TM, Technique for TM construction, Computing Function with TM	01	
	Variants of Turing Machines, TM's Halting Problem, Halting vs Looping, Turing Recognizable Language	01	

	Reducibility, Recursion Theorem, the model of Linear Bounded Automata.	01	
	Case Study- Algorithm using TM	01	
UNIT VI : Computability and Complexity Theorem	**Computability Theory:** Decidable and undecidable Problems, Church Turing Thesis	02	T1,R1
	Reducibility: Undecidable Problem that is recursively enumerable, simple undecidable problem.	02	
	Complexity Classes: Time and Space measures, The Class P, examples of problem in P, The Class NP , examples of problem in NP. P problem vs. NP problem, NP completeness and NP hard Problems	02	
	Case Study: Travelling Salesperson Problem, Post Correspondence Problem(PCP)	01	

Syllabus Related to Competitive Examinations (GATE, IES any other)

Relevance with GATE Examination

Regular Expressions (RE) , Regular Languages(RL's) and Finite Automata

Finite State Machine (FSM), Language accepted by FA, Deterministic and Nondeterministic FA(DFA and NFA), epsilon- NFA, FA with output: Moore and Mealy machines Building RE, Conversions: RE to DFA, DFA to RE,Pumping Lemma for Regular languages, Closure and Decision properties

Recursively enumerable sets and Turing machines

TM's Halting Problem, Language Acceptability by Turing Machines, Recursively enumerable Languages

Context free languages and Push-down automata:

Context Free Language, Equivalence of PDA and CFG, Parsing & PDA

Undecidability:

A Language that is not recursively enumerable, An un-decidable problem that is RE, Post Correspondence Problem, The Classes P and NP.

Topics Beyond Syllabus: Lex and Yacc

References Prescribed in University Syllabus

Text Books:

1. John E. Hopcroft, Rajeev Motwani, Jeffrey D.Ullman, —Introduction to Automata Theory Languages and Computationl, Addison-Wesley, ISBN 0-201-44124-1.
2. Daniel Cohen, "Introduction to Computer Theory", Wiley and Sons, ISBN 97881265133454

Reference books:

1. John Martin, —Introduction to Languages of The Theory of Computationl, 2nd Edition, Mc Graw Hill Education, ISBN-13: 978-1-25-900558-9, ISBN-10: 1-25-900558-5
2. Sanjeev Arora and Boaz Barak, —Computational Complexity: A Modern Approachl, Cambridge University Pre ss, ISBN:0521424267 9780521424264
3. J. Carroll & D Long, —Theory of Finite Automatal, Prentice Hall, ISBN 0-13-913708-4
4. Kavi Mahesh, —Theory of Computation : A Problem-Solving Approachl, Wiley India, ISBN10 8126533110
5. Michael Sipser, —Introduction to the Theory of Computationl, Cengage Learning, ISBN-13: 9781133187813
6. Vivek Kulkarni —Theory of Computationl, Oxford University Press, ISBN 0-19-808458

References other than UoP Syllabus:

1. Peter Linz, "An Introduction to Formal Languages and Automata" 6/e Mass Market

e- Books:

1. https://cglab.ca/~michiel/TheoryOfComputation/TheoryOfComputation.pdf
2. https://www.cs.virginia.edu/~robins/Sipser_2006_Second_Edition_Problems.pdf
3. http://ce.sharif.edu/courses/94-95/1/ce414-2/resources/root/Text%20Books/Automata/John%20E.%20Hopcroft,%20Rajeev%20Motwani,%20Jeffrey%20D.%20UllmanIntroduction%20to%20Automata%20Theory,%20Languages,%20and%20Computations-Prentice%20Hall%20(2006).pdf

MOOC's Courses Links:

1. https://nptel.ac.in/courses/106/104/106104148/
2. https://nptel.ac.in/courses/106/104/106104028/

Course Teacher

HOCD
Prof. M.S. Takalikar

7

SECTION

Course Delivery

7.1 Course Delivery

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043

Department of Electronics & Telecommunication Engineering

S.No.-27, Pune Satara Road, Dhankawadi, Pune-411043

Academic Year:2021 -2022

Couse Name: Control Systems

Date: Between 1st to 10th May'22 (SE V, VI, VII, VIII)

Course Coordinator Name: M.R.Kale

Couse Teacher Name:1. Dr. S.S.Narkhede

2. Ms. S.M.Hosamani

3. Mr. C.C.Pawar

1	**Title of the Innovative Teaching Learning Practice: Flipped Classroom (PID Controller)**
2	**Objectives: To facilitate learning through flipped classroom activity.**
3	**Description of Activity:** Students were provided with the study material (Notes, videos, video links, web content) on PID controller. Students were expected to study the topic thoroughly using the material. In a classroom, Q&A session was conducted on the topic to ensure the conceptual understanding of the topic along with the mathematical representations.
4	**Learning Outcomes:** By the end of this activity, students will be able to 1. Define P, I, D, PI, PD, PID controllers using mathematical expressions. 2. Discuss the characteristics of all the types of controllers and their use in the appropriate application with reasoning. 3. Design a basic controller to tune the system parameters. **(Write Activity Mapping with Program Outcomes /Program Specific Outcomes)**
5	**Target Students : tick appropriate** **F.E. [ ] S.E. [√] T.E. [ ] B.E. [ ]**
6.	**Snapshot: (About event conduction/live session)**

PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
3	3	3	-	-	3	-	3	3	-	3	-	3	3	-

Go to homepage 1

7. **Student Feedback:**
Rate the following questionnaire as linear scale 1 ,2,3,4,5 (1-as a lowest and 5 as a highest)

1. Would it help you during your study to Improve Engineering knowledge? (PO1)
2. Did you use Problem Analysis while finding solution to the given statement? (PO2)
3. Will you be able to design & develop a solution for similar engineering problem? (PO3)
4. Is the knowledge gained by you still relevant to the current engineering practices and society? (PO6)
5. Did you follow professional ethics during the completion of this activity? (PO8)
6. How was your involvement, individual/in a team? (PO9)
7. Will you be able to demonstrate the knowledge about PID controllers and apply this to your own work/project if required? (PO11)
8. Have you applied basic mathematical knowledge to study the topic? (PSO1)
9. Will you be able to design basic PID controller with given specifications? (PSO2)

MRK
M·R·Kale
Course Coordinator / Teacher Name & Signature

MVMunot 18/5/22
HOED
Dr. M. V. Munot

SECTION 8

Evaluation Method

8.1 Unit Test

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE – 43.
Department of Computer Engineering

Academic Year: 2021-22 (Semester-II)

UNIT TEST II

Year 2021-2022

Subject: Artificial Intelligence (310253)

Time: - 1 Hour Max. Marks: - 30

Instructions to the Candidates: -

All the questions are compulsory

Q. No.	Sub. Q. No.	Question	Marks	Unit No.	Cos Covered	CO Mapping
1	A	Explain Knowledge Based agents. Explain Wumpus World problem in detail.	5	4	3 & 4	3 & 4
1	B	What is First Order logic? Explain Quantifiers and Semantic of FOL.	5	4	3 & 4	3 & 4
2	A	Explain Inference in First Order logic. What is Resolution in First order logic? OR Explain Semantic Network. And Draw Semantic Network for below example Tom is Cat Tom is Grey in Color Tom is Mammal Tom is owned by Sam	5	5	4 & 5	4 & 5
2	B	Explain Forward Chaining. "The law says that it is crime for an American to sell weapons to hostile nations. The country Nono, an enemy of America, has some missiles, and all of its missiles were sold to it by Colonel West, who is American" **Now prove that West is a Criminal. With forward Chaining.**	5	5	4 & 5	4 & 5
3	A	Explain 1. Hierarchical Planning	5	6	4 & 6	4 & 6

Go to homepage 1

		2. Classical Planning Give suitable examples.				
3	B	Explain AI Architecture with AI components.	5	6	4 & 6	4 & 6

M. V. Mane

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE - 43.

UNIT TEST ATTENDANCE & MARKLIST

Academic Year: 2021-22 **(Semester -II)** **Unit test – II**
Class: TE-IV **Dept** : CE

Date: 28/4/22 **Subject:** AI **Supervisor Sign.:** Shruti

Sr.No.	Roll No.	NAME OF THE STUDENT	STUDENT SIGN	MARKS
1	31401	Adake Mitesh Manoj		19
2	31402	Agarwal Aryan Sudarshan	AB	AB
3	31403	Ambekar Chinmay Udayrao		16
4	31404	Belekar Atharva Mahendra		19
5	31405	Baheti Rajnandini Ashok		19
6	31406	Bhat Rohin Raj		21
7	31407	Bhtawadekar Ved Chintamani		20
8	31408	Bhosale Apeksha Balasaheb		19
9	31409	Biyani Shashwat Omprakash		15
10	31410	Chaudhari Tanaya Harish		14
11	31411	Cheke Akash Prabhakar	AB	AB
12	31412	Chindhade Adhish Mahesh		13
13	31413	Datar Chaitralee Shreenivas		21
14	31414	Dhadwad Urmila Namdeo		16
15	31415	Dhane Shreyash Rajendra		15
16	31416	Dhawade Kalyani Purushottam		15
17	31417	Dhaygude Pratik Vijay		16
18	31418	Dhomse Siddhi Kalyan		20
19	31419	Dhulshette Nilesh Sambhaji		12
20	31420	Dighole Pratik Pandharinath		16
21	31421	Edlabadkar Sania Ravindra		20
22	31422	Gaikwad Isha Prasanna		17
23	31423	Ganjale Omkar Suresh		12
24	31424	Gopale Priti Bansilal		16
25	31425	Hake Raj Subhash		18
26	31426	Hole Harshal Jagdish		16
27	31427	Jagtap Abhijeet Sudhakar		17
28	31428	Jagtap Swapnil Adhik		12
29	31429	Jain Dhruv		15
30	31430	Sonawane Jay Yuvraj		14
31	31431	Joshi Jigyarth		16
32	31432	Kandepalli Ganesh Suresh		16
33	31433	Adhe Kaustubh Prashant		16
34	31434	Khabale Priyanka Jalindar		19
35	31435	Kore Sharvari Vijay		14
36	31436	Kulkarni Shreyas Sanjay		15
37	31437	Lanjewar Kartik Abhay		21
38	31438	Manchare Vijay Babasaheb		15
39	31439	Merchant Burhanuddin Abizer		21
40	31440	Mohite Shreyas		15
41	31441	Borse Mrudul Prashant		15
42	31442	Murtadak Sanket Somnath		9
43	31443	Mutha Anuj Mahendra		23
44	31444	Oswal Mehul Jitendra		19
45	31445	Patankar Shantanu Deepak		20
46	31446	Patil Chirag Chainesh		19
47	31447	Patil Nidhi Sunil		15
48	31448	Jadhav Pavan Ravindra		18

PUNE INSTITUTE OF COMPUTER TECHNOLOGY
DHANKAWADI, PUNE - 43.

UNIT TEST ATTENDANCE & MARKLIST

Academic Year: 2021-22 **(Semester -II)** **Unit test – II**
Class:TE-IV **Dept** : CE

Date: 28/4/22 **Subject:** AI **Supervisor Sign.:** shruti

Sr.No.	Roll No.	NAME OF THE STUDENT	STUDENT SIGN	MARKS
49	31449	Pitale Kaivalya Dattatraya		21
50	31450	Purohit Amit Hanamant		16
51	31451	Ranajkar Akash Atulrao		14
52	31452	Rathod Roshani Ganesh		20
53	31453	Sabnis Abhishek Narayan		16
54	31454	Sakure Parth Sanjay	P.S.Sakure	14
55	31455	Agrawal Sarang		16
56	31456	Sawant Umesh Anandrao		17
57	31457	Shah Jash Pragnesh		21
58	31458	Shinde Aditya Narhari		16
59	31459	Desai Snehal Ashok		18
60	31460	Surve Amartya Vedprakash		14
61	31461	Tayade Om Ashok		16
62	31462	Thite Ashutosh Sanjay		16
63	31463	Thosar Dhananjay Kamlakar		18
64	31464	Tondase Priyanka Prakash		17
65	31465	Uttarwar Chaitanya Jitendra		17
66	31466	Sidam Vaibhavi Hemant		16
67	31467	Vidye Rushikesh Ganesh		18
68	31468	Vyawahare Aditya Jagdish		15
69	31469	Vyawahare Rajat Rajesh		16
70	31470	Wagh Snehadeep Bhaskar		20
71	31471	Waghmare Pratapsinh Shivaji		18
72	31472	Wakchaure Siddhi Kiran		20
73	31473	Zalte Mahesh Shantaram		20
74	31474	Zaware Pratik Rajaram		19
75	31475	Rathod Manisha Harachand	ManishaR	16

PRESENT -	73
ABSENT :-	2
PASS :-	73

Subject Teacher Name: M.V.More **HOD (sign):**
Sign:

8.2 Endsem

Total No. of Questions—8] [Total No. of Printed Pages—3

Seat No.	

[5352]-563

S.E. (Computer Engineering) (I Sem.) EXAMINATION, 2018

DATA STRUCTURE & ALGORITHMS

(2015 PATTERN)

Time : Two Hours Maximum Marks : 50

N.B. :— (*i*) Attempt Q. No. 1 *or* Q. No. 2, Q. No. 3 *or* Q. No. 4, Q. No. 5 *or* Q. No. 6, Q. No. 7 *or* Q. No. 8.

(*ii*) Draw neat diagrams wherever necessary.

(*iii*) Assume suitable data, if necessary.

1. (*a*) Define and explain the following terms : [3]

(*i*) Data

(*ii*) Data structure

(*iii*) Algorithm.

(*b*) Give pseudo C/C++ code to reverse the string. [3]

(*c*) Explain the divide and conquer strategy with suitable example. Comment on its time complexity. [6]

Or

2. (*a*) Define and explain the following terms : [4]

(*i*) Sequential organization

(*ii*) Linear data structure

(*iii*) Ordered list

(*iv*) Sparse matrix.

P.T.O.

(*b*) Explain polynomial representation using an array with suitable example. [2]

(*c*) Explain the Asymptotic notation Big O, Omega and Theta with suitable example. [6]

3. (*a*) Write a pseudo C/C++ code to insert node into a singly linked list. [3]

(*b*) Explain Generalised linked list with suitable example. [3]

(*c*) Explain evaluation of postfix expression using stack with suitable example. [6]

Or

4. (*a*) Give pseudo C/C++ code to implement the following operations on linked stack : [4]

(*i*) Create

(*ii*) Push data.

(*b*) Explain the stepwise conversion using stack for the given infix expression to the postfix expression : [2]

A * B + C * D.

(*c*) Write pseudo C/C++ code for polynomial addition using singly linked list. [6]

5. (*a*) Define the following terms with example : [6]

(*i*) Linear queue

(*ii*) Circular queue

(*iii*) Priority queue.

SECTION 9

Result Analysis

PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE - 411043

Department of Computer Department
S.No.-27, Pune Satara Road, Dhankawadi, Pune-411043

NOV 2021-2022 RESULTS
T.E. COMPUTER 2021 SEM1

SUBJECT WISE % RESULT

S.N.	SUBJECT(SEM-I)	TH %	TW %	PR %	OR %
1	DBMS	100			
2	TOC	100			
3	SPOS	100			
4	CNS	100			
5	DS	100			
6	HI	100			
7	STC/TW		100		
8	DBMS/TW		100		
9	LP1/TW		100		
10	CNS/TW		100		
11	DBMS/PR			100	
12	LP1/PR			99.69	
13	CNS/OR				100
14	HON	100			
15	HON_PR			100	

OVERALL RESULT

TOTAL NO OF STUDENT APPEARED = 333	
RESULT	NO OF STUDENTS
ALL CLEAR:	331(99.39)
DISTINCTION (> 7.75 SGPA)	331(0.99)
FIRST CLASS (6.75 TO 7.74 SGPA)	-
HIGH.SECOND CLASS (6.25 TO 6.74 SGPA)	-
SECOND CLASS (5.5 TO 6.24 SGPA)	-
FAIL	2(0.0060)

Go to homepage 1

CLASS TOPPER

S.N.	NAME OF STUDENT	SGPA
1ST	ADAKE MITESH MANOJ	10
	ADITYA SONAWANE	
	AGRAWAL DEEPA NITESH	
2ND	APURVA	9.95
	BHUJBAL VAISHNAVI MAHESH	
	CHAUDHARI TANAYA HARISH	
3RD	ALAMAD AISHWARYA SURESH	9.9
	ASALKAR MANSWI MANISH	
	AWATHARE SUSHANT SUDHAKAR	

SUBJECT TOPPERS

S.N.	SUBJECT(SEM-I)	NAME OF THE STUDENT	MARKS OBTAINED (OUT OF 100)
1	DBMS	AGRAWAL DEEPA NITESH	100
		AKSHAT VINAY SHARMA	
		ANJANKAR AOVI GAJANAN	
2	TOC	ADAKE MITESH MANOJ	100
		AGARWAL ARYAN SUDARSHAN AGRAWAL DEEPA NITESH	
3	SPOS	ADAKE MITESH MANOJ	100
		ADITYA SONAWANE	
		AGARWAL ARYAN SUDARSHAN	
		ADAKE MITESH MANOJ	

Go to homepage 1

4	CNS	ADITYA SONAWANE	100
		AGARWAL ARYAN SUDARSHAN	
5	DS	AHMED ABDUL NAIM SIDDIQUI	100
		ARYAN CHATTERJEE	
		BADAMIKAR MEDHA MANOJ	

Go to homepage 1

10

SECTION

Course Attainment

10.1 Test Attainment Computation-Sample

TOC UT_I and II AY:2021-22

UT-I

		16	14	
Roll no	CO1	CO2		Total
21137		11	14	25
21311		10	13	23
31101		9	13	22
31102		10	13	23
31103		10	13	23
31104		10	13	23
31105		9	11	18
31106		12	13	25
31107		8	13	21
31108		10	13	23
31109		8	13	21
31110		10	13	23
31111		10	13	23
31112		8	13	21
31113		10	13	23
31114		10	13	23
31115		11	13	24
31116		10	13	23
31117		10	13	23
31118		10	13	23
31119		10	13	23
31120		10	13	23
31121		10	13	23
31122		10	13	23
31123		10	13	23
31124		10	13	23
31125		10	13	23
31126		10	13	23
31127		10	13	23
31128		12	13	25
31129		10	13	23
31130		10	13	23
31131		10	13	23
31132		10	13	23
31133		8	13	21
31134		12	13	25
31135		11	13	24
31136		10	13	23
31138		10	13	23
31139		10	13	23
31140		10	13	23

31141	10	13	23
31142	10	13	23
31143	8	13	21
31144	12	13	25
31145	10	13	23
31146	8	13	21
31147	10	13	23
31148	10	13	23
31149	10	13	23
31150	12	12	24
31151	10	13	23
31152	10	13	23
31153	10	13	23
31154	8	13	21
31155	10	13	23
31156	10	13	23
31157	10	13	23
31158	10	13	23
31159	11	11	22
31160	10	13	23
31161	8	12	20
31162	10	13	23
31163	10	13	23
31164	10	13	23
31165	10	13	23
31166	10	13	23
31167	13	13	26
31168	11	13	24
31169	11	13	24
31170	10	14	24
31171	10	13	23
31172	13	13	26
31173	10	13	23
31174	8	13	21
31175	10	13	23
31176	10	13	23
31177	10	13	23
31178	10	13	23
31179	10	13	23
31180	10	13	23
31181	10	13	23
31182	10	13	23
31183	10	13	23
31184	10	13	23
31185	10	10	20
31186	8	13	23
31201	7	12	19

Go to homepage 1

31466	9	13	22
31467	10	13	23
31468	13	14	27
31469	13	14	27
31470	13	14	27
31471	13	14	27
31472	10	13	23
31473	13	14	27
31474	14	13	29
31475	3	5	8

Present	333	
CO Mapping	CO1	CO2
Marks	16	14
Target for Pass	6.4	5.6
How many pass	324	330
%passing Level1	97.297	99.099
Target for first class	9.6	8.4
How many first class	276	327
%FC (>=60)	82.883	98.198
Target for dist	10.56	9.24
How many dist	276	325
% Distinction (>=66)	82.883	97.598
level1	1	1
level2	2	2
level3	3	3
weighted average	1	1

UT Target(2021-22	
PASS (Level1)	77%
FC (level2)	58%
Dist(level3)	51%

MARKS	6	8	16	
Roll no	CO3	CO4	CO5	Total
31101	6	7	14	27
31102	6	7	14	27
31103	6	7	14	27
31104	6	7	14	27
31105	6	5	8	19
31106	6	7	14	27
31107	6	7	14	27
31108	6	7	13	26
31109	6	5	13	24
31110	6	7	14	27
31111	6	7	14	27
31112	6	7	14	27
31113	6	7	14	27
31114	6	7	14	27
31115	6	7	14	27
31116	6	7	14	27
31117	6	7	13	26
31118	6	7	14	27
31119	6	7	14	27
31120	6	7	14	27
31121	6	7	14	27
31122	6	7	14	27
31123	6	7	14	27
31124	6	7	14	27
31125	6	7	14	27
31126	6	7	14	27
31127	6	7	14	27
31128	6	7	14	27
31129	6	7	14	27
31130	6	7	14	27
31131	6	7	14	27
31132	6	7	14	27
31133	6	7	14	27
31134	6	7	14	27
31135	6	7	14	27
31136	6	7	14	27
31137	6	7	14	27
31138	6	7	14	27
31139	6	5	14	25
31140	6	7	14	27

Go to homepage 1

31467	6	7	13	26
31468	6	7	13	26
31469	4	5	14	23
31470	6	7	13	26
31471	6	7	13	26
31472	6	7	14	27
31473	6	5	14	
31474	6	7	14	
31475	3	3	9	

Unit test-_II

Present **331**

CO Mapping	CO3	CO4	CO5
Target for Pass	2.4	3.2	6.4
How many pass	327	329	331
%passing	98.792	99.396	100
Target for first class	3.6	4.8	9.6
How many first class	326	328	329
% (>=60)	98.489	99.094	99.396
Target for dist	3.96	5.28	10.56
How many dist	303	302	328
% Distinction (>=66)	91.541	91.239	99.094
level1	1	1	1
level2	2	2	2
level3	3	3	3
weighted average	1	1	1

UT Target(2021-22	
PASS	77%
FC	58%
Dist	51%

Target		
	% target(2021-22)	
Total	Unit test	SPPU
Distinction		
First class		
Pass class		

No of stud present for exam 333 333	
CO Mapping	External Assessment(2021-22)
Target for Pass	95%
How many pass	100.00%
Target for first class	74%
How many first class	100.00%
Target for distinction	61%
How many distinction	100.00%
level1	1
level2	2
level3	3

	External Assessment(70%)
level1	1
level2	2
level3	3
Weighted average = (level 1 + level 2 + level 3)	1
External Assessment(70%)	0.7

Internal and external CO attainment AY 2021-22

Internal Attainment out of (30%)	
	Attainment
CO1	1
CO2	1
CO3	1
CO4	1
CO5	1
Average	1
Out of 30%	0.3

External Assessment(70%)	
level1	1
level2	2
level3	3
Weighted average	1
External Assessment(70%)	0.7

Final attainment

Internal Attainment(30%)	0.3
External Assessment(70%)	0.7
TOC CO Attainment 2021-22	1

SECTION 11

Course Coordinate Report

11.1 Course Coordinate Report

Department of Electronics &Telecommunication Engineering

Course Coordinator's Report

Subject: Electronic Circuits (204181) **AY: 2021-22 (Sem-1)**

Course Coordinator: Dr. M. A. Gangarde **Date: 04.08.2021**

The meeting with Electronic Circuits teachers was taken on 04/08/2021 (Wednesday) for coordination with all subject teachers and smooth conduction of semester one of AY 2021-2022.

Following points discussed in meeting

1. Discussed about Course Plan of academic year 2021-2022, CO attainment, List of Experiments, Schedule and Lab Manual.
2. Planed to upload revised syllabus and list of experiments on teams.
3. Scheduled simulation software (Multisim) installation training session for students
4. Discussed about innovative teaching learning methods/techniques
5. Decided to share free online learning resources (e-book, pdf, websites, courses) with students
6. Planed to arrange industry expert session for students to boost interest in electronic subjects.
7. Importance of subject for higher education, R&D, in society etc.
8. Discussed to arrange placed students session in class for placement awareness and building confidence during placement process.

Name and Signature of Subject Teacher

Dr. M. A. Gangarde, Dr. S. S. Narkhede, Ms. S. M. Hosamni

Go to homepage 1

Department of Electronics &Telecommunication Engineering

Course Coordinator's Report

Subject: Electronic Circuits (204181) **AY: 2021-22 (Sem-1)**

Course Coordinator: Dr. M. A. Gangarde **Date: 04.08.2021**

The meeting with Electronic Circuits teachers was taken on 04/08/2021 (Wednesday) for coordination with all subject teachers and smooth conduction of semester one of AY 2021-2022.

Following points discussed in meeting

1. Discussed about Course Plan of academic year 2021-2022, CO attainment, List of Experiments, Schedule and Lab Manual.
2. Planed to upload revised syllabus and list of experiments on teams.
3. Scheduled simulation software (Multisim) installation training session for students
4. Discussed about innovative teaching learning methods/techniques
5. Decided to share free online learning resources (e-book, pdf, websites, courses) with students
6. Planed to arrange industry expert session for students to boost interest in electronic subjects.
7. Importance of subject for higher education, R&D, in society etc.
8. Discussed to arrange placed students session in class for placement awareness and building confidence during placement process.

Name and Signature of Subject Teacher

Dr. M. A. Gangarde, Dr. S. S. Narkhede, Ms. S. M. Hosamni

Go to homepage 1