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UG
SCHEME

SCHOOL OF ENGINEERING AND TECHNOLOGY
SRI PADMAVATHI MAHILA VISVAVISYALAYAM
SCHEME OF INSTRUCTION AND EVALUATION OF B.TECH(ECE)
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
I YEAR – I SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	L	T	P	Credits	Assignment Max. Marks	Test Duration (Hrs)	Test Max. Marks	External Duration (Hrs)	External Max. Marks	Total Marks
1	19BST04	Engineering Mathematics – I	3	1	0	4	5	2	25	3	70	100
2	19BST02	Engineering Chemistry	3	1	0	4	5	2	25	3	70	100
3	19CST01	Programming for Problem Solving	2	1	0	3	5	2	25	3	70	100
4	19EET01	Basic Electrical Engineering	2	1	0	3	5	2	25	3	70	100
5	19BST13	Essence of Indian Knowledge Tradition	3	0	0	0	Satisfactory/Not Satisfactory					

PRACTICALS

S.No	Course Code	Course Title	L	T	P	Credits	Continuous Evaluation Max. Marks	Test Duration (Hrs)	Test Max. Marks	External Duration (Hrs)	External Max. Marks	Total Marks
6	19BSP02	Engineering Chemistry Lab	0	0	2	1	20	2	20	3	60	100
7	19CSP01	Programming for Problem Solving Lab	0	0	4	2	20	2	20	3	60	100
8	19MEP01	Engineering Graphics Lab	0	0	6	3	20	2	20	3	60	100
		Total	13	4	12	20						700

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I YEAR – II SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	Hours per Week L	Hours per Week T	Hours per Week P	Credits	Internal (30 Marks) Assignment Max. Marks	Internal (30 Marks) Test Duration (Hrs)	Internal (30 Marks) Test Max. Marks	External (70 Marks) Duration (Hrs)	External (70 Marks) Max. Marks	Total Marks
1	19BST05	Engineering Mathematics – II	3	1	0	4	5	2	25	3	70	100
2	19BST03	Engineering Physics	3	1	0	4	5	2	25	3	70	100
3	19BST01	Functional English	3	0	0	3	5	2	25	3	70	100
4	19BST08	Economics and Accountancy	3	1	0	4	5	2	25	3	70	100

PRACTICALS

S.No	Course Code	Course Title	Hours per Week L	Hours per Week T	Hours per Week P	Credits	Internal(40 Marks) Continuous Evaluation Max. Marks	Internal(40 Marks) Test Duration (Hrs)	Internal(40 Marks) Test Max. Marks	External (60 Marks) Duration (Hrs)	External (60 Marks) Max. Marks	Total Marks
5	19BSP03	Engineering Physics Lab	0	0	2	1	20	2	20	3	60	100
6	19BSP01	Communicative English Lab	0	0	2	1	20	2	20	3	60	100
7	19MEP03	Workshop & Manufacturing Practices Lab	0	0	4	2	20	2	20	3	60	100
8	19EEP01	Basic Electrical Engineering Lab	0	0	2	1	20	2	20	3	60	100
		Total	**12**	**3**	**10**	**20**						**800**

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
II YEAR – I SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	L	T	P	Credits	Internal(30 Marks) Assignment Max. Marks	Internal(30 Marks) Test Duration (Hrs)	Internal(30 Marks) Test Max. Marks	External (70 Marks) Duration (Hrs)	External (70 Marks) Max. Marks	Total Marks
1	19BST06	Engineering Mathematics – III	3	1	0	4	5	2	25	3	70	100
2	19ECT02	Electronic Devices and Circuits	2	1	0	3	5	2	25	3	70	100
3	19ECT04	Digital System Design	2	1	0	3	5	2	25	3	70	100
4	19EET37	Network Theory	2	1	0	3	5	2	25	3	70	100
5	19ECT05	Signals and Systems	3	1	0	4	5	2	25	3	70	100
6	19BST12	Environmental Studies	3	0	0	0	Satisfactory/Not Satisfactory					

PRACTICALS

S.No	Course Code	Course Title	L	T	P	Credits	Internal (40 Marks) Continuous Evaluation Max. Marks	Internal (40 Marks) Test Duration (Hrs)	Internal (40 Marks) Test Max. Marks	External (60 Marks) Duration (Hrs)	External (60 Marks) Max. Marks	Total Marks
7	19ECP02	Electronic Devices and Circuits Lab	0	0	2	1	20	2	20	3	60	100
8	19EEP10	Networks and Simulation Lab	0	0	2	1	20	2	20	3	60	100
Total			15	5	4	19						700

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II YEAR – II SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal(30 Marks) Assignment Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (70 Marks) Duration (Hrs)	External Max. Marks	Total Marks
1	19EET10	Control Systems	2	1	0	3	5	2	25	3	70	100
2	19ECT03	Analog Electronics	3	1	0	4	5	2	25	3	70	100
3	19CST05	Computer Architecture and Organisation	3	0	0	3	5	2	25	3	70	100
4	19ECT06	Probability Theory and Stochastic Processes	2	1	0	3	5	2	25	3	70	100
5	19ECT07	Electromagnetic Theory and Transmission Lines	2	1	0	3	5	2	25	3	70	100
6	19ECT10	Analog Communication	2	1	0	3	5	2	25	3	70	100

PRACTICALS

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal (40 Marks) Continuous Evaluation Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (60 Marks) Duration (Hrs)	External Max. Marks	Total Marks
7	19ECP04	Analog Electronics Lab	0	0	2	1	20	2	20	3	60	100
8	19ECP03	Digital System Design Lab	0	0	2	1	20	2	20	3	60	100
		Total	14	5	4	21						800

THEORY

S.No	Course Code	Course Title	Hours per Week			Credits	Internal (30 Marks)			External (70 Marks)		Total Marks
							Assignment	Test				
			L	T	P		Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)	Max. Marks	
1	19ECT09	Microprocessors & Microcontrollers	2	1	0	3	5	2	25	3	70	100
2	19ECT08	IC Applications	2	1	0	3	5	2	25	3	70	100
3	19ECT11	Digital Communications	2	1	0	3	5	2	25	3	70	100
4	19ECT12	Electronic Measurements & Instrumentation	2	1	0	3	5	2	25	3	70	100
5	19BST09	Industrial Management	3	0	0	3	5	2	25	3	70	100
6		Elective-I	2	1	0	3	5	2	25	3	70	100

PRACTICALS

S.No	Course Code	Course Title	Hours per Week			Credits	Internal(40 Marks)			External (60 Marks)		Total Marks
							Continuous Evaluation	Test				
			L	T	P		Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)	Max. Marks	
7	19ECP05	Microprocessors & Microcontrollers Lab	0	0	2	1	20	2	20	3	60	100
8	19ECP06	IC Applications Lab	0	0	2	1	20	2	20	3	60	100
9	19ECP07	Analog& Digital Communications Lab	0	0	2	1	20	2	20	3	60	100
		Total	**13**	**5**	**6**	**21**						**900**

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III YEAR – II SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	Hours per Week			Credits	Internal(30 Marks)			External (70 Marks)		Total Marks
							Assignment	Test				
			L	T	P		Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)	Max. Marks	
1	19BST10	Entrepreneurship & Project Management	3	0	0	3	5	2	25	3	70	100
2	19ECT13	Digital Signal Processing	2	1	0	3	5	2	25	3	70	100
3	19ECT14	Microwave Theory	2	1	0	3	5	2	25	3	70	100
4		Elective-II	2	1	0	3	5	2	25	3	70	100
5		Elective-III	2	1	0	3	5	2	25	3	70	100
6		Open Elective-I	3	0	0	3	5	2	25	3	70	100
7	19BST11	Constitution of India	3	0	0	0	Satisfactory/Not satisfactory					

PRACTICALS

S.No	Course Code	Course Title	Hours per Week			Credits	Internal (40 Marks)			External (60 Marks)		Total Marks
							Continuous Evaluation	Test				
			L	T	P		Max. Marks	Duration (Hrs)	Max. Marks	Duration (Hrs)	Max. Marks	
8	19ECP08	Digital Signal Processing Lab	0	0	2	1	20	2	20	3	60	100
9	19ECP09	Microwave Lab	0	0	2	1	20	2	20	3	60	100
		Total	**17**	**4**	**4**	**20**						**800**

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IV YEAR – I SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal (30 Marks) Assignment Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (70 Marks) Duration (Hrs)	External Max. Marks	Total Marks
1	19CST14	Computer Networks	3	0	0	3	5	2	25	3	70	100
2	19ECT15	VLSI	2	1	0	3	5	2	25	3	70	100
3	19ECT16	Cellular Mobile Communication	2	1	0	3	5	2	25	3	70	100
4	19ECM01	Elective-IV(MOOCs)	3	0	0	3	0	0	0	0	0	100
5		Open Elective-II	3	0	0	3	5	2	25	3	70	100

PRACTICALS

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal (40 Marks) Continuous Evaluation Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (60 Marks) Duration (Hrs)	External Max. Marks	Total Marks
6	19CSP10	Computer Networks Lab	0	0	2	1	20	2	20	3	60	100
7	19ECP10	VLSI Lab	0	0	2	1	20	2	20	3	60	100
8	19ECI01	Internship	0	0	0	2	100	0	0	0	0	100
9	19ECS01	Technical Seminar	0	0	2	1	100	0	0	0	0	100
10	19ECJ01	Project Work Phase-I	0	0	4	2	100	0	0	0	0	100
		Total	13	2	10	22						1000

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IV YEAR – II SEMESTER (2019-20)

THEORY

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal (30 Marks) Assignment Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (70 Marks) Duration (Hrs)	External (70 Marks) Max. Marks	Total Marks
1		Elective-V	2	1	0	3	5	2	25	3	70	100
2		Elective-VI	2	1	0	3	5	2	25	3	70	100
3		Open Elective-III	3	0	0	3	5	2	25	3	70	100

PRACTICALS

S.No	Course Code	Course Title	Hours per Week L	T	P	Credits	Internal(40 Marks) Continuous Evaluation Max. Marks	Test Duration (Hrs)	Test Max. Marks	External (60 Marks) Duration (Hrs)	External (60 Marks) Max. Marks	Total Marks
4	19ECJ02	Project Work Phase-II	0	0	16	8	40	0	0	0	60	100
		Total	**7**	**2**	**16**	**17**						**400**

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LIST OF ELECTIVES (2019-20)

ELECTIVE – I

S.No.	Course Code	Course Title
1	19ECT17	Antennas and wave propagation
2	19EET29	Digital control systems
3	19EET11	Power electronics

ELECTIVE – II

S.No.	Course Code	Course Title
1	19ECT19	Embedded systems
2	19ECT21	Bio medical electronics
3	19CST06	Object Oriented Programming

ELECTIVE – III

S.No.	Course Code	Course Title
1	19ECT26	Satellite communication
2	19ECT20	Coding theory and techniques
3	19ECT27	Nano electronics
4	19CST10	Operating systems

ELECTIVE – IV

S. No	Course Code	Course Title
1	19ECM01	Mandatory MOOCs

ELECTIVE – V

S.No.	Course Code	Course Title
1	19ECT23	Digital CMOS design
2	19ECT22	Digital image and video processing
3	19ECT24	Radar systems

ELECTIVE – VI

S.No.	Course Code	Course Title
1	19ECT18	Low power VLSI design
2	19ECT28	Wireless sensor networks
3	19ECT25	Fiber optic communications

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LIST OF OPEN ELECTIVES OFFERED BY ECE TO OTHER DEPARTMENTS(2019-20)

OPEN ELECTIVE – I

S.No.	Course code	Course Title
1	19ECT33	Pulse and Digital Circuits
2	19ECT34	Electronic Measurements

OPEN ELECTIVE – II

S.No.	Course code	Course Title
1	19ECT35	Communication Systems
2	19ECT36	Microprocessors & Interfacing
3	19ECT37	Digital Design using VHDL

OPEN ELECTIVE – III

S. No	Course Code	Course Title
1	19ECT38	Microcontrollers & Interfacing
2	19ECT39	Basics of Embedded Systems
3	19ECT40	Digital Image Processing

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

LIST OF OPEN ELECTIVES OFFERED BY OTHER DEPARTMENTS TO ECE (2019-20)

OPEN ELECTIVE – I

S.No	Course Code	Course Title	Offering Department
1	19CST33	Basics of Data Structures	CSE
2	19CST34	Introduction to C++ programming	
3	19CSP13	Advanced Programming Lab	
4	19CST35	Fundamentals of Computer Organization	
5	19EET31	Electrical Engineering Materials	EEE
6	19EET32	Energy Auditing and Demand Side Management	
7	19MEP13	Engineering Projects in Community Services (Project based)	ME
8	19MET36	Time and Motion Study	
9	19MET37	Nano Technology	
10	19MUP01	Music Vocal	BS&H
11	19MUP02	Dance Bharatanatyam	
12	19MUP03	Dance Kuchipudi	

OPEN ELECTIVE – II

S.No	Course Code	Course Title	Offering Department
1	19CST36	Basics of Computer Networks	CSE
2	19CST37	Introduction to Programming with Python	
3	19CST38	Introduction to Data Base Management Systems	
4	19CST39	Introduction to Cloud Computing	
5	19EET33	Artificial Neural Networks	EEE
6	19EET34	Energy Storage Systems	
7	19MET39	Power Plant Engineering	ME
8	19MET40	Plant Layout and Design	
9	19BST14	LSRW Skills	BS&H

OPEN ELECTIVE-III

S.No	Course Code	Course Title	Offering Department
1	19CST40	Introduction to Cyber Security	CSE
2	19CST41	Introduction to Artificial Intelligence	
3	19CST42	Introduction to JAVA Programming	
4	19CST43	Fundamentals of Internet Of Things	
5	19EET35	Conventional & Non-Conventional Energy Sources	EEE
6	19EET36	Design Costing of Electrical System	
7	19MET41	Total Quality Management	ME
8	19MET42	Production Planning and Control	
9	19MET43	Supply Chain Management	
10	19BST15	Data Analytics for Decision Making	BS&H