



**DEPARTMENT OF TECHNOLOGY
SHIVAJI UNIVERSITY, KOLHAPUR**

**STRUCTURE
For
FIRST YEAR
TO
FINAL YEAR B. TECH.
ELECTRONICS AND TELECOMMUNICATION
ENGINEERING**

**TO BE EFFECTIVE FROM
ACADEMIC YEAR 20-21**



DEPARTMENT OF TECHNOLOGY
SHIVAJI UNIVERSITY, KOLHAPUR
FIRST YEAR B.TECH

Scheme of Teaching and Examination

Semester – I (Group-A)

Course code	Sr. No.	Course Title	Teaching Scheme with Credits (Hours / Week)				Examination Scheme (Marks)					
			L	T	P	Credits	Theory			Practical/Tutorial		
							Scheme	Max. Marks	Min. Passing \$	Scheme	Max. Marks	Min. Passing \$
BS-11A1	1.	Engineering Mathematics-I	4	1	-	05	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-11A2	2.	Engineering Physics	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11A1	3.	Basics of Mechanical Engineering	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11A2	4.	Engineering Mechanics	4	-	-	04	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11A3	5.	Basic Electronics Engineering	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-11A3	6.	Lab.-I Engineering Physics	-	-	2	01	---	---	---	IPE	50	20
ES-11A4	7.	Lab.-II Basics of Mechanical Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-11A5	8.	Lab.-III Engineering Mechanics	-	-	2	01	---	---	---	IPE	50	20
ES-11A6	9.	Lab.-IV Basic Electronics Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-11A7	10.	Lab.-V Computer Programming	1	-	2	02	---	---	---	IPE	50	20
ES-11A8	11.	Lab.-VI Workshop Practice	-	-	2	01	---	---	---	IPE	50	20
		Total	18	1	12	25		500			300	

Total Credits: 25

Total Contact Hours/Week: 31 hrs

Note:

\$: In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.

CIE – Continuous Internal Evaluation

SEE – Semester End Examination

IPE – Internal Practical Evaluation

* Semester End Examination duration will be 4 hrs



DEPARTMENT OF TECHNOLOGY
SHIVAJI UNIVERSITY, KOLHAPUR
FIRST YEAR B.TECH

Scheme of Teaching and Examination

Semester – II (Group-A)

Course code	Sr. No.	Course Title	Teaching Scheme with Credits (Hours / Week))				Examination Scheme (Marks)					
			L	T	P	Credits	Theory			Practical/Tutorial		
							Scheme	Max. Marks	Min. Passing \$	Scheme	Max. Marks	Min. Passing \$
BS-12A1	1.	Engineering Mathematics–II	4	1	-	05	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-12A2	2.	Engineering Chemistry	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12A1	3.*	Engineering Graphics	4	-		04	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12A2	4.	Basic Civil Engineering	3	-		03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12A3	5.	Basic Electrical Engineering	3	-		03	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-12A3	6.	Lab.–I Engineering Chemistry	-	-	2	01	---	---	---	IPE	50	20
ES-12A4	7.	Lab.–II Engineering Graphics	-	-	2	01	---	---	---	IPE	50	20
ES-12A5	8.	Lab.–III Basic Civil Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-12A6	9.	Lab. –IV Basic Electrical Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-12A7	10.	Lab. –V Programming with Scilab and Matlab	-	1	-	01	---	---	---	IPE	50	20
HS-12A1	11.	Lab.–VIProfessional Communication	2	-	-	02	---	---	---	IPE	50	20
		Total	19	2	8	25		500			300	

Total Credits: 25

Total Contact Hours/Week: 29 hrs

Note:

\$: In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.

CIE – Continuous Internal Evaluation

SEE – Semester End Examination

IPE – Internal Practical Evaluation

* Semester End Examination duration will be 4 hrs



DEPARTMENT OF TECHNOLOGY
SHIVAJI UNIVERSITY, KOLHAPUR
FIRST YEAR B.TECH

Scheme of Teaching and Examination

Semester – I (Group-B)

Course code	Sr. No.	Course Title	Teaching Scheme with Credits (Hours / Week))				Examination Scheme (Marks)					
			L	T	P	Credits	Theory			Practical/Tutorial		
							Scheme	Max. Marks	Min. Passing \$	Scheme	Max. Marks	Min. Passing \$
BS-11B1	1.	Engineering Mathematics-I	4	1	-	05	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-11B2	2.	Engineering Chemistry	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11B1	3.*	Engineering Graphics	4	-		04	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11B2	4.	Basic Civil Engineering	3	-		03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-11B3	5.	Basic Electrical Engineering	3	-		03	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-11B3	6.	Lab.-I Engineering Chemistry	-	-	2	01	---	---	---	IPE	50	20
ES-11B4	7.	Lab.-II Engineering Graphics	-	-	2	01	---	---	---	IPE	50	20
ES-11B5	8.	Lab.-III Basic Civil Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-11B6	9.	Lab. -IV Basic Electrical Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-11B7	10.	Lab. -V Programming with Scilab and Matlab	-	1	-	01	---	---	---	IPE	50	20
HS-11B1	11.	Lab.-VIP Professional Communication	2	-	-	02	---	---	---	IPE	50	20
		Total	19	2	8	25		500			300	

Total Credits: 25

Total Contact Hours/Week: 29 hrs

Note:

\$: In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.

CIE – Continuous Internal Evaluation

SEE – Semester End Examination

IPE – Internal Practical Evaluation

* Semester End Examination duration will be 4 hrs



DEPARTMENT OF TECHNOLOGY
SHIVAJI UNIVERSITY, KOLHAPUR
FIRST YEAR B.TECH

Scheme of Teaching and Examination

Semester – II (Group-B)

Course code	Sr. No.	Course Title	Teaching Scheme with Credits (Hours / Week)				Examination Scheme (Marks)					
			L	T	P	Credits	Theory			Practical/Tutorial		
							Scheme	Max. Marks	Min. Passing %	Scheme	Max. Marks	Min. Passing %
BS-12B1	1.	Engineering Mathematics-II	4	1	-	05	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-12B2	2.	Engineering Physics	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12B1	3.	Basics of Mechanical Engineering	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12B2	4.	Engineering Mechanics	4	-	-	04	CIE	30	40	---	---	---
							SEE	70		---	---	---
ES-12B3	5.	Basic Electronics Engineering	3	-	-	03	CIE	30	40	---	---	---
							SEE	70		---	---	---
BS-12B3	6.	Lab.-I Engineering Physics	-	-	2	01	---	---	---	IPE	50	20
ES-12B4	7.	Lab.-II Basics of Mechanical Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-12B5	8.	Lab.-III Engineering Mechanics	-	-	2	01	---	---	---	IPE	50	20
ES-12B6	9.	Lab.-IV Basic Electronics Engineering	-	-	2	01	---	---	---	IPE	50	20
ES-12B7	10.	Lab.-V Computer Programming	1	-	2	02	---	---	---	IPE	50	20
ES-12B8	11.	Lab.-VI Workshop Practice	-	-	2	01	---	---	---	IPE	50	20
		Total	18	1	12	25		500			300	

Total Credits: 25

Total Contact Hours/Week: 31 hrs

Note:

\$: In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

Tutorials and practical shall be conducted in batches with batch strength not exceeding 15 students.

CIE – Continuous Internal Evaluation

SEE – Semester End Examination

IPE – Internal Practical Evaluation

* Semester End Examination duration will be 4 hrs.



DEPARTMENT OF TECHNOLOGY
SECOND YEAR B.TECH

Scheme of Teaching and Examination
Semester – III (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2021- 22

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Credit	Theory			Practical		
						Scheme	Max. marks	Min. Passing \$	Scheme	Max. marks	Min. Passing
ETE211	Engineering Mathematics-III	04	---	---	04	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE212	Electronics Circuit Design –I	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE213	Network Analysis	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE214	Digital Electronics	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE215	Programming Techniques	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE211T	Engineering Mathematics-III Tutorial	---	01	---	01	-----	-----	-----	IOE	50	20
ETE216	Aptitude and Professional communication	03	---	02	04	-----	-----	-----	IOE	50	20
ETE212L	Electronics Circuit Design –I Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE213T	Network Analysis Tutorial	---	01	---	01	-----	-----	-----	IOE	50	20
ETE214L	Digital Electronics Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE215L	Programming Techniques Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
	Total	19	02	08	25	-----	500	-----	-----	300	-----

ES 218	Environmental Studies	02	---	---	---	Project* Theory*	30 70	40	-----	-----	-----
HS217	Introduction to Performing Arts	02	---	---	---	Evaluation at institute/ department level		Based on total marks obtained out of 50, the grade to be given by the course auditor			

Total contact hours per week: **29+2+2=33**

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

B. Tech. (Electronics and Telecommunication Engineering), F.Y to Final Year Structure Revision w.e.f. 2020 -21

* indicates Environmental Studies project evaluation and the theory examination will be at the end of the year i.e. along with Semester IV End Examination.

CIE :Continuous Internal Evaluation SEE : Semester End Examination

IPE : Internal Practical Evaluation IOE : Internal Oral Evaluation

EPE : External Practical Evaluation EOE : External Oral Evaluation

**DEPARTMENT OF TECHNOLOGY****SECOND YEAR B.TECH**

Scheme of Teaching and Examination

Semester – IV (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2021- 22

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Credit	Theory			Practical		
						Scheme	Max. marks	Min. Passing \$	Scheme	Max. marks	Min. Passing
ETE221	Electronics Circuit Design –II	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE222	Analog Communication	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE223	Linear Integrated Circuits	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE224	Measurements & Instrumentation	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE225	Industrial Organization and Management	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE226	Data Structures	02	01	---	03	-----	-----	-----	IPE	50	20
ETE221L	Electronics Circuit Design –II Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE222L	Analog Communication Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE223L	Linear Integrated Circuits Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE224L	Measurements & Instrumentation Laboratory	---	---	02	01	-----	-----	-----	IPE	50	20
ETE225L	Electronics system Design	02	01	---	03	-----	-----	-----	IOE	50	20
	Total	19	02	08	25	-----	500	-----	-----	300	-----

B. Tech. (Electronics and Telecommunication Engineering), F.Y to Final Year Structure Revision w.e.f. 2020 -21

ES 218	Environmental studies project work	02	---	---	---	Project- 30 Theory-70	40			
EC227	Soft Skill Development	02	--	---	----	Evaluation at institute/ department level	Based on total marks obtained out of 50, the grade to be given by the course auditor			

Total contact hours per week: **29+2+2=33**

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

CIE :Continuous Internal Evaluation
 SEE : Semester End Examination
 IPE : Internal Practical Evaluation
 IOE : Internal Oral Evaluation
 EPE : External Practical Evaluation
 EOE : External Oral Evaluation

Internship I which is a part of Semester V evaluation will be the activity after the SEE of semester IV. It is mandatory for all the students to undergo Internship I from standpoint of electronics engineering principles and report to the institute for the semester V along with the completion certificate by the concerned organization. The students have to submit a hard as well as soft copy of the activity report to the institute.

Equivalence of Second Year B.Tech (Electronics & Telecommunication Engineering) Semester III and IV

The above detailed syllabus is a revised version of the Second Year B.Tech (Electronics & Telecommunication Engineering) Program being conducted by the Shivaji University at the Technology Department of the University. This syllabus is to be implemented from June 2021. (Academic year 2021-22)

The Equivalence for the courses of Electronics & Telecommunication Engineering at Second Year B Tech Semester III and IV pre-revised Program under the faculty of Engineering and Technology is as follows.

Second Year B.Tech Semester III (Electronics & Telecommunication Engineering)

Sr.No	Second Year B.Tech(Electronics & communication Technology) Semester III Pre-revised syllabus	Second Year B.Tech(Electronics & Telecommunication Engineering) Semester III Revised syllabus	Remark
1.	Engineering Mathematics-III	Engineering Mathematics-III	Syllabus revised
2.	Electrical Technology	No equivalence	Course removed
3.	Electronics Circuit Analysis & Design-I	Electronics Circuit Design-I	Title changed and Syllabus revised
4.	Network Analysis	Network Analysis	Syllabus revised
5.	Digital Techniques	Digital Electronics	Title changed and Syllabus revised

B. Tech. (Electronics and Telecommunication Engineering), F.Y to Final Year Structure Revision w.e.f. 2020 -21

6.	Programming Techniques	Programming Techniques	No change in contents
7.	Environmental studies	Environmental studies	No change in contents
8	Introduction to performing arts	Introduction to performing arts	No change in contents
9.		Aptitude and professional communication	New course added

Second Year B.Tech Semester IV (Electronics & Telecommunication Engineering)

Sr.No	Second Year B.Tech(Electronics & communication Technology) Semester IV Pre-revised syllabus	Second Year B.Tech(Electronics & Telecommunication Engineering)Semester IV Revised syllabus	Remark
1.	Electronics Circuit Analysis & Design-II	Electronics Circuit Design-II	Title changed and Syllabus revised
2.	Communication Technology	Analog Communication	Title changed and Syllabus revised
3.	Measurement Techniques	Measurements & Instrumentation	Title changed and Syllabus revised
4.	Industrial Organization and Management	Industrial Organization and Management	Syllabus revised
5.	Linear Integrated Circuits	Linear Integrated Circuits	Syllabus revised
6.	Data Structures	Data Structures	Syllabus revised
7.		Electronics system design	New course added
8.	Environmental studies	Environmental studies	No change in contents
9.	Soft skill development	Soft skill development	No change in contents

Audit course have not been assigned any credits. The students will be evaluated for these courses by the concerned course in charge. There will be grade conferred to the student. The grade will be based on conversion of marks obtained out of 50. (Obtaining passing grade is essential). Please refer to chart in the detail examination scheme. The chart shows the marks range and the respective grade.



DEPARTMENT OF TECHNOLOGY

THIRD YEAR B.TECH

Scheme of Teaching and Examination

Semester – V (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2022-23

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Credit	Theory			Practical		
						Scheme	Max. marks	Min. Passing \$	Scheme	Max. marks	Min. Passing
ETE311	Power Electronics	03	-	-	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE312	Electromagnetic Fields	03	-	-	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE313	Microcontrollers	03	-	-	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE 314	Signals & Systems	03	-	-	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE 315	Computer Networks	03	-		03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE311L	Power Electronics Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE312T	Electromagnetic Fields Tutorial	---	01	---	01	-----	-----	-----	IOE	50	20
ETE313L	Microcontrollers Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE315L	Computer Networks Laboratory	---	---	02	01	-----	-----	-----	EOE	50	20
ETE316L	Advanced programming techniques	03	---	02	04	-----	-----	-----	IPE	50	20
ETE317	Internship-I	---	--	---	02	-----	-----	-----	IOE	50	20
	Total	18	01	08	25	-----	500	-----	-----	300	-----

Audit Course III

RM 311	Research Methodology	02	---	---	---	Evaluation at institute/ department level	Based on total marks obtained out of 50, the grade to be given by the course auditor (teacher)
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Total contact hours per week: 27+02=29

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

CIE : Continuous Internal Evaluation SEE : Semester End Examination

B. Tech. (Electronics and Telecommunication Engineering), F.Y to Final Year Structure Revision w.e.f. 2020 -21

IPE : Internal Practical Evaluation IOE : Internal Oral Evaluation

EPE : External Practical Evaluation EOE : External Oral Evaluation

Note : Tutorials and Practical shall be conducted in batches with batch strength not exceeding 18 students.

**DEPARTMENT OF TECHNOLOGY****THIRD YEAR B.TECH**

Scheme of Teaching and Examination

Semester – VI (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2022-23

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Total	Theory			Practical		
						Scheme	Max. marks	Min. Passing\$	Scheme	Max. marks	Min. Passing
ETE321	Digital Signal Processing	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE322	Digital Communication	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE323	Antenna & Wave propagation	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE324	VLSI Design	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE325	Control Systems	03	---	---	03	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE321L	Digital Signal Processing Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE322T	Digital Communication Laboratory			02	01	-----	-----	-----	IOE	50	20
ETE323L	Antenna & Wave propagation Laboratory	---	---	02	01	-----	-----	-----	EPE	50	20
ETE324L	VLSI Design Laboratory	---	---	02	01	-----	-----	-----	EOE	50	20
ETE325T	Seminar	02	---	---	02	-----	-----	-----	IOE	50	20
ETE326L	Mini Project and Seminar Laboratory	---	---	02	04	-----	-----	-----	IPE	50	20
	Total	17	00	10	25	-----	500	-----	-----	300	-----

Audit Course IV

FL 321	Introduction to foreign language	02	---	---	---	Evaluation at institute/ department level	Based on total marks obtained out of 50, the grade to be given by the course auditor
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Total contact hours per week: 27+02=29

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

CIE : Continuous Internal Evaluation SEE : Semester End Examination

IPE : Internal Practical Evaluation IOE : Internal Oral Evaluation

EPE : External Practical Evaluation EOE : External Oral Evaluation

Note : Tutorials and Practical shall be conducted in batches with batch strength not exceeding 18 students.

Note: After semester IV & VI during vacation period, students will undergo Internship I and Internship II for minimum 4 weeks in a reputed industry from standpoint of electronics engineering principles. The students will submit a report of the training. This particular activity is equivalent to one credit and it carries 50 marks as an Internal Oral Evaluation (IOE) which is included in Semester V and semester VII.

For submission of the activity report, all the students will follow one specific format recommended by the Program Advisory Board.

Equivalence of Third Year B.Tech (Electronics & Telecommunication Engineering) Semester V and VI

The above detailed syllabus is a revised version of the Third Year B.Tech (Electronics & Telecommunication Engineering) Program being conducted by the Shivaji University at the Technology Department of the University. This syllabus is to be implemented from June 2022. (Academic year 2022-23)

The Equivalence for the subjects/courses of Electronics and Communication Technology at Third Year B Tech Semester V and VI pre-revised Program under the faculty of Engineering and Technology is as follows.

Third Year B.Tech Semester V (Electronics and Communication Technology)

Sr.No	Third Year B.Tech (Electronics and Communication Technology) Semester V Pre-revised syllabus	Third Year B.Tech (Electronics & Telecommunication Engineering) Semester V Revised syllabus	Remark
1.	Digital Communication Technology	No equivalence for semester 5	Course shifted to semester 6
2.	Electromagnetic Fields	Electromagnetic Fields	Syllabus revised
3.	Microcontrollers	Microcontrollers	Syllabus revised
4.	Signals & systems	Signals & systems	Syllabus revised
5.	Computer Networks and data communication	Computer Networks	Title changed and syllabus revised
6.	Electronic System Design	No equivalence for semester 5	Course shifted to semester 4
7.		Advanced programming	New course added

B. Tech. (Electronics and Telecommunication Engineering), F.Y to Final Year Structure Revision w.e.f. 2020 -21

		techniques	
8.	Internship-I	Internship-I	No change
9.	Research methodology	Research methodology	No change in audit course
10		Power Electronics	New course added

Third Year B.Tech Semester VI (Electronics & Telecommunication Engineering)

Sr.No	Third Year B. Tech(Electronics and Communication Technology) Semester VI Pre-revised syllabus	Third Year B. Tech(Electronics & Telecommunication Engineering)Semester VI Revised syllabus	Remark
	Digital Signal Processing	Digital Signal Processing	Syllabus revised
		Digital Communication	Title changed, course shifted from semester 5, syllabus revised
		Seminar	New course introduced
	Control Systems	Control Systems	Syllabus revised
	Mini project and Seminar	Mini project and Seminar	Syllabus revised
	Operating Systems	No equivalence in semester 6	Course shifted to semester 8
	Antenna and wave propagation	Antenna and wave propagation	Syllabus revised
	VLSI Design	VLSI Design	Syllabus revised
	Introduction to foreign language	Introduction to foreign language	No change in audit course

Audit course have not been assigned any credits. The students will be evaluated for these courses by the concerned course in charge. There will be grade conferred to the student. The grade will be based on conversion of marks obtained out of 50. (Obtaining passing grade is essential). Please refer to chart in the detail examination scheme. The chart shows the marks range and the respective grade.



DEPARTMENT OF TECHNOLOGY

FINAL YEAR B.TECH

Scheme of Teaching and Examination

Semester – VII (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2023-24

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Credit	Theory			Practical		
						Scheme	Max. marks	Min. Passing \$	Scheme	Max. marks	Min. Passing
ETE411	Digital Image Processing	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE412	Wireless Networks	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE413	Microwave Engineering	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE414	Program Elective-I	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE415	Open Elective-I	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE416L	Major project (Phase-I)	-	-	2	4	-----	-----	-----	IPE	50	20
ETE411L	Digital Image Processing Laboratory	-	-	2	1	-----	-----	-----	EPE	50	20
ETE412L	Wireless Networks Laboratory	-	-	2	1	-----	-----	-----	EPE	50	20
ETE413L	Microwave Engineering Laboratory	-	-	2	1	-----	-----	-----	EOE	50	20
ETE414L	Program Elective-I Laboratory	-	-	2	1	-----	-----	-----	IPE	50	20
ETE417	Internship-II	-	--	-	02	-----	-----	-----	IOE	50	20
	Total	15	00	10	25	-----	500	-----	-----	300	-----

Audit Course III

HS411	Professional Ethics	02	---	---	---	Evaluation at institute/ department level	Based on total marks obtained out of 50, the grade to be given by the course auditor (teacher)
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Total contact hours per week: 25+02=27

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

CIE : Continuous Internal Evaluation SEE : Semester End Examination

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IPE : Internal Practical Evaluation IOE : Internal Oral Evaluation

EPE : External Practical Evaluation EOE : External Oral Evaluation

Note : Tutorials and Practical shall be conducted in batches with batch strength not exceeding 18 students.



DEPARTMENT OF TECHNOLOGY

FINAL YEAR B.TECH

Scheme of Teaching and Examination

Semester – VIII (Electronics & Telecommunication Engineering)

To be implemented from Academic Year 2023-24

Course code	Course Title	Teaching Scheme (Hours / Week)				Examination Scheme (Marks)					
		L	T	P	Total	Theory			Practical		
						Scheme	Max. marks	Min. Passing\$	Scheme	Max. marks	Min. Passing
ETE421	Audio and Video Engineering	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE422	Operating systems	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE423	Optical Communication Fiber	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE424	Program Elective-II	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE425	Open Elective-II	3	-	-	3	CIE	30	40	-----	-----	-----
						SEE	70		-----	-----	-----
ETE426	Major Project (Phase-II)	-	-	2	4	-----	-----	-----	EPE	50	20
ETE421L	Audio and Video Engineering laboratory	-	-	2	1	-----	-----	-----	EPE	50	20
ETE422L	Operating systems tutorial	-	1	-	1	-----	-----	-----	IOE	50	20
ETE423L	Optical Communication Fiber Laboratory	-	-	2	1	-----	-----	-----	EOE	50	20
ETE424L	Program Elective-II Laboratory	-	-	2	1	-----	-----	-----	IOE	50	20
ETE426	Financial Management	2	-	-	2	-----	-----	-----	IOE	50	20
	Total	17	02	08	25	-----	500	-----	-----	300	-----

Audit Course IV

HS421	Introduction to Indian Constitution	02	---	---	---	Evaluation at institute/ department level	Based on total marks obtained out of 50, the grade to be given by the course auditor
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Total contact hours per week: 26+02=28

\$ In theory student should appear for the CIE (Mid Semester Exam), submit the assignment and must secure 40% marks in SEE.

CIE	: Continuous Internal Evaluation	SEE	: Semester End Examination
IPE	: Internal Practical Evaluation	IOE	: Internal Oral Evaluation
EPE	: External Practical Evaluation	EOE	: External Oral Evaluation

Note : Tutorials and Practical shall be conducted in batches with batch strength not exceeding 18 students.

Note: After semester VI, during vacation period, students will undergo Internship II for minimum 4 weeks in a reputed industry from standpoint of electronics engineering principles. The students will submit a report of the training. This particular activity is equivalent to one credit and it carries 50 marks as an Internal Oral Evaluation (IOE) which is included in Semester VII.

For submission of the activity report, all the students will follow one specific format recommended by the Program Advisory Board.

Equivalence of Final Year B.Tech (Electronics & Telecommunication Engineering) Semester VII and VIII

The above detailed syllabus is a revised version of the Final Year B.Tech (Electronics & Telecommunication Engineering) Program being conducted by the Shivaji University at the Technology Department of the University. This syllabus is to be implemented from June 2023. (Academic year 2023-24)

The Equivalence for the subjects/courses of Electronics and Communication Technology at Final Year B Tech Semester VII and VIII pre-revised Program under the faculty of Engineering and Technology is as follows.

Final Year B.Tech Semester VII (Electronics and Communication Technology)

Sr.No	Final Year B.Tech(Electronics and Communication Technology) Semester VII Pre-revised syllabus	Final Year B.Tech (Electronics & Telecommunication Engineering) Semester VII Revised syllabus	Remark
1.	Audio and Video Engineering	No equivalence for semester 7	Course shifted to semester 8
2.	Industrial and Power Electronics	No equivalence for semester 7	Title changed and course shifted to semester 5
3.	Microwave Engineering	Microwave Engineering	Syllabus changed

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4.			Course removed
5.	Elective-I (Internet of Things added)	No equivalence for semester 7	Changed to Program Elective-I
6.	Major Project (phase-I)	Major Project (phase-I)	Syllabus Changed
7.	Professional Ethics	Professional Ethics	No Change
8.	Internship-II	Internship-II	No Change
9.		Digital Image Processing	New compulsory course added
10.		Wireless Networks	New compulsory course added
11.		Program Elective-I	New course added
12.		Open Elective- I	New course added

Final Year B.Tech Semester VIII (Electronics & Telecommunication Engineering)

Sr.No	Final Year B. Tech(Electronics and Communication Technology) Semester VIII Pre-revised syllabus	Final Year B. Tech(Electronics & Telecommunication Engineering)Semester VIII Revised syllabus	Remark
	Broadband Communication	No equivalence for semester 8	Course removed
		Audio and video engineering	Course shifted from semester 7
		Operating systems	Course shifted from semester 6
	Elective-II	Program elective-II	New title program elective-II added and courses changed
	Major Project (Phase-II)		No Change
	Optical fiber communication	Optical Fiber Communication	Syllabus changed
	Wireless Networks	No equivalence	Course shifted to semester 7
	Satellite and Radar Communication	Satellite and Radar Communication	Course included in Program elective-II
	Constitution of India		No change
		Open elective-II	New course added
		Finance Management	New course added

Audit course have not been assigned any credits. The students will be evaluated for these courses by the concerned course in charge. There will be grade conferred to the student. The grade will be based on conversion of marks obtained out of 50. (Obtaining passing grade is essential). Please refer to chart in the detail examination scheme. The chart shows the marks range and the respective grade.

LIST OF ELECTIVES

Sr. No.	Program Elective-I
1	ARM & Embedded systems
2	PLC and automation
3	RF Circuit Design

Sr. No.	Open Elective-I
1	Internet of Things
2	Micro Electro Mechanical Systems
3	Remote Sensing & GIS
4	Software Defined Radio

Sr. No.	Program Elective-II
1	Satellite & Radar Engineering
2	Speech and Audio Processing
3	Wireless Sensor Networks

Sr. No.	Open Elective-II
1	Automotive Electronics
2	Robotics
3	Artificial Intelligence