

Rajarambapu Institute of Technology, Sakharale

(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)

Curriculum Structure and Evaluation Scheme With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Class: S. Y. B. Tech

Semester: III

		_		Semester: III							
				chin hem			Ev	aluatio	1 Schen	ne	
Course	Course				, s	a	Theory (Marks)				actical [arks]
Code	Course	L	Т	P	Credits	Scheme	Max	Marl	n. % ks for sing	Max.	Min. % Marks for Passing
						ISE	20				
CI2011	Discrete Mathematics	3	1	l	4	UT1	15	40	40		
C12011	Discrete Mathematics	٦	1		7	UT2	15		40		
	2					ESE	50	40			
						ISE	20				
CI2031	Computer Networks	3			3	UT1	15	40	40		
C12031	Compater Networks	"				UT2	15		40		
						ESE	50	40		****	
	D					ISE	20				
CI2051	Data Structures and	3			3	UT1	15	40	40		
C12031	Algorithms	١				UT2	15		40	3	
						ESE	50	40			
						ISE	20	40			
CI2071	Digital Electronics	3	-		3	UT1	15		40		-
C12071	Digital Electronics	١				UT2	15		40		
						ESE	50	40			
CI2091	Commutan Naturalis I ah			2	1	ISE				50	50
C12091	Computer Networks Lab				1	ESE				50	50
010111	Data Structures and			4		ISE			-	50	50
CI2111	Algorithms Lab		-	4	2	ESE		-	-	50	50
CI2131	Digital Electronics Lab		-	2	1	ISE			-	50	50
C12151	Digital Electronics Lab				1	ESE		-	-	50	50
CI2151	Object Oriented Design	3	1	2	4	ISE			-	50	50
012131	and Programming Lab	,		۲		ESE		-	-	50	50
CI2171	Technical Aptitude-I	-	1	2	1	ESE		-	-	100	50
-	Open Elective-II Choice Based Soft Skill Program-I		ŭ	2	1	ISE				100	50
	TOTAL	15	01	14	23		-		-		

ISE = In Semester Evaluation, UT-1 = Unit Test-1, UT-2 = Unit Test-2 ESE = End Semester Examination

Total Contact Hours/week

: 30

Total Credits

: 23

Technical Aptitude Courses: Discrete Mathematics, Computer Networks, Data Structures and Algorithms, Digital Electronics





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Curriculum Structure and Evaluation Scheme
With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Open Elective-II

Sr. No.		Subject Name	Course Code
1.	Choice Based Soft	Personal Effectiveness & Body	SH2593
	Skill Program-I & II	Language	
2.		Interpersonal Skills (Work life	SH2613
		Balance)	
3.		Leadership & Public Speaking	SH2633
4.		Innovation Tools and Methods for	SH2693
		Entrepreneurs	
5.		German Language – Basic Level	SH2733
6.	*	Japanese Language – Basic Level	SH2713

Note:

- 1. A student has to complete any two courses out of six choices offered under Choice Based Soft Skills Programme. A course in each semester will be allocated without any repetition.
- 2. The students who have completed 'German Language Lab' or 'Japanese Language Lab' in F.Y. B. Tech should not give their choice for 'German Language Basic Level' and 'Japanese Language Basic Level'. Such students may give their choices for 'German Language Advanced Level' and 'Japanese Language Advanced Level' (batch sizes 40 each) in the S.Y. B. Tech Sem-IV only.
- 3. The students who will select and will successfully complete 'German Language Basic Level' and 'Japanese Language Basic Level' in S.Y. B. Tech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.





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Curriculum Structure and Evaluation Scheme With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Class: S. Y. B. Tech

Semester, IV

Class:	S. I. B. Tech					Semester: IV						
				achii hem			Evaluation Scheme					
Course Code	Course				its	ne	The	ory (Ma	rks)		actical Aarks)	
Code		L	Т	P	Credits	Scheme	Max	Mar	n. % ks for ssing	Max.	Min. % Marks for Passing	
	Mathematics for Data					ISE	20					
SH2043		3	1	-	4	UT1	15	40	40			
	Analytics					UT2	15		1 40			
		-	+	+-		ESE	50	40				
						ISE	20	1				
CI2021	Automata Theory	3	1		4	UT1	15	40	40			
				1		UT2	15		40			
			_	_		ESE	50	40				
		1				ISE	20	40				
CI2041	Software Engineering	3			3	UT1	15		40			
		I	1			UT2	15		1 40			
	<u> </u>	-	-	-		ESE	50	40				
1	1					ISE	20		40			
CI2061	CI2061 Computer Organization	3			3	UT1	15	40				
				1		UT2	15		1 70			
			-	_		ESE	50	40				
	* 1					ISE	20	40	40			
CE2262	Engineering Mechanics	2			2	UT1	15					
		-			_	UT2	15					
						ESE	50					
CI2081	Python lab	2		2	3	ISE		-		50	50	
	- 7	ļ <u> </u>		_		ESE		-		50	50	
CE2282	Engineering Mechanics Lab			2	1	ISE		-		50	50	
	Lau					ESE			-	50	50	
CI2101	Technical Aptitude-II			2	1	ESE			-	100	50	
SH2173	Environmental Science	14			,	ISE	50	40	9000			
3172173	Livironniental Science	1*			1	ESE	50	40	40			
SH2603	Environmental Science Project	-	-	2	1	ISE		-	-	100	50	
9	Open Elective- III Choice Based Soft Skill Program-II	-	-	2	1	ISE			-	100	50	
	TOTAL	17	2	8	24							

ISE = In Semester Evaluation, UT-1 = Unit Test-1, UT-2 = Unit Test-2 ESE = End Semester Examination

Total Contact Hours/week : 29 **Total Credits** : 24

Technical Aptitude Courses: Mathematics for Data Analytics, Automata Theory, Software Engineering, Computer Organization

Internship Note: Students are required to undergo industrial / field training of minimum four weeks in the vacation of Semester-IV and its evaluation will be carried out in the Semester-V. Note*:Department should allot one extra lecture to Environment Science in time table.

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Department of Computer Science and Information Technology

Open Elective-III

Sr. No.		Subject Name	Course Code
1.	Choice Based Soft	Personal Effectiveness & Body	SH2593
	Skill Program-I & II	Language	
2.		Interpersonal Skills (Work life	SH2613
		Balance)	
3.		Leadership & Public Speaking	SH2633
4.		Innovation Tools and Methods for	SH2693
		Entrepreneurs	
5.		German Language – Basic Level	SH2733
6.		Japanese Language – Basic Level	SH2713

Note:

- 1. A student has to complete any two courses out of six choices offered under Choice Based Soft Skills Programme. A course in each semester will be allocated without any repetition.
- 2. The students who have completed 'German Language Lab' or 'Japanese Language Lab' in F.Y. B. Tech should not give their choice for 'German Language Basic Level' and 'Japanese Language Basic Level'. Such students may give their choices for 'German Language Advanced Level' and 'Japanese Language Advanced Level' (batch sizes 40 each) in the S.Y. B. Tech Sem-IV only.
- 3. The students who will select and will successfully complete 'German Language Basic Level' and 'Japanese Language Basic Level' in S.Y. B. Tech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.





Rajarambapu Institute of Technology, Sakharale

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Curriculum Structure and Evaluation Scheme

With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Class: T. Y. B. Tech

Semester: V

		Te	achin	g Sc	heme		Ev	aluatio		ne	
Course					ts	Je Je	The	ory (Mai	rks)		actical Iarks)
Code	Course	L	Т	P	Credits	Scheme	Max	Mar	n. % ks for ssing	Max.	Min. % Marks for Passing
						ISE	20				
CI3011	Operating Systems	3	-		3	UT1	15	40	40		
						UT2	15] "		
	-	-	_	-		ESE	50	40			
	Databasa Managamant					ISE	20	4	1		
CI3031	Database Management	3			3	UT1	15	40	40		
	Systems	1	1			UT2	15	ļ] ~~		
						ESE	50	40			
	Design and Australia of					ISE	20				
CI3051	Design and Analysis of	3			3	UT1	15	40	40		
01000	Algorithms					UT2	15		1 70		
						ESE	50	40			
						ISE	20				
	Program Elective-I	3			3	UT1	15	40	40		
						UT2	15] ""		
						ESE	50	40			
CI3131	JAVA Programming Lab	3		2	4	ISE				50	50
		-		_		ESE		-	-	50	50
CI3151	Database Management		-	2	1	ISE		-		50	50
	Systems Lab					ESE			-	50	50
CI3171	Operating Systems Lab			2	1	ISE				50	50
		-		_		ESE		-	 I	50	50
						ISE UT1	20	40			
SH3033	Scholastic Aptitude I	2*	-	-	2	UT2	15 15	40	40		
						ESE	50	40			
CI3191	Summer Internship (4 Weeks)		-	-	2	ISE				100	50
CI3211	Technical Aptitude-III	-	-	2	1	ESE				100	50
SH3011	Indian Constitution	2		-	Audit	ISE	100	50	(P/N)		
A. 119 150 150 150 150 150 150 150 150 150 150	TOTAL	19	00	08	23				-		

ISE = In Semester Evaluation, UT-1 = Unit Test-1, UT-2 = Unit Test-2 ESE = End Semester Examination

Total Contact Hours/week

: 27

Total Credits

: 23

Technical Aptitude Courses: Operating Systems, Database Management Systems, Design and analysis of algorithms

Note*: Department should allot one extra lecture to Scholastic Aptitude – I in time Table.



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Rajarambapu Institute of Technology, Sakharale (An Autonomous Institute, affiliated to Shivaji University, Kolhapur)

Curriculum Structure and Evaluation Scheme
With effective from 2020-21 [2020-24 & 2021-25 Batch]
Department of Computer Science and Information Technology

Program Elective I

Sr.No.	Course Code	Course
1.	CI3071	Organizational Management Behavior
2.	CI3091	IPR and Cyber Law
3.	CI3111	Software Modeling and Design
4.	CI323	Internetworking Protocols





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Curriculum Structure and Evaluation Scheme

With effective from 2020-21 [2020-24 & 2021-25 Batch]
Department of Computer Science and Information Technology

Class: T. Y. B. Tech

Semester: VI

		Te	achin	g Sc	heme		Ev	aluatio	Schen	ne	
Course					Credits	e e	The	ory (Mai	·ks)		actical Iarks)
Code	Course	L	T	P		Scheme	Max	Mar	Min. % Marks for Passing		Min. % Marks for Passing
						ISE	20				
CI3021	Information Security	3	-		3	UTI	15	40	40		
	Total Control of Contr					UT2	15	40	"		
		+	├	₩		ESE	50	40			
			İ			ISE	20				
	Program Elective-II	3			3	UT1	15	40	40		
er an	36657			1		UT2	15				
		-		_		ESE	50	40			
	1					ISE	20				
	Open Elective-IV	3		-	3	UT1	15	40	40		****
						UT2	15	40			
		-		\vdash		ESE	50	40			
						ISE	20	40	1		
SH3021	SH3021 Biology for Engineers	3	-	-	3	UT1	15	40	40		
						UT2 ESE	15 50	40			
	Front End Web	+		-				40			
CI3121		2		4	4	ISE				50	50
	Technology Lab			_		ESE				50	50
CI3201	Mobile Application Development Lab	2		2	3	ISE		-		50	50
	Development Lab					ESE		-		50	50
						ISE	20				
SH3053	Scholastic Aptitude II	2*			2	UT1	15	40	40		
5115055	Senotable riplicate if	-				UT2	15		40		
						ESE	50	40			
CI3241	Technical Aptitude-IV			2	1	ESE			-	100	50
CI3221	Capstone Project phase-I	-	-	2	2	ISE		_			50
SH304	Psychology for Engineers	1*	_	_	1	ISE	40	4	0		
311304	1 sychology for Engineers	1		_	1	ESE	40	4	0		
	TOTAL	19	00	10	25				-		-

ISE = In Semester Evaluation, UT-1 = Unit Test-1, UT-2 = Unit Test-2 ESE = End Semester Examination

Total Contact Hours/week

: 29

Total Credits

: 25

Technical Aptitude Courses

: C Programming, C++ Programming, Compiler Design

Note*: Department should allot one extra lecture to Aptitude Training-II in time table.



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Program Elective II

Sr.No.	Course Code	Course Name	
1.	CI3041	Data Mining	
2.	CI3061	Sensor Network	
3.	CI3081	Machine Learning Algorithms	
4.	CI3101	Computer Graphics	

Open Elective-IV

Sr. No.	Branch	Course Code	Open Elective-IV Courses
1	Automobile	OE3023	Reliability Engineering
2	Automobile	OE3043	Renewable Energy Sources
3	Civil	OE3063	Environmental Impact Assessment
4	Civil	OE3083	Material Management.
5	Computer	OE3103	Network Administration
6	Computer	OE3123	Information Technology Foundation Program
7	E&TC	OE3143	Mechatronics
8	Electrical	OE3163	Engineering Materials
9	Electrical	OE3181	Industrial Drives
10	CS&IT	OE336	Neural Network and Deep Learning
11	CS&IT	OE3221	Cyber Forensics
12	MBA	OE3243	Marketing for Engineers
14	Mechanical	OE3263	Aircraft Systems
14	Mechanical	OE3283	Supply Chain Management
15	Mechanical	OE3301	New Product Design and Development
16	Mechanical	OE3323	Entrepreneurship Development
17	Mechanical	OE3341	Research Methodology





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Curriculum Structure and Evaluation Scheme With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Class: Final Year B. Tech.

Semester: VII

				chin hem			Ev	aluatio	n Schen	ne	
Course	Course				ts		Theo	ry (Mar	·ks)		actical [arks)
Code		L	Т	P	Credits	Scheme	Max	Min. % Marks for Passing		Max.	Min. % Marks for Passing
						ISE	20				
CI4011	Cloud Computing	3			3	UT1	15	40	40		
011011	Cloud Companing			ı		UT2	15		40		
		_				ESE	50	40			
	-					ISE	20				
	Program Elective III	3			3	UT1	15	40	40		
	Trogram Elective III	١				UT2	15		40		
						ESE	50	40	1		
						ISE	20				
	Program Elective-IV	3		l	3	UT1	15	40	40		
	l rogram Electricati	١			3	UT2	15		40	2	
						ESE	50	40			
						ISE	20	40	40		
	Program Elective-V	3			3	UT1	15				
	110gram Diecerye-y	"	_		3	UT2	15				
						ESE	50	40			
CI4331	Web Technology Lab	2	,	4	4	ISE		-		50	50
C14331	Web reciniology Lab			7	-1	ESE			-	50	50
	Program Elective Lab	T_	_	2	2	ISE		-	-	50	50
	1 Togram Elective Lab			2		ESE				50	50
CI4271	Capstone Project Phase-II	-	_	4	4	ISE		-		100	50
511271	Capsione i roject i nase-n					ESE		-	-	100	50
	TOTAL	14	00	10	22				-		

ISE = In Semester Evaluation, UT-1 = Unit Test-1, UT-2 = Unit Test-2 ESE = End Semester Examination

Total Contact Hours/week

: 25

Total Credits

: 22





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Department of Computer Science and Information Technology

Program Elective III

Sr.No.	Course Code	Course Name	
1.	CI4031	Soft Computing	
2.	CI4051	Human Computer Interaction	
3.	CI4071	Software Testing	
4.	CI409	Software Project Management	

Program Elective IV

Sr.No.	Course Code	Course Name	
1.	CI4111	Internet of Things	
2.	CI413	Bioinformatics	
3.	CI4151	Computer Vision	
4.	CI4171	Data Analytics	

Program Elective V

Sr.No.	Course Code	Course						
1.	CI4191	Blockchain Technology						
2.	CI4211	Virtual Reality and Augmented Reality						
3.	CI4231	Parallel Computing						
4.	CI4251	Big Data						

Program Elective Lab

Sr.No.	Course Code	Course Name						
1.	CI429	PHP						
2.	CI4311	R Programming Lab						
3.	CI4331	Asp. Net MVC Lab						





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Curriculum Structure and Evaluation Scheme

With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Track I: Industry Internship & Projects (IIP)

Class: Final Year B. Tech Semester: VIII Teaching **Evaluation Scheme** Scheme Course Practical (Marks Theory Credits Course Scheme Code (Marks %) %) T P L Max. Min. for Max. Min. for passing passing Finance for Engineers 25 40 **ISE OE4381** 2 2 40 (Online Course) **ESE** 40 75 ---Engineering **ISE** 25 40 Management & **OE4361** 2 2 40 **Economics ESE** 40 75 (Online Course) **ISE** 50 50 IP4023 Internship & Project 8 ESE 50 ------50

12

ISE = In Semester Evaluation, ESE = End Semester Examination

Total Contact Hours/week

TOTAL

: 4

4

Total Credits

: 12

Note:

- 1] Weekly Contact hours are not mentioned in IP4023 as student is expected to be in industry regularly for 20 weeks. However, student needs to report to Institute mentors as and when required.
- 2] For online course, lecture videos of each unit will be made available through college platform to the students. For each unit there will be separate assignment. Students need to submit all assignments within specified time.

Weightage: 25% weightage for unit wise assignments + 75% weightage for final exam. Final exam will be held at college campus.





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Curriculum Structure and Evaluation Scheme

With effective from 2020-21 [2020-24 & 2021-25 Batch]

Department of Computer Science and Information Technology

Track II: Undergraduate Research Experience (URE)

Final Year B. Tech Class: Semester: VIII **Teaching Evaluation Scheme** Scheme Course Practical (Marks Theory Credits Course Scheme Code %)_ (Marks %) T L P Max. Min. for Max. Min. for passing passing Finance for Engineers 25 40 **ISE** OE4381 2 2 40 (Online Course) **ESE** 75 40 Engineering ISE 25 40 Management & **OE4361** 2 2 40 **Economics** ESE 40 75 ---(Online Course) **ISE** 50 50 **RE4043** 8 8 Research Project ESE 50 50

ISE = In Semester Evaluation, UT-I = Unit Test-I, UT-2 = Unit Test-2 ESE = End Semester Examination

8

12

4

Total Contact Hours/week

TOTAL

: 12

Total Credits

`: 12

Note:

1] For online course, lecture videos of each unit will be made available through college platform to the students. For each unit there will be separate assignment. Students need to submit all assignments within specified time.

Weightage: 25% weightage for unit wise assignments + 75% weightage for final exam. Final exam will be held at college campus.





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Track III: Entrepreneurship Development (ED)

Class: Final Year B. Tech Semester: VIII

	Course	Teaching Scheme				Evaluation Scheme					
Course Code		L	Т	P	Credits	me	Theory (Marks %)			Practical (Marks %)	
						Scheme	Max	fo	in. or sing	Max	Min. for passing
ED4103	Project Management	2*	-	-	2	ISE	20	40			
						UT-1	15		40		
						UT-2			40		
						ESE	50	40			
ED4043	Commercial Aspects of the Project		-	-	121	ISE	20	40	40		
		2*				UT-1	15				
						UT-2	15		40		
						ESE	50	40			=:
ED4063	Entrepreneurship Development Program (EDP)	-	-	-	1	ISE				100	50
E114083 1	Entrepreneurship Development Project		-	7	7	ISE				50	50
					,	ESE				50	
/ /	Total	4	-	7	12						

Examination **Total Contact Hours/week**

: 11

Total Credits

: 12

Note:

1] * One extra lecture to be allotted to Project Management and Commercial Aspects of the Project course in time table.

