

Electrical Engineering

Semester - I (Common for all B.Tech Courses)

S.No	C. Code	Course	L	T	P	C
1	MA 101	Calculus	3	1	0	8
2	PH 101	Quantum Physics and Applications	2	1	0	6
3	CH 102	Fundamental Concepts and Applications of Chemistry	3	0	0	6
4	BB 103	Introduction to Modern biology	3	0	0	6
5	PH 113	Hands on Science Laboratory - I	0	0	3	3
6	CS 101	Computer Programming	3	0	2	8
7	HS 103	Introduction to Fine Arts	0	0	1	PP/NP
8	HS 106	Design Thinking and Creativity	1	0	0	PP/NP
9	NO107/NO105	NSO/NSS	0	0	2	2
First Semester Total Credits						37

Semester - II

S. No	Course Code	Course Name	L	T	P	C
1	MA 102	Linear Algebra (1st Half)	3	1	0	4
2	MA 103	Differential Equations - I (2nd Half)	3	1	0	4
3	ME 111	Engineering Graphics Laboratory	1	0	3	5
4	EE 101	Introduction to Electrical Systems and Electronics	3	0	0	6
5	CS 201	Data Structures and Algorithms	3	0	0	6
6	CS 211	Data Structures and Algorithms Laboratory	0	0	3	3
7	ME 113	Hands on Engineering Laboratory	0	0	3	3
8	PH 102	Electricity and magnetism	2	1	0	6
9	NO 105/ NO 107	National Sports Organization (NSO)/National Service Scheme (NSS)	0	0	2	2
Total Credits						37

Semester III

S.No	Course Code	Course Name	L	T	P	C
1	EE 221	Introduction to Probability (1st Half)	3	0	0	3
2	EE 227	Data Analysis (2nd Half)	3	0	0	3
3	EE 229	Electronic Devices (1st Half)	3	0	0	3
4	EE 202	Introduction to Analog Circuits (2nd Half)	3	0	0	3
5	EE 205	Network Theory	2	1	0	6
6	EE 210	Signals and Systems	2	1	0	6

7	MA 201	Complex Analysis (1st Half)	3	1	0	4
8	MA 203	Differential Equations II (2nd Half)	3	1	0	4
9	HS 201	Economics	3	0	0	6
		Total Credits				38

Semester - IV

S. No	Course Code	Course Name	L	T	P	C
1	EE 206	Introduction to Electrical Machines (1st Half)	3	0	0	3
2	EE 209	Introduction to Power Electronics (2nd Half)	3	0	0	3
3	EE 208	Engineering Electromagnetics (1st Half)	2	1	0	3
4	EE 223	Introduction to Power Systems (2nd Half)	2	0	2	3
5	EE 232	Introduction to Communication Systems (1st Half)	3	1	0	3
6	EE 216	Communications Lab (2nd Half)	0	0	4	2
7	EE 204	Digital Systems	3	0	0	6
8	EE 214	Digital Circuits Lab	0	0	3	3
9	EE 226	Control Systems and Laboratory	2	0	2	6
10	EE 212	Devices and Circuits Lab	0	0	3	3
		Total Credits				35

Semester V

S.No	Course Code	Course Name	L	T	P	C
1	EE 325	Microprocessors and Microcontrollers	3	0	0	6
2	EE 321	Digital Signal Processing	3	0	0	3
3	EE 315	Digital Signal Processing Lab	0	0	4	2
4	EE 319	Microprocessors and Microcontrollers Lab	0	0	3	3
5	EE 311	Electrical Machines and Power Electronics Lab	0	0	3	3
6		HSS Elective	3	0	0	6
7		Electives				12
		Total Credits				35

Semester VI

S.No	Course Code	Course Name	L	T	P	C
1	CE 301	Environmental Studies	3	0	0	6

2	EE 314	Electronics Design Lab	3	0	0	6
3		Elective Courses				24
		Total Credits				36

Semester VII & VIII						
1. Student has to earn 36 credits in the fourth year.						
2. Student may choose to earn zero or 6 or 12 credits through BTP/co-op project.						
3. The BTP/co-op may be split in two semesters (6 credits per semester).						
4. The remaining credits should be earned through Institute Elective.						
	Overall Credits Required (Minimum)					254