Course Structure (B. Tech Electronics Engineering)

First Year Odd Semester

Course Code	Course/Subject	L	Т	Р	Cr
PY111	Classical Physics	3	1	0	11
CY121	Inorganic & Physical Chemistry	3	1	0	11
MA111	Real Analysis & Calculus	3	1	0	11
CS101	Computer Programing	3	1	2	13
ECE101	Electronics Engineering Work Practices	1	0	2	5
ME131	Workshop Practices	0	0	3	3
	Total Credits				56
LM101	Basic English	1	2	0	7
HU101	Universal Human values	1	1	0	5

*Basic English course to be taken by student on recommendation after Diagnostic Test

First Year Even Semester

Course Code	Course/Subject	L	Т	Р	Cr
PY121	Modern Physics	2	1	0	8
MA121	Differential Equations	3	1	0	11
ECE102	Fundamental of Electronics Engineering	3	1	2	13
CH161	Thermodynamics	3	1	0	11
ME121	Engineering Graphics	0	0	3	3
BY101	Biology	2	1	0	8
	Total Credits				54
HU102	Community Internship	0	0	5	5

Second Year Odd Semester

Course Code	Course/Subject	L	Т	Р	Cr
MA131	Linear Algebra & Complex Analysis	2	1	0	8
ECE201	Fundamental of Electrical Engineering	3	0	0	9
MS211	Materials Science	3	0	0	9
ECE202	Network Analysis & Synthesis	3	1	0	11
ECE231	Solid State Electronic Devices	3	0	2	11
CS211	Data Structure and Algorithm	3	0	2	11
	Total Credits				59

Second Year Even Semester

Course Code	Course/Subject	L	Т	Р	Cr
PE202	Fundamental of Mechanical Engineering	3	1	0	11
ECE211	Signals and Systems	3	0	0	9
MA231	Statistical Methods and Data Analysis	2	1	0	8
MA141	Numerical Methods	2	1	0	8
ECE232	Analogue Circuits and Systems	3	1	2	13
ECE221	Digital Circuits and Systems	3	1	2	13
	Total Credits				62

Third Year Odd Semester

Course Code	Course/Subject	L	Т	Р	Cr
ECE311	Analogue Communication Systems	3	0	2	11
ECE331	Microelectronics	3	0	0	9
ECE341	Electromagnetic Fields and Transmission Lines	3	0	0	9
	Department Elective – 1 (DE)	3	0	0	9
ECE321	Microprocessor Engineering	3	0	2	11
ECE418	B.Tech. Project	0	0	10	10
	Total Credits				59

	Departmental Elective (DE -1)		
ECE324	Embedded Systems Design		
ECE332	Optoelectronic Devices		
ECE314	Telecommunication Networks		

Third Year Even Semester

Course Code	Course/Subject	L	Т	Р	Cr
ECE312	Digital Signal Processing	3	0	0	9
ECE313	Digital Communication	3	0	2	11
	Department Elective (DE) - 2	3	0	0	9
ECE322	Control Systems	3	0	0	9
ECE323	Instrumentation Engineering	3	0	2	11
ECE419	B.Tech. Project	0	0	10	10
	Total Credits				59

Summer Term

Course/Subject	L	Т	Р	Cr
Industrial Training/Summer Project	0	0	0	5

	Departmental Elective (DE -2)		
ECE325	Advanced Digital Design		
ECE326	Artificial Intelligence		
ECE327	Internet of things		
ECE333	VLSI Technology		
ECE315	Wireless Communication		

Fourth Year Odd Semester

Course Code	Course/Subject	L	Т	Р	Cr
ECE431	Basic VLSI Design	3	0	0	9
ECE441	Microwave Engineering	3	0	0	9
	Department Elective-3(DE)	3	0	0	9
	Open Elective – 1 (OE)	3	0	0	9
	Language & Management Courses L/M-1	3	0	0	9
ECE420	B.Tech. Project	0	0	10	10
	Total Credits				55

Departmental Elective (DE -3)			
ECE432	Advanced Field Effect Devices		
ECE421	Digital Image Processing		
ECE422	Electronics System Design		
ECE412	Information Theory		

Fourth Year Even Semester

Course Code	Course/Subject	L	Т	Р	Cr
ECE442	Antennas and Propagation	3	0	0	9
ECE411	Optical Communication	3	0	0	9
	Department Elective - 4(DE)	3	0	0	9
	Open Elective-2 (OE)	3	0	0	9
	Language & Management Courses L/M-2	3	0	0	9
ECE401	Advances in Electronics Engineering	2	0	0	6
	Total Credits	-	-		51

Departmental Elective (DE -4)	
ECE433	Introduction to Nano Electronics
ECE423	Logical Designs of Digital Systems
ECE434	Micro-Electromechanical Systems (MEMS)
ECE413	Modern Coding Theory
ECE414	Stochastic Process
ECE424	Switching Theory, Finite Machines & Automata