K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Class: S. Y. B. Tech   **Semester:** III

Course Code	Course	L	T	P	Credits	Scheme	Theory (Marks) Max	Theory Min. % Marks for Passing		Practical (Marks) Max.	Practical Min. % Marks for Passing
CI201	Discrete Mathematics	3	1	--	4	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			----	---
						ESE	50	40		----	----
CI203	Computer Networks	3	--	--	3	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			----	----
						ESE	50	40		----	----
CI205	Data Structures and Algorithms	3	--	--	3	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15				
						ESE	50	40		----	----
CI207	Digital Electronics	2	--	--	2	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			---	----
						ESE	50	40		----	----
CI209	Computer Networks Lab	--	--	2	1	ISE	----	----		50	50
						ESE	----	----		50	50
CI211	Data Structures and Algorithms Lab	--	--	4	2	ISE	----	----		50	50
						ESE	---	----		50	50
CI213	Digital Electronics Lab	--	--	2	1	ISE	----	----		100	50
CI215	Object Oriented Design and Programming Lab	2	--	2	3	ISE	----	----		50	50
						ESE	----	----		50	50
CI217	**Comprehensive Exam-I**	--	--	--	1	ESE	----	----		100	50
	Open Elective-II Choice Based Soft Skill Program-I	--	--	2	1	ISE	---	---		100	50
	TOTAL	13	01	12	21	---	---	---		---	---

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

Total Contact Hours/week   : 26
Total Credits   : 21
Comprehensive Exam Subjects : Discrete Mathematics, Computer Networks, Data Structures and Algorithms, Digital Electronics
Note: Open Elective-II - Students should select any one course from list of choice based soft Skill Program-I

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Choice Based Soft Skill Program I

Sr.No.	Course Code	Course Name
1.	SH2592	Personal Effectiveness & Body Language
2.	SH2612	Interpersonal Skills (Work life Balance)
3.	SH2632	Leadership & Public Speaking
4.	SH2692	Innovation Tools and Methods for Entrepreneurs
5.	SH2732	German Language – Basic Level
6.	SH2712	Japanese Language – Basic Level

Note for Choice Based Soft Skill Program I & II:

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 SYBTech Sem-IV only.

3. The students who will select and will successfully complete 'German Language – Basic Level' and 'Japanese Language – Basic Level' in SYBTech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Class: S. Y. B. Tech   **Semester:** IV

Course Code	Course	L	T	P	Credits	Scheme	Theory (Marks) Max	Theory Min. % Marks for Passing	Practical (Marks) Max.	Practical Min. % Marks for Passing
SH2043	Mathematics for Data Analytics	3	1	--	4	ISE	20		----	----
						UT1	15	40	----	----
						UT2	15		----	---
						ESE	50	40	----	----
CI202	Automata Theory	3	1	--	4	ISE	20		----	----
						UT1	15	40	----	----
						UT2	15		----	----
						ESE	50	40	----	----
CI204	Software Engineering	3	--	--	3	ISE	20		----	----
						UT1	15	40	----	----
						UT2	15			
						ESE	50	40	----	----
CI206	Computer Organization	3	--	--	3	ISE	20		----	----
						UT1	15	40	----	----
						UT2	15		---	----
						ESE	50	40	----	----
CE2262	Engineering Mechanics	2	--	--	2	ISE	20		----	----
						UT1	15	40	----	----
						UT2	15			
						ESE	50	40	----	----
CI208	Python lab	--		2	1	ISE	----	----	50	50
						ESE	---	----	50	50
CE2282	Engineering Mechanics Lab	--	--	2	1	ISE	----	----	50	50
						ESE	---	----	50	50
CI210	Comprehensive Exam-II	--	--	--	1	ESE	----	----	100	50
	Open Elective-III Choice Based Soft Skill Program-II	--	--	2	1	ISE	----	----	100	50
SH2172	Environmental Science	1*	--	--	1	ISE	50	40	---	---
						ESE	50	40	---	---
SH2602	Environmental Science Miniproject	--	--	2	1	ISE	----	----	100	50
	TOTAL	15	2	8	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
Comprehensive Exam Subjects: Mathematics for Data Analytics, Automata Theory, Software Engineering, Computer Organization

Note: Open Elective-III - Students should select any one course from list of choice based soft Skill Program-II excluding the course studied under choice based soft Skill Program-I
Internship Note: Students should complete summer internship in vacations. Its evaluation will be in semister V.
Note*:Department should allot one extra lecture to Environment Science in time table.

K.E. Society's

Rajarambapu Institute of Technology, Sakharale

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

Curriculum Structure and Evaluation Scheme

With effective from 2019-23 [2019-23 Batch]

Department of Computer Science and Information Technology

Choice Based Soft Skill Program II

Sr.No.	Course Code	Course Name
1.	SH2592	Personal Effectiveness & Body Language
2.	SH2612	Interpersonal Skills (Work life Balance)
3.	SH2632	Leadership & Public Speaking
4.	SH2692	Innovation Tools and Methods for Entrepreneurs
5.	SH2642	German Language – Advanced Level
6.	SH2622	Japanese Language – Advanced Level

Note for Choice Based Soft Skill Program-I & II:

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 SYBTech Sem-IV only.

3. The students who will select and will successfully complete 'German Language – Basic Level' and 'Japanese Language – Basic Level' in SYBTech Sem-III will by default (mandatorily) appear for Advance Levels of said courses in Semester-IV.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Class: T. Y. B. Tech **Semester**: V

| Course Code | Course | Teaching Scheme | | | | Evaluation Scheme | | | | | |
| | | L | T | P | Credits | Scheme | Theory (Marks) | | | Practical (Marks) | |
							Max	Min. % Marks for Passing		Max.	Min. % Marks for Passing
CI301	Operating Systems	3	--	--	3	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			----	---
						ESE	50	40		----	----
CI303	Database Management Systems	3	--	--	3	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			----	----
						ESE	50	40		----	----
CI305	Design and Analysis of Algorithms	3	--	--	3	ISE	20	40	40	----	----
						UT1	15			----	
						UT2	15				
						ESE	50	40		----	----
	Program Elective-I	2	--	--	2	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			---	----
						ESE	50	40		----	----
CI313	JAVA Programming Lab	3	--	2	4	ISE	----	----		50	50
						ESE	---	----		50	50
CI315	Database Management Systems Lab	--	--	2	1	ISE	----	----		50	50
						ESE	---	----		50	50
CI317	Operating Systems Lab	--	--	2	1	ISE	----	----		50	50
						ESE	---	----		50	50
SH3032	Aptitude Training-I	2*	--	--	2	ISE	20	40	40	----	----
						UT1	15			----	----
						UT2	15			----	----
						ESE	50	40		----	----
CI319	**Summer Internship/ Professional Certification (4 Weeks)**	--	--	--	2	ISE	---	---		100	50
CI321	**Comprehensive Exam-III**	--	--	--	1	ESE	----	----		100	50
SH301	**Indian Constitution**	2	--	--	Audit	ISE	100	50	(P/N)	---	---
	TOTAL	18	00	06	22	---	---	---		---	---

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

Total Contact Hours/week : 24
Total Credits : 22
Comprehensive Exam Subjects: Operating Systems, Database Management Systems, Design and analysis of algorithms
Note*: Department should allot one extra lecture to Aptitude Training – I in time Table.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Program Elective I

Sr.No.	Course Code	Course
1.	CI307	Organizational Management Behavior
2.	CI309	IPR and Cyber Law
3.	CI311	Software Modeling and Design

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Class: T. Y. B. Tech   **Semester:** VI

Course Code	Course	L	T	P	Credits	Scheme	Theory (Marks) Max	Theory (Marks) Min. % Marks for Passing		Practical (Marks) Max.	Practical (Marks) Min. % Marks for Passing
CI302	Information Security	3	--	--	3	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			----	---
						ESE	50	40		----	----
	Program Elective-II	3	--	--	3	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			----	----
						ESE	50	40		----	----
	Program Elective-III	3	--	--	3	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			----	----
						ESE	50	40		----	----
	Open Elective-IV	3	--	--	3	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			----	----
						ESE	50	40		----	----
SH302	Biology for Engineers	3	--	--	3	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			---	----
						ESE	50	40		----	----
CI318	C#. Net Lab	3	--	2	4	ISE	----	----		50	50
						ESE	----	----		50	50
CI320	Mobile Application Development Lab	2	--	2	3	ISE	----	----		50	50
						ESE	---	----		50	50
CI322	Capstone Project phase-I	--	--	2	2	ISE	----	----		100	50
SH3052	Aptitude Training-II	2*	--	--	2	ISE	20		40	----	----
						UT1	15	40		----	----
						UT2	15			----	----
						ESE	50	40		----	----
CI324	Comprehensive Exam-IV	--	--	--	1	ESE	----	----		100	50
	TOTAL	22	00	06	27	---	---	---		---	---

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

Total Contact Hours/week   **: 28**
Total Credits   **: 27**
Comprehensive Exam Subjects   : Information Security, C#. Net Lab, Mobile Application Development Lab
Note*: Department should allot one extra lecture to Aptitude Training-II in time table.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Program Elective II

Sr.No.	Course Code	Course Name
1.	CI304	Data Mining
2.	CI306	Sensor Network
3.	CI308	Machine Learning Algorithms
4.	CI310	Computer Vision

Program Elective III

Sr.No.	Course Code	Course Name
1.	CI312	Soft Computing
2.	CI314	Human Computer Interaction
3.	CI316	Software Testing

Open Elective-IV

Sr. No.	Branch	Course Code	Open Elective-IV Courses
1	Automobile	OE3022	Reliability Engineering
2	Automobile	OE3042	Renewable Energy
3	Civil	OE3062	Environmental Impact Assessment
4	Civil	OE3082	Material Management.
5	Computer	OE3102	Network Administration
6	Computer	OE3122	Information Technology Foundation Program
7	E&TC	OE3142	Mechatronics
8	Electrical	OE3162	Engineering Materials
9	Electrical	OE318	Industrial Drives
10	CS&IT	OE320	Artificial Intelligence
11	CS&IT	OE322	Cyber Forensics
12	MBA	OE3242	Marketing for Engineers

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Sr. No.	Branch	Course Code	Open Elective-IV Courses
13	Mechanical	OE3262	Aircraft Systems
14	Mechanical	OE3282	Supply Chain Management
15	Mechanical	OE3302	New Product Design and Development
16	Mechanical	OE3322	Entrepreneurship Development
17	Mechanical	OE334	Research Methodology

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Class: Final Year B. Tech.   **Semester:** VII

Course Code	Course	L	T	P	Credits	Scheme	Theory (Marks) Max	Theory (Marks) Min. % Marks for Passing	Practical (Marks) Max.	Practical (Marks) Min. % Marks for Passing
CI401	Cloud Computing	3	--	--	3	ISE	20	40	----	----
						UT1	15		----	----
						UT2	15	40	----	---
						ESE	50	40	----	----
CI403	Neural Network and Deep Learning	3	--	--	3	ISE	20	40	----	----
						UT1	15		----	----
						UT2	15	40	----	----
						ESE	50	40	----	----
	Program Elective-IV	3	--	--	3	ISE	20	40	----	----
						UT1	15		----	----
						UT2	15	40		
						ESE	50	40	----	----
	Program Elective-V	3	--	--	3	ISE	20	40	----	----
						UT1	15		----	----
						UT2	15	40	---	----
						ESE	50	40	----	----
CI419	Front End Web Technology Lab	2	--	4	4	ISE	----	----	50	50
						ESE	----	----	50	50
	Program Elective Lab	--	--	2	1	ISE	----	----	50	50
						ESE	---	----	50	50
CI427	Capstone Project Phase-II	--	--	4	4	ISE	----	----	100	50
	TOTAL	14	00	10	21	---	---	---	---	---

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

Total Contact Hours/week   : 24
Total Credits   : 21

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Program Elective IV

Sr.No.	Course Code	Course Name
1.	CI405	Parallel Computing
2.	CI407	Big Data
3.	CI409	Computer Graphics
4.	CI411	Data Analytics

Program Elective V

Sr.No.	Course Code	Course
1.	CI413	Blockchain Technology
2.	CI415	Internet of Things
3.	CI417	Virtual Reality and Augmented Reality

Program Elective Lab

Sr.No.	Course Code	Course Name
1.	CI421	Advanced Java Lab
2.	CI423	R Programming Lab
3.	CI425	Asp. Net MVC Lab

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Track I: Industry Internship & Projects (IIP)

Class: Final Year B. Tech   **Semester:** VIII

Course Code	Course	Teaching Scheme				Evaluation Scheme					
		L	T	P	Credits	Scheme	Theory (Marks)			Practical (Marks %)	
							Max.	Min. % for passing		Max.	Min. % for passing
OE438	Finance for Engineers (Online Course)	2	-	-	2	ISE	25	40	40	---	---
						ESE	75	40		---	---
OE436	Engineering Management & Economics (Online Course)	2	-	-	2	ISE	25	40	40	---	---
						ESE	75	40		---	---
IP4022	Internship & Project	-	-	-	8	ISE	---	----		50	50
						ESE	---	---		50	50
	TOTAL	4	-	-	12						

ISE = In Semester Evaluation, ESE = End Semester Examination

Total Contact Hours/week   : 4
Total Credits   : 12

Note:

1] Weekly Contact hours are not mentioned 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.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Track II: Undergraduate Research Experience (URE)

Class: Final Year B. Tech   **Semester:** VIII

Course Code	Course	Teaching Scheme				Evaluation Scheme					
		L	T	P	Credits	Scheme	Theory (Marks %)			Practical (Marks %)	
							Max.	Min. % for passing		Max.	Min. % for passing
OE438	Finance for Engineers (Online Course)	2	-	-	2	ISE	25	40	40	---	---
						ESE	75	40		---	---
OE436	Engineering Management & Economics (Online Course)	2	-	-	2	ISE	25	40	40	---	---
						ESE	75	40		---	---
RE4042	Research Project	-	-	8	8	ISE	---	----		50	50
						ESE	---	---		50	50
	TOTAL	4	-	8	12						

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

Total Contact Hours/week : 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.

K.E. Society's
Rajarambapu Institute of Technology, Sakharale
(An Autonomous Institute, affiliated to Shivaji University, Kolhapur)
Curriculum Structure and Evaluation Scheme
With effective from 2019-23 [2019-23 Batch]
Department of Computer Science and Information Technology

Track III: Entrepreneurship Development (ED)

Class: Final Year B. Tech   **Semester:** VIII

Sr.No	Course Code	Course	Teaching Scheme			Credits	Scheme	Evaluation Scheme				
								Theory (Marks)		Practical (Marks)		
			L	T	P			Max	Min. % for passing		Max	Min. % for passing
1	ED4102	Project Management	2*	-	-	2	ISE	20				
							UT-1	15	40	40		
							UT-2	15				
							ESE	50	40			
2	ED4042	Commercial Aspects of the Project	2*	-	-	2	ISE	20				
							UT-1	15	40	40		
							UT-2	15				
							ESE	50	40			
3	ED4062	Entrepreneurship Development Program (EDP)	-	-	-	1	ISE				100	50
4	ED4082	Entrepreneurship Development Project	-	-	7	7	ISE				50	50
							ESE				50	
		Total	**4**	**-**	**7**	**12**						

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