



SETHU INSTITUTE OF TECHNOLOGY

Pulloor, Kariapatti – 626 115

(An Autonomous Institution)

B.E. Degree Programme

CURRICULUM

Regulations 2013

Bachelor of Engineering in Electronics & Communication Engineering

OVERALL COURSE STRUCTURE

Category	No. of Courses	Credits	Total Percentage
Science & Humanities	15	40	21.05
Basic Engineering	10	28	14.74
Professional Subjects – CORE	36	104	54.74
Professional Subjects – ELECTIVE	6	18	9.47
TOTAL	67	190	100

COURSE CREDITS – SEMESTER WISE

Branch	I	II	III	IV	V	VI	VII	VIII	TOTAL
ECE	26	26	27	25	25	25	24	12	190

Semester I

Course Code	Course Title	L	T	P	C
THEORY					
01UEN101	Technical English – I (Common to ALL Branches)	3	1	0	4
01UMA102	Engineering Mathematics – I (Common to ALL Branches)	3	1	0	4
01UPH103	Engineering Physics (Common to ALL Branches)	3	0	0	3
01UCY105	Applied Chemistry (Common to CSE,ICE,ECE,EEE,IT & EIE)	3	0	0	3
01UCS106	Computer Programming (Common to ALL Branches)	3	0	0	3
01UME107	Engineering Graphics (Common to ALL Branches)	2	0	3	4
PRACTICAL					
01UCS108	Computer practice laboratory-1 (Common to ALL Branches)	0	0	3	2
01UME109	Engineering Practices Laboratory (Common to ALL Branches)	0	0	3	2
01UGS110	Physics & Chemistry Laboratory (Common to ALL Branches)	0	0	2	1
	TOTAL	17	2	11	26
Total No. of Credits : 26					

Semester II

Course Code	Course Title	L	T	P	C
THEORY					
01UEN201	Technical English – II (Common to ALL Branches)	3	1	0	4
01UMA202	Engineering Mathematics – II (Common to ALL Branches)	3	1	0	4
01UPH204	Applied Physics (Common to CSE,ICE,ECE,EEE,IT & EIE)	3	0	0	3
01UCY204	Environmental Science (Common to ALL Branches)	3	0	0	3
01UME205	Basic Civil and Mechanical Engineering (Common to ALL Branches)	4	0	0	4
01UEC207	Electronic Devices	3	0	0	3
PRACTICAL					
01UEC208	Electronic Devices Laboratory	0	0	3	2
01UCS209	Computer Practice Laboratory – II (Common to ALL Branches)	0	0	3	2
01UGS210	Physics & Environmental Science Laboratory (Common to ALL Branches)	0	0	2	1
	TOTAL	19	2	8	26
Total No. of Credits : 26					

Semester III

Course Code	Course Title	L	T	P	C
THEORY					
01UMA321	Transforms and Partial Differential Equations (Common to ALL Branches)	3	1	0	4
01UEC302	Digital Electronics and Design	3	1	0	4
01UEC303	Circuit Theory	3	1	0	4
01UEC304	Electronic Circuits	3	0	0	3
01UEE323	Electrical Machines (Common to MECH., ICE & ECE)	3	0	0	3
01UCS323	Data Structures and Algorithm Analysis	3	0	0	3
PRACTICAL					
01UEC307	Digital Electronics Laboratory	0	0	3	2
01UEC308	Electric and Electronic Circuits Laboratory	0	0	3	2
01UCS329	Data Structures and Algorithm Analysis Laboratory	0	0	3	2
VALUE ADDED COURSE					
01UGS331	Value Education and Human Rights (Common to ALL Branches)	2	0	0	P/F
	TOTAL	20	3	9	27
Total No. of Credits : 27					

Semester IV

Course Code	Course Title	L	T	P	C
THEORY					
01UMA424	Probability and Random Processes	3	1	0	4
01UEC402	Analog Circuits	3	0	0	3
01UEC403	Electromagnetic Fields	3	0	0	3
01UEC404	Signals and Systems	3	1	0	4
01UEC405	Analog Communication	3	0	0	3
01UEI422	Linear Control Engineering	3	0	0	3
01UGS431	Qualitative and Quantitative Aptitude (Common to ALL Branches)	1	0	0	1
PRACTICAL					
01UEC407	Analog Circuits Laboratory	0	0	3	2
01UEC408	Signal Processing and Analog Communication Laboratory	0	0	3	2
	TOTAL	19	2	6	25
Total No. of Credits : 25					

Semester V

Course Code	Course Title	L	T	P	C
THEORY					
01UEC501	Digital Communication	3	0	0	3
01UEC502	Data Communication and Networks	3	0	0	3
01UEC503	Electronic Measurements and Instrumentation	3	0	0	3
01UEC504	Transmission Lines and Waveguides	3	1	0	4
01UEC505	Microprocessors, Microcontrollers and Applications	3	1	0	4
01UEC506	Information Theory and Coding	3	0	0	3
PRACTICAL					
01UEC507	Digital Communication Laboratory	0	0	3	2
01UEC508	Microprocessors, Microcontrollers and Applications Laboratory	0	0	3	2
01UGS531	Soft Skills and Communication Laboratory (Common to CSE,ECE,EEE & IT)	0	0	2	1
	TOTAL	18	2	8	25
Total No. of Credits : 25					

Semester VI

Course Code	Course Title	L	T	P	C
THEORY					
01UEC601	Digital Signal Processing	3	1	0	4
01UEC602	Wireless Communication Systems	3	0	0	3
01UEC603	Antenna and Wave Propagation	3	1	0	4
01UEC604	VLSI Design	3	0	0	3
	Elective I	3	0	0	3
	Elective II	3	0	0	3
PRACTICAL					
01UEC607	Digital Signal Processing Laboratory	0	0	3	2
01UEC608	VLSI Design Laboratory	0	0	3	2
01UEC609	Technical Seminar / Mini Project	0	0	2	1
	TOTAL	18	2	8	25
Total No. of Credits : 25					

Semester VII

Course Code	Course Title	L	T	P	C
THEORY					
01UME701	Project Management and Finance (Common to MECH., ICE,ECE,EEE & EIE	3	0	0	3
01UEC702	Optical Communication and Networks	3	0	0	3
01UEC703	Microwave Engineering	3	0	0	3
01UEC704	Embedded and Real Time Systems	3	0	0	3
	Elective III	3	0	0	3
	Elective IV	3	0	0	3
PRACTICAL					
01UEC707	Embedded Systems Laboratory	0	0	3	2
01UEC708	Optical and Microwave Communication Laboratory	0	0	3	2
01UEC709	Networks and Image Processing Laboratory	0	0	3	2
	TOTAL	18	0	9	24
Total No. of Credits : 24					

Semester VIII

Course Code	Course Title	L	T	P	C
THEORY					
	Elective V	3	0	0	3
	Elective VI	3	0	0	3
PRACTICAL					
01UEC803	Project Work	0	0	12	6
	TOTAL	6	0	12	12
Total No. of Credits : 12					

LIST OF ELECTIVES

Course Code	Course Title	L	T	P	C
01UEC901	Advanced Microcontrollers and Microprocessors	3	0	0	3
01UEC902	Mobile Ad-hoc Networks	3	0	0	3
01UEC903	Computer Architecture and Organization	3	0	0	3
01UEC904	Intellectual Property Rights	3	0	0	3
01UEC905	Cyber Security	3	0	0	3
01UEC906	Wireless Sensor Networks	3	0	0	3
01UEC907	Advanced Signal Processing	3	0	0	3
01UEC908	High Speed Networks	3	0	0	3
01UEC909	Soft Computing	3	0	0	3
01UEC910	Digital Image Processing	3	0	0	3
01UEC911	Multimedia Compression and Communication	3	0	0	3
01UEC912	Television and Video Engineering	3	0	0	3
01UEC913	RF Circuit Design	3	0	0	3
01UEC914	Wireless Communication and Networks	3	0	0	3
01UEC915	ASIC Design	3	0	0	3
01UEC916	Fiber Optic Networks	3	0	0	3
01UEC917	Satellite Communication Principles and Applications	3	0	0	3
01UEC918	Radar and Navigational Aids	3	0	0	3
01UEC919	Electromagnetic Interference and Compatibility	3	0	0	3
01UEC920	Remote Sensing	3	0	0	3
01UEC921	Nanoelectronics	3	0	0	3
01UEC922	MEMS	3	0	0	3
01UEC923	Telecommunication Switching and Networks	3	0	0	3
01UMA951	Numerical Techniques and Linear Programming	3	0	0	3

*The students may choose any one of the electives offered by the other branches of study