

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
I YEAR – I SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (30 Marks)			External (70 Marks)		
				Assignment	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
1	BS	20BST04	Engineering Mathematics – I	3	1	0	4	5	2	25	3	70	100
2	BS	20BST02	Engineering Chemistry	3	1	0	4	5	2	25	3	70	100
3	ES	20CST01	Programming for Problem Solving	2	1	0	3	5	2	25	3	70	100
4	ES	20EET01	Basic Electrical Engineering	2	1	0	3	5	2	25	3	70	100
5	MAN	20BST13	Essence of Indian Knowledge Tradition	3	0	0	0	Satisfactory/Not Satisfactory					
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
5	BS	20BSP02	Engineering Chemistry Lab	0	0	2	1	20	2	20	3	60	100
6	ES	20CSP01	Programming for Problem Solving Lab	0	0	4	2	20	2	20	3	60	100
7	ES	20MEP01	Engineering Graphics	0	0	6	3	20	2	20	3	60	100
Total				13	4	12	20						700

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
I YEAR –II SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (30 Marks)			External (70 Marks)		
				Assignment	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
1	BS	20BST05	Engineering Mathematics – II	3	1	0	4	5	2	25	3	70	100
2	BS	20BST03	Engineering Physics	3	1	0	4	5	2	25	3	70	100
3	HUM	20BST01	Functional English	3	0	0	3	5	2	25	3	70	100
4	HUM	20BST08	Economics and Accountancy	3	1	0	4	5	2	25	3	70	100
5	MAN		NCC/NSS	2 HOURS			Satisfactory/Not Satisfactory						
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
6	ES	20BSP03	Engineering Physics Lab	0	0	2	1	20	2	20	3	60	100
7	BS	20BSP01	Communicative English Lab	0	0	2	1	20	2	20	3	60	100
8	ES	20MEP03	Workshop & Manufacturing Practices	0	0	4	2	20	2	20	3	60	100
9	ES	20EEP01	Basic Electrical Engineering Lab	0	0	2	1	20	2	20	3	60	100
Total				12	3	10	20						800

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
II YEAR –I SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
				Internal (30 Marks)		External (70 Marks)							
				Assignment	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
1	BS	20BST06	Engineering Mathematics – III	3	1	0	4	5	2	25	3	70	100
2	ES	20EET34	Network Theory	2	1	0	3	5	2	25	3	70	100
3	PC	20ECT02	Electronic Devices and Circuits	2	1	0	3	5	2	25	3	70	100
4	PC	20ECT03	Digital System Design	2	1	0	3	5	2	25	3	70	100
5	PC	20ECT04	Signals and Systems	3	1	0	4	5	2	25	3	70	100
6	MAN	20BST12	Environmental Studies	3	0	0	0	Satisfactory/Not Satisfactory					
7	MAN		NCC/NSS	2 HOURS			Satisfactory/Not Satisfactory						
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
				Internal (40 Marks)		External (60 Marks)							
				Continuous	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
8	PC	20ECP02	Electronic Devices and Circuits Lab	0	0	2	1	20	2	20	3	60	100
9	ES	20EEP10	Networks Lab	0	0	2	1	20	2	20	3	60	100
10	SC	20ECS01	Skill Oriented Course 1	0	1	2	2	20	2	20	3	60	100
Total				15	6	6	21						800

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
II YEAR –II SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (30 Marks)			External (70 Marks)		
				Assignment	Test								
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
1	ES	20EET09	Control Systems	2	1	0	3	5	2	25	3	70	100
2	PC	20ECT05	Analog Electronics	3	1	0	4	5	2	25	3	70	100
3	PC	20ECT09	Microprocessors & Microcontrollers	2	1	0	3	5	2	25	3	70	100
4	PC	20ECT06	Probability Theory and Stochastic Processes	2	1	0	3	5	2	25	3	70	100
5	PC	20ECT07	Electromagnetic Theory and Transmission Lines	2	1	0	3	5	2	25	3	70	100
6	PC	20ECT08	Analog Communication	2	1	0	3	5	2	25	3	70	100
7	MAN	20BST16	Universal Human values & Ethics	3	0	0	3	5	2	25	3	70	100
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test								
				Max.	Duration	Max.		Duration	Max.				
			L	T	P								
8	PC	20ECP03	Digital System Design Lab	0	0	2	1	20	2	20	3	60	100
9	PC	20ECP04	Analog Electronics Lab	0	0	2	1	20	2	20	3	60	100
10	SC	20ECS02	Skill Oriented Course 2	0	1	2	2	20	2	20	3	60	100
Total				16	7	6	26						1000

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
III YEAR –I SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (30 Marks)			External (70 Marks)		
				Assignment	Test			External (70 Marks)					
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
1	HUM	20BST09	Industrial Management	2	1	0	3	5	2	25	3	70	100
2	PC	20ECT10	IC Applications	2	1	0	3	5	2	25	3	70	100
3	PC	20ECT11	Digital Communications	2	1	0	3	5	2	25	3	70	100
4	PE		Elective-I	2	1	0	3	5	2	25	3	70	100
5	PE		Elective-II	2	1	0	3	5	2	25	3	70	100
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test			External (60 Marks)					
				Max.	Duration	Max.		Duration	Max.				
			L	T	P								
6	PC	20ECP05	Microprocessors & Microcontrollers Lab	0	0	2	1	20	2	20	3	60	100
7	PC	20ECP06	IC Applications Lab	0	0	2	1	20	2	20	3	60	100
8	PC	20ECP07	Analog & Digital Communications Lab	0	0	2	1	20	2	20	3	60	100
9	Intern	20ECI01	Internship-1	0	0	0	1	100	0	0	0	0	100
10	SC	20ECS03	Skill Oriented Course 3	0	1	2	2	20	2	20	3	60	100
Total				10	6	8	21						1000

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
III YEAR –II SEMESTER

THEORY													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
				Internal (30 Marks)				External (70 Marks)					
				Assignment	Test			External (70 Marks)					
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
1	HUM	20BST12	Antenna & Wave Propagation	3	0	0	3	5	2	25	3	70	100
2	PC	20ECT13	Digital Signal Processing	2	1	0	3	5	2	25	3	70	100
3	PC	20ECT14	Microwave Theory	2	1	0	3	5	2	25	3	70	100
4	PE		Elective-III	2	1	0	3	5	2	25	3	70	100
5	OE		Open Elective-I	2	1	0	3	5	2	25	3	70	100
6	OE		Open Elective-II	3	0	0	3	5	2	25	3	70	100
7	MAN	20BST11	Constitution of India	3	0	0	0	Satisfactory/Not satisfactory					
PRACTICALS													
S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
				Internal (40 Marks)				External (60 Marks)					
				Continuous	Test			External (60 Marks)					
				Max. Marks	Duration	Max. Marks		Duration	Max. Marks				
			L	T	P								
8	PC	20ECP08	Digital Signal Processing Lab	0	0	2	1	20	2	20	3	60	100
9	PC	20ECP09	Microwave Lab	0	0	2	1	20	2	20	3	60	100
10	SC		Skill Oriented Course 4	0	1	2	2	20	2	20	3	60	100
Total				17	5	6	22						900

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
IV YEAR –I SEMESTER

THEORY

S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (30 Marks)			External (70 Marks)		
				Assignment	Test			Duration	Max. Marks				
				Max. Marks	Duration	Max. Marks				Duration	Max. Marks		
L	T	P											
1	PC	20CST12	Computer Networks	3	0	0	3	5	2	25	3	70	100
2	PC	20ECT15	VLSI Design	2	1	0	3	5	2	25	3	70	100
3	PE	20ECM01	Elective-IV(MOOCs)	2	1	0	3	5	2	25	3	70	100
4	PE		Elective-V	2	1	0	3	0	0	0	0	0	100
5	OE		Open Elective-III	3	0	0	3	5	2	25	3	70	100

PRACTICALS

S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test			Duration	Max.				
				Max. Marks	Duration	Max.				Duration	Max.		
L	T	P											
6	PC	20CSP10	Computer Networks Lab	0	0	2	1	20	2	20	3	60	100
7	PC	20ECP10	VLSI Lab	0	0	2	1	20	2	20	3	60	100
8	Intern	20ECI02	Internship-2	0	0	0	1	100	0	0	0	0	100
9	SC		Skill Oriented Course 5	0	1	2	2	20	2	20	3	60	100
Total				12	4	6	20						900

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
IV YEAR –II SEMESTER
PRACTICALS

S.No	Course Type	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
								Internal (40 Marks)			External (60 Marks)		
				Continuous	Test								
				Max. Marks	Duration	Max.		Duration	Max.				
1	PW	20ECJ01	Internship-3 cum Project Work	0	0	26	13	40	0	0	0	60	100
Total				0	0	26	13						100

**SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
LIST OF ELECTIVES**

ELECTIVE - I

S. No	Course Code	Course Title
1	20ECT16	Detection & Estimation of Signals
2	20EET35	Digital control systems
3	20EET11	Power electronics

ELECTIVE - II

S. No	Course Code	Course Title
1	20ECT17	Embedded systems
2	20ECT18	Bio medical electronics
3	20CST06	Object Oriented Programming

ELECTIVE - III

S. No	Course Code	Course Title
1	20ECT19	Coding theory and techniques
2	20ECT20	Nano electronics
3	20CST10	Operating systems

ELECTIVE - IV

S. No	Course Code	Course Title
		Mandatory MOOCs

ELECTIVE - V

S. No	Course Code	Course Title
1	20ECT21	Cellular Mobile Communication
2	20ECT22	Wireless sensor networks
3	20ECT23	Digital Image & Video Processing

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
LIST OF OPEN ELECTIVES OFFERED BY ECE TO OTHER DEPARTMENTS

OPEN ELECTIVE - I

S. No	Course Code	Course Title
1	20ECT27	Pulse and Digital Circuits
2	20ECT28	Electronic Measurements

OPEN ELECTIVE - III

S. No	Course Code	Course Title
1	20ECT32	Microcontrollers & Interfacing
2	20ECT33	Basics of Embedded Systems
3	20ECT34	Digital Image Processing

OPEN ELECTIVE - II

S. No	Course Code	Course Title
1	20ECT29	Communication Systems
2	20ECT30	Microprocessors & Interfacing
3	20ECT31	Digital Design using VHDL

**SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

LIST OF OPEN ELECTIVES OFFERED BY OTHER DEPARTMENTS TO ECE (2020-21)

OPEN ELECTIVE - I

S.No	Course Code	Course Title	Offering Department
1	20CST31	Introduction to C++ Programming	CSE
2	20CSP13	Advanced Programming Lab	
3	20CST32	Fundamentals of Computer Organization	
4	20EET28	Electrical Engineering Materials	EEE
5	20EET29	Energy Auditing and Demand Side Management	
6	20MET33	Power Plant Engineering	ME
7	20MET34	Plant Layout and Design	
8	20MUP01	Music Vocal	BS&H
9	20MUP02	Dance Bharatanatyam	
10	20MUP03	Dance Kuchipudi	

OPEN ELECTIVE - II

S.No	Course Code	Course Title	Offering Department
1	20CST33	Basics of Computer Networks	CSE
2	20CST34	Introduction to Cyber Security	
3	20CST35	Introduction to Cloud Computing	
4	20EET30	Artificial Neural Networks	EEE
5	20EET31	Energy Storage Systems	
6	20MEP13	Engineering Projects in Community	ME
7	20MET36	Time and Motion Study	
8	20MET37	Nano Technology	
9	20BST14	LSRW Skills	BS&H

OPEN ELECTIVE - III

S.No	Course Code	Course Title	Offering Department
1	20CST36	Introduction to Artificial Intelligence	CSE
2	20CST37	Introduction to Java Programming	
3	20CST38	Fundamentals of Internet of Things	
4	20EET32	Conventional & Non-Conventional Energy Sources	EEE
5	20EET33	Design Costing of Electrical System	
7	20MET38	Total Quality Management	ME
8	20MET39	Production Planning and Control	
9	20MET40	Supply Chain Management	
10	20BST15	Data Analytics for Decision Making	BS&H

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATI MAHILA VISVAVIDYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH (ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
ACADEMIC REGULATIONS, SCHEME and SYLLABII for R-2020
SKILL ORIENTED COURSES

S.No	Year / Semester	Skill Development Course No.	Course Code	Course Title	Hours per Week			Credits	Evaluation					Total Marks
									Internal (40 Marks)			External (60 Marks)		
					Continuous Assessment	Test								
									Max. Marks	Duration	Max. Marks	Duration	Max. Marks	
1	II - I	SC1	20ECS01	Introduction to MATLAB	0	1	2	2	20	2	20	3	60	100
2	II - II	SC2	20BSS01	Effective Communication Skills	0	1	2	2	20	2	20	3	60	100
3	III - I	SC3	20ECS02	Electronic Circuit Design	0	1	2	2	20	2	20	3	60	100
TRACK 1: PCB DESIGN														
4	III - II	SC4	20ECS03	Fundamentals of PCB Design	0	1	2	2	20	2	20	3	60	100
5	IV - I	SC5	20ECS04	Advanced PCB Design	0	1	2	2	20	2	20	3	60	100
TRACK 2: EMBEDDED SYSTEMS														
6	III - II	SC4	20ECS05	Fundamentals of Embedded Systems	0	1	2	2	20	2	20	3	60	100
7	IV - I	SC5	20ECS06	Advanced Embedded Systems	0	1	2	2	20	2	20	3	60	100
TRACK 3: ANTENNAS														
8	III - II	SC4	20ECS07	Antenna Measurements	0	1	2	2	20	2	20	3	60	100
9	IV - I	SC5	20ECS08	Microstrip Patch Antenna Design	0	1	2	2	20	2	20	3	60	100
TRACK 4: MACHINE LEARNING & ARTIFICIAL INTELLIGENCE														
10	III - II	SC4	20CST13	Machine Learning	0	1	2	2	20	2	20	3	60	100
11	IV - I	SC5	20CST27	Artificial Intelligence	0	1	2	2	20	2	20	3	60	100
Total					0	5	10	10						500