Shri Vithal Education & Research Institute's

COLLEGE OF ENGINEERING, PANDHARPUR

P.B.No.54, Gopalpur - Ranjani Road, Gopalpur, Pandharpur - 413304, District. Solapur (Maharashtra)
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Website.: www.sveri.ac.in (Approved by A.I.C.T.E., New Delhi and Affiliated to Solapur University, Solapur)
NBA Accredited all eligible UG Programmes, NAAC Accreditated Institute,ISO 9001.2015 Certified Institute.
Accredited by The Institution of Engineers (India), Kolkata and TCS, Pune.

Ref.:-   Date:-

1.2.1 List of programs in which Choice Based Credit System (CBCS)/elective course system has been implemented

Programme Name : Electronics & Tele-communication Engineering (PG)			
Programme Code: 1-1408968335			
Sr. No.	Class Name	Status of implementation of CBCS / elective course system (Yes/No)	Year of implementation of CBCS / elective course system
1	M.E. Electronics & Tele-communication Engineering -I	Yes (CBCS & Elective)	2015-16
2	M.E. Electronics & Tele-communication Engineering -II	Yes (CBCS)	2016-17
3	M.Tech. Electronics & Tele-communication Engineering -I	Yes (CBCS & Elective)	2018-19
4	M.Tech. Electronics & Tele-communication Engineering -II	Yes (CBCS & Elective)	2019-2020

PRINCIPAL,
College of Engineering
PANDHARPUR

SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ELECTRONICS & TELECOMMUNICATION ENGINEERING

Syllabus Structure for

M.E. (Electronics & Telecommunication Engineering)

4 Semester PG Programme

To be effective from 2015-16

Semester-I

Sr. No.	Subject	Teaching Scheme		Examination Scheme				Credits Assigned	
				Theory		Pract/TW			
		Theory	Pract	ESE	ISE	ESE	ISE	Theory	Pract
1	Research Methodology	3	1(T)	70	30	-	-	3	1(T)
2	Antenna Theory and Design	3	2	70	30	-	25	3	1
3	Probability & Stochastic Processes	3	2	70	30	-	25	3	1
4	Advanced Network Systems	3	2	70	30	-	25	3	1
5	Elective - I	3	1(T)	70	30	-	25	3	1(T)
6	Seminar- I	-	2	-	-	-	50	-	2
	Total	15	10	350	150	-	150	15	7
		Total=25		Total=650				Total=22	

Elective- I : 1. Optical Networks

2. Speech & Video Processing

3. Advanced VLSI Design

Note –

Students have to select any one course from Elective -I

Semester-II

Sr. No.	Subject	Teaching Scheme		Examination Scheme				Credits Assigned	
				Theory		Pract/TW			
		Theory	Pract	ESE	ISE	ESE	ISE	Theory	Pract
1	RF and Microwave Circuit Design	3	2	70	30	-	25	3	1
2	Advanced Signal Processing	3	2	70	30	-	25	3	1
3	Wireless Communication	3	1(T)	70	30	-	-	3	1(T)
4	Cryptography & Network Security	3	2	70	30	-	25	3	1
5	Elective - II	3	1(T)	70	30	-	25	3	1(T)
6	Seminar- II	-	2	-	-	-	50	-	2
	Total	15	10	350	150	-	150	15	7
		Total=25		**Total=650**				**Total=22**	

Elective- II : 1. Wireless Sensor Network & Optimization.

2. Wavelet Transform & Applications.

3. Advanced Embedded Systems.

Note –

> *Students have to select any one course from Elective –II*

SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ELECTRONICS & TELECOMMUNICATION ENGINEERING

Syllabus Structure for

M.E. (Electronics & Telecommunication Engineering)

4 Semester PG Programme

To be effective from 2016-17

Choice Based Credit System Syllabus

Semester-III

Sr. No.	Subject	Teaching Scheme		Examination Scheme				Credits Assigned	
				Theory		Pract/TW			
		Theory	Pract	ESE	ISE	ESE	ISE	Theory	Pract
1	**Self Learning**	$	-	70	30	-	-	3	-
2	**Lab Practice**	-	2	-	-	-	25	-	1
3	**Dissertation Phase-I:** Synopsis Submission Seminar*(Format to designed)(ISE)	-	4@			-	75	-	3
	Dissertation Phase-II: Term work *(ISE)	-	-			-	100	-	3
	Dissertation Phase-II: Progress Seminar* Presentation(ESE)	-	-			200	-	-	6
	Total	-	6	70	30	200	200	3	13
		Total=6		**Total=500**				**Total=16**	

Self Learning Corses :

1. Internet of Things
2. Software Defined and Cognitive Radio
3. Modeling & Simulation of Communication System

➢ $-Being a self learning subject ,student shall prepare for examination as per specified syllabus.

➢ *-For all activities related to desertation phase I (Synopsis submission seminar and progress seminar) student must interact regularly every week with the adviser.\

➢ Synopsis submission seminar shall cover detailed synopsis of the proposed work.Student shall submit synopsis of desertation work only after delivering this seminar.

➢ Progress seminar shall be delivered capturing details of the work done by student for desertation.

➢ Student shall deliver all seminar using modern presentation tools. A hard copy of report shall be submitted to the department before delivering the seminar .A PDF copy of report must be submitted to the adviser along with other details if any.

➢ Lab practice shall include any of the below activities related to desertation work and recommended by advisor.Student shall submit report after completion of the activity to the advisior –
Software assignments ,learning new software ,hardware realization ,literature survey,filed work,Industrial traing etc.

➢ @ Indicates contact hours of student for interaction with advisior.

➢ Details of mode of assignment of seminar and desertation shall be as specified in 7(III) of PG Engineering ordinance of Solapur University ,Solapur

Semester-IV

Sr. No.	Subject	Teaching Scheme		Examination Scheme				Credits Assigned	
				Theory		Pract/TW			
		Theory	Practical	ESE	ISE	ESE	ISE	Theory	Pract
1	**Dissertation Phase-III:**Progress Seminar #(ISE) Dissertation Phase IV: Term work #(ISE)	-	4@	-	-	-	100	-	4
2	**Dissertation Phase-IV:**Term Work#(ISE)	-	2@	-	-	-	200	-	6
3	**Final submission of Dissertation** and Viva-voce(ESE)	-	-	-	-	200	-	-	6
	Total	-		-	-	200	300	-	16
		Total = 6		**Total=500**				**Total=16**	

- ➢ #-For all activities related to dissertation phase-II student must interact regularly every week with the advisior .
- ➢ Progress seminar shall be delivered capturing details of the work done by student for desertation.
- ➢ Student shall deliver all seminar using modern presentation tools. A hard copy of report shall be submitted to the department before delivering the seminar .A PDF copy of report must be submitted to the adviser along with other details if any.
- ➢ Student must submit hard copy of project report to the department .
- ➢ @ Indicates contact hours of student for interaction with advisior.
- ➢ Details of mode of assignment of seminar and desertation shall be as specified in 7(III) of PG Engineering ordinance of Solapur University ,Solapur.

SOLAPUR UNIVERSITY, SOLAPUR

FACULTY OF ENGINEERING & TECHNOLOGY

ELECTRONICS and TELECOMMUNICATION ENGINEERING

CBCS Syllabus for

First Year M. Tech.

w.e.f. Academic Year 2018-19

SOLAPUR UNIVERSITY, SOLAPUR
FACULTY OF ENGINEERING & TECHNOLOGY

STRUCTURE of M.Tech. (ELECTRONICS and TELECOMMUNICATION ENGINEERING)
Four Semester Course
Choice Based Credit System (CBCS) Syllabus w.e.f. A.Y. 2018 -19
Semester-I

Sr. No.	Subject	Teaching Scheme				Credits				Evaluation Scheme				
		L	T	P	Total	Credits (L)	Credits (T)	Credits (P)	Total Credits	Scheme	Theory Marks	ICA- P Marks	ICA-T Marks	Total Marks
1	Research Methodology & IPR	3	1	-	4	3.0	1.0	-	4.0	ISE	30	--	25	125
										ESE	70	--	--	
2	Antenna Design and Application	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
3	Soft Computing Methods	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
4	Advanced Network System	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
5	Elective I	3	1	-	4	3.0	1.0	-	4.0	ISE	30	--	25	125
										ESE	70	--	--	
6	Seminar- I	-	-	2	2	-	-	2.0	2.0	ISE	--	50	--	50
										ESE	--	--	--	
	Total	15	2	8	25	15.0	2.0	5.0	22.0		500	125	50	675

Note: L- Lectures, P-Practical, T-Tutorial, ISE- In Semester Evaluation, ESE- End Semester Evaluation, ICA- Internal Continuous Assessment

SOLAPUR UNIVERSITY, SOLAPUR
FACULTY OF ENGINEERING & TECHNOLOGY

STRUCTURE of M.Tech. (ELECTRONICS and TELECOMMUNICATION ENGINEERING)
Four Semester Course
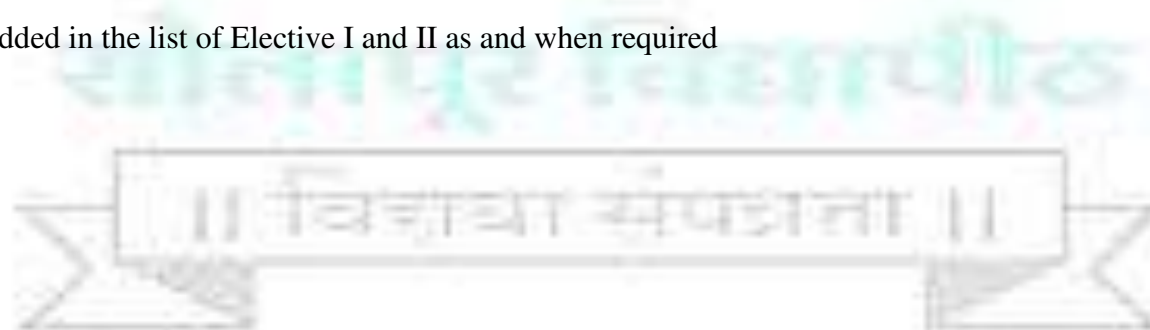**Choice Based Credit System (CBCS) Syllabus w.e.f. A.Y. 2018-19**
Semester-II

Sr. No.	Subject	Teaching Scheme				Credits				Evaluation Scheme				
		L	T	P	Total	Credits (L)	Credits (T)	Credits (P)	Total Credits	Scheme	Theory Marks	ICA- P Marks	ICA-T Marks	Total Marks
1	Advanced Internet of Things	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
2	RF Circuit Design	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
3	Artificial Intelligence & Machine Learning	3	-	2	5	3.0	-	1.0	4.0	ISE	30	25	--	125
										ESE	70	--	--	
4	Cryptography and Network Security	3	1	-	4	3.0	1.0	-	4.0	ISE	30	--	25	125
										ESE	70	--	--	
5	Elective – II	3	1	-	4	3.0	1.0	-	4.0	ISE	30	--	25	125
										ESE	70	--	--	
6	Seminar- II	-	-	2	2	-	-	2.0	2.0	ISE	--	50	--	50
										ESE	--	--	--	
	Total	**15**	**2**	**8**	**25**	**15.0**	**2.0**	**5.0**	**22.0**		**500**	**125**	**50**	**675**

Note : L- Lectures, P-Practical, T-Tutorial, ISE- In Semester Evaluation, ESE- End Semester Evaluation, ICA- Internal Continuous Assessment

- Seminar I shall be delivered on a topic related to student's broad area of interest for dissertation work selected in consultation with the advisor after compiling the information from the latest literature. Student shall deliver seminar using modern presentation tools. A hard copy of the report (as per format specified by the department) shall be submitted to the Department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any.

- Seminar II shall be delivered on a topic related to student's particular area of interest for dissertation work selected in consultation with the advisor after compiling the information from the latest literature. Student shall deliver seminar using modern presentation tools. A hard copy of the report (as per format specified by the department) shall be submitted to the Department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any.

- **List of elective courses for semester I and II -**

Sr.	Elective - I	Elective – II
1.	Biomedical Signal Processing	Communication System Design
2.	Advanced Embedded System	Multimedia Processing
3.	Automotive Electronics	Automation and Industrial Robotics

- Courses may be added in the list of Elective I and II as and when required

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

NAAC Accredited-2015
'B' Grade (CGPA 2.62)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: ELECTRONICS & TELECOMMUNICATION ENGINEERING

Name of the Course: M.Tech.- Semester I, II, III & IV

(Syllabus to be implemented from w.e.f. 2018-19 & 2019-20)

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

FACULTY OF SCIENCE & TECHNOLOGY

STRUCTURE OF M.Tech.(ELECTRONICS and TELECOMMUNICATION ENGINEERING)

Four Semester Course

Choice Based Credit System Syllabus

Semester-III

Sr. No.	Subject	Teaching Scheme		Credits			Evaluation Scheme			
		L	P	Credits (L)	Credits (P)	Total Credits	Scheme	Theory Marks	ICA Marks	Total Marks
1	Self Learning Course	$	-	3.0	-	3.0	ISE	30	--	100
							ESE	70		
2	Open Elective Course#	3		3.0		3.0	ISE	30		100
							ESE	70		
3	Dissertation Phase I : Synopsis Submission Seminar*		@4		3.0	3.0	ISE	--	100	100
							ESE	--	--	
4	Dissertation Phase II : ICA*		-		3.0	3.0	ISE	--	100	100
							ESE	--	--	
5	Dissertation Phase II Progress Seminar*		-		3.0	3.0	ISE	--		100
							ESE	--	100	
	Total	**3**	**4**	**6.0**	**9.0**	**15.0**		**200**	**300**	**500**

L- Lectures, P-Practical, T-Tutorial, ISE- In Semester Evaluation, ESE- End Semester Evaluation, ICA- Internal Continuous Assessment

Note -
- $- Being a Self Learning Course, student shall prepare for examination as per specified syllabus
- *- For all activities related to dissertation Phase I (synopsis submission seminar and progress seminar) student must interact regularly every week with the advisor.

- # - This course is common for all branches of Technology (i.e. for all M.Tech. Programs)

- Synopsis submission seminar shall cover detailed synopsis of the proposed work. Student shall submit synopsis of the dissertation work only after delivering this seminar.
- Progress seminar shall be delivered capturing details of the work done by student for dissertation
- Student shall deliver all seminars using modern presentation tools. A hard copy of the report shall be submitted to the department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any
- @ Indicates contact hours of students for interaction with advisor.
- Details of modes of assessment of seminar and dissertation shall be as specified in 7(III) of PG Engineering Ordinance of Solapur University, Solapur

List Self Learning Courses -

Sr.	*Self Learning Subject*
1	Programmable System on Chip (PSoC)
2	Remote Sensing
3	Multimedia Network

List of Open Elective Courses-

Sr.	*Self LearningSubject*
1	Business Analytics
2	Operation Research
3	Cost Management of Engineering Projects
4	Non conventional Energy

- New Self Learning Courses and New Open Elective Courses may be added as and when required

Punyashlok Ahilyadevi Holkar Solapur University, Solapur
FACULTY OF SCIENCE & TECHNOLOGY
STRUCTURE OF M.Tech.(ELECTRONICS and TELECOMMUNICATION ENGINEERING)
Four Semester Course
Choice Based Credit System Syllabus

Semester-IV

Sr. No.	Subject	Teaching Scheme			Credits			Evaluation Scheme		
		L	P	Total	Credits (L)	Credits (P)	Total Credits	Scheme	ICA Marks	Total Marks
1	Dissertation Phase III : Progress Seminar #	-	4@	4	-	3.0	3.0	ISE	100	100
2	Dissertation Phase IV: #	-	2@	2	-	6.0	6.0	--	200	200
3	Final Submission of the Dissertation and Viva –Voce	-	-	-	-	6.0	6.0	ESE	200	200
	Total	**-**	**-**	**6**	**--**	**15.0**	**15.0**	**-**	**500**	**500**

Note –
- #- For all activities related to dissertation Phase III & IV student must interact regularly every week with the advisor.
- Progress seminar shall be delivered capturing details of the work done by student for dissertation
- Student shall deliver all seminars using modern presentation tools. A hard copy of the report shall be submitted to the Department before delivering the seminar. A PDF copy of the report must be submitted to the advisor along with other details if any.
- Student must submit a hard copy of Project Report to the department
- @ indicates contact hours of the student for interaction with the advisor
- Details of modes of assessment of seminar and dissertation shall be as specified in 7 (III) of PG Engineering Ordinance of Solapur University, Solapur.