SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ELECTRONICS & TELECOMMUNICATION ENGINEERING

Syllabus for

B.E. (E & TC Engineering) w.e.f. Academic Year 2015-16

SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

STRUCTURE OF B.E (Electronics & Telecommunication Engineering)

W.E.F 2015-16

B. E. (Electronics & Telecommunication Engineering) Semester- I

Sr. No.	Subject	Teaching Scheme				Examination Scheme				
		L	Tut	P	Total	Th.	TW	POE	OE	Total
1	Computer Communication Network	4	--	2	6	100	25	50	--	175
2	VLSI Design	4	--	2	6	100	25	50	--	175
3	Satellite Communication	3	1	--	4	100	25	--	--	125
4	Coding Theory	3	1	--	4	100	25	--	--	125
5	Elective – I	4	--	2	6	100	25	--	--	125
6	Seminar & Project	--	--	4	4	--	25	--	50	75
7	Vocational Training	--	--	--	--	--	25	--	--	25
	Total	**18**	**2**	**10**	**30**	**500**	**175**	**100**	**50**	**825**

Elective – I Advanced Telecommunication Network
Image Processing
Advance DSP.

B. E. (Electronics & Telecommunication Engineering) Semester- II

Sr. No.	Subject	Teaching Scheme				Examination Scheme				
		L	Tut	P	Total	Th.	TW	POE	OE	Total
1	Broadband Communication	3	1	--	4	100	25	--	25	150
2	Multimedia Communication Techniques	4	--	2	6	100	25	--	50	175
3	Embedded Systems	4	--	2	6	100	25	--	50	175
4	Elective – II	4	--	2	6	100	25	--	--	125
5	Project	--	--	8	8	--	100	100	--	200
	Total	**15**	**1**	**14**	**30**	**400**	**200**	**100**	**125**	**825**

Elective – II Wireless Sensor Network
Pattern Recognition
DSP Processors & Application

Note:

- Minimum strength of the students for Elective be 15.
- Term work assessment shall be a continuous process based on student's performance in class tests, assignments, homework, subject seminars, quizzes, laboratory books and their interaction and attendance for theory and lab sessions as applicable.

SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ELECTRONICS & TELECOMMUNICATION ENGINEERING

Syllabus for

T.E. (Electronics & Telecommunication Engineering)

w.e.f. Academic Year 2018-19

Choice Based Credit System

SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology

CBCS *structure of T.E. Electronics & Telecommunication Engineering W.E.F. 2018-19*

Semester I

Course Code	*Theory Course Name*	*Hrs./week*			*Credits*	*Examination Scheme*			
		L	*T*	*P*		*ISE*	*ESE*	*ICA*	*Total*
ET311	Electro Magnetic Engg. & Radiating System	3	1	--	4	30	70	--	100
ET312	Principles of Digital Communication	4	--	--	4	30	70	--	100
ET313	Software Engineering & Project Management System	3	--	--	3	30	70	--	100
ET314	Digital Signal Processing	4	--	--	4	30	70	--	100
ET315	Microcontroller – I (8051)	4	--	--	4	30	70	--	100
SLH31	Self Learning Course I -HSS	--	--	--	2	--	50	--	50
Sub Total		18	1	--	21	150	400	--	550
Course Code	*Laboratory Course Name*								
							ESE		
							POE	*OE*	
ET311	Electro Magnetic Engg. & Radiating System	--	--	2	1	--	--	--	25	25
ET312	Principles of Digital Communication	--	--	2	1	--	50	--	25	75
ET314	Digital Signal Processing	--	--	2	1	--	25	--	25	50
ET315	Microcontroller – I (8051)	--	--	2	1	--	50	--	25	75
ET316	Electronic Software Lab-III	--	1	2	2	--	--	--	50	50
Sub Total		--	2	10	6	--	125		150	275
Grand Total		**18**	**2**	**10**	**27**	**150**	**525**		**150**	**825**

Abbreviations: L- Lectures, P –Practical, T- Tutorial, ISE-In Semester Exam., ESE - End Semester Exam, ICA- Internal Continuous Assessment ESE - University Examination (Theory &/ POE &/Oral examination)

SOLAPUR UNIVERSITY, SOLAPUR
Faculty of Engineering & Technology

CBCS *structure of T.E. Electronics & Telecommunication Engineering W.E.F. 2018-19*

Semester II

Course Code	***Theory Course Name***	***Hrs./week***			***Credits***	***Examination Scheme***			
		L	***T***	***P***		***ISE***	***ESE***	***ICA***	***Total***
ET321	Radar & Microwave Engineering	4	_	_	4	30	70	-	100
ET322	Microcontroller-II (PIC)	4	_	_	4	30	70	-	100
ET323	Electronics Applications & System Design	4	1	_	5	30	70	-	100
ET324	Optical Communication	3	_	_	3	30	70	-	100
ET325	Mobile Communication	3	1	_	4	30	70	_	100
ET327	Self Learning Course II- Technical	_	_	_	2	--	50	_	50
Sub Total		18	2	_	22	150	400	--	550
Course Code	***LaboratoryCourse Name***								
							ESE		
							POE	***OE***	
ET321	Radar & Microwave Engineering	_	_	2	1	_	_	_	25	25
ET322	Microcontroller-II (PIC)	_	_	2	1	_	50	_	25	75
ET323	Electronics Applications & System Design	_	_	2	1	_	_	#50	25	75
ET324	Optical Communication	_	_	2	1	_	_	25	25	50
ET325	Mobile Communication	--	--	--	--	_	_	_	25	25
ET327	Mini Hardware Project	_	_	2	1	_	_	_	25	25
Sub Total			_	10	5	_	125		150	275
Grand Total		**18**	2	**10**	**27**	**150**	**525**		**150**	**825**

Abbreviations: L- Lectures, P –Practical, T- Tutorial, ISE-In Semester Exam., ESE - End Semester Exam, ICA- Internal Continuous Assessment ESE - University Examination (Theory &/ POE &/Oral examination)

Solapur University, Solapur

T.E. (Electronics and Telecommunication Engineering) Semester-II

ET 326-MINI PROJECT (HARDWARE)

Teaching Scheme
Practical – 2 Hours/week, 1 Credit

Examination Scheme
ICA – 25 Marks

This course is introduced to enable students to apply the knowledge and skills learned out of courses studied to solve/implement predefined practical problem. The Project work may be beyond the scope of curriculum of courses for learning additional skills, developing the ability to define, design, analysis and implementation of the problem and lead to its accomplishment with proper planning.

Course Prerequisite:

Student shall have knowledge of PCB designing, circuit designing, testing, soldering.

Course Objectives:

1) To produce PCB artwork using an appropriate EDA tool.
2) To practice good soldering, testing, fault detection and effective trouble-shooting.
3) To design and implement application based hardware project.
4) To present technical seminar and display the project.

Course Outcomes:

Students will be able to

1) Produce PCB artwork using an appropriate EDA tool.
2) Practice good soldering, testing, fault detection and effective trouble-shooting.
3) Design and implement application based hardware project.
4) Present technical seminar and display the project.

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1) Guidelines for project implementation:

1) Project group should be not more than 3 students per group.
2) Domains for projects may be based on a particular application from the following, but not limited to:
   i. Instrumentation and Control Systems
   ii. Electronic Communication Systems
   iii. Biomedical Electronics

iv.Power Electronics
v.Audio, Video Systems
vi.Embedded Systems
vii.Mechatronics Systems

3) Week 1 & 2: Formation of groups, searching of an application based hardware project
4) Week 3 & 4: Finalization of Mini project & Distribution of work.
5) Week 5 & 6: PCB artwork design using an appropriate EDA tool & Simulation.
6) Week 7 & 8: Procurement of electronic components for the project & PCB manufacturing.
7) Week 9, 10 & 11: Hardware assembly, testing, fabrication
8) Week 12: Demo, Group presentation & report submission

2) Guidelines for group seminar:

1) The seminar shall consist of the Literature Survey, Market survey, Basic project work and Applications of Mini project.
2) Seminar Assessment shall be based on Innovative Idea, Presentation skill, depth of understanding, Applications, Future Scope and Individual Contribution.

1. A certified copy of seminar/ project report shall be required to be presented to external examiner at the time of final examination.