

Electrical and Electronics Engineering

1. Course Structure

Humanities and Social Sciences

18 (15:0:3)

	L:T:P	Credits
1. English	2:0:1	3
2. Professional Communication	1:0:2	3
3. Organizations	3:0:0	3
4. Economic Citizenship	3:0:0	3
5. Energy and Entropy	3:0:0	3
6. Complexity	3:0:0	3

Basic Sciences

28 (21:4:3)

	L:T:P	Credits
1. Engineering Physics	3:0:1	4
2. Engineering Chemistry	3:0:1	4
3. Problem Solving through Programming	3:0:1	4
4. Differential Equations	3:1:0	4
5. Statistics	3:1:0	4
6. Functions of Several Variables	3:1:0	4
7. Numerical Methods and Partial Differential Equations	3:1:0	4

Engineering Sciences

26(19:2:5)

	L:T:P	Credits
1. Workshop	0:0:1	1
2. Engineering Drawing	1:0:2	3
3. Ecology and Environment	3:0:0	3
4. Measurements and Instrumentation	3:0:1	4
5. Engineering Materials	3:0:0	3
6. Electrical and Electronic Systems	3:0:1	4
7. Electromagnetics	3:1:0	4
8. Linear Electrical Networks	3:1:0	4

Professional Subject Core**54(42:0:12)**

	L:T:P	Credits
1. Analog Circuits and Systems	3:0:1	4
2. Functional Design of Digital Systems	3:0:1	4
3. Microcontrollers and Microprocessors	3:0:1	4
4. Signal Processing	3:0:1	4
5. Power Supplies and Power Amplifiers	3:0:1	4
6. Microelectronics Systems Packaging	3:0:1	4
7. Control Systems	3:0:1	4
8. Transformers and DC Machines	3:0:1	4
9. Induction and Synchronous Machines	3:0:1	4
10. Transmission and Distribution	3:0:0	3
11. Power System Analysis 1	3:0:1	4
12. Power System Analysis 2	3:0:1	4
13. Switchgear and Protection	3:0:0	3
14. High Voltage Engineering	3:0:1	4

Professional Subject Electives**18 Credits**

	L:T:P	Credits
1. Digital Control Systems	3:0:0	3
2. Digital Signal Processing	3:0:0	3
3. Designing with PLDs and FPGAs	3:0:0	3
4. Embedded Systems Design	3:0:0	3
5. Design of Electrical Machines	3:0:0	3
6. Electronic Drive Systems	3:0:0	3
7. Solar Energy Systems	3:0:0	3
8. Design of VLSI Circuits	3:0:0	3
9. HV DC Transmission	3:0:0	3
10. Over Voltages in Power Systems	3:0:0	3
11. SCADA Systems	3:0:0	3
12. Smart Grid Operation and Management	3:0:0	3
13. Power Quality and Control	3:0:0	3
14. Insulation Engineering	3:0:0	3
15. Flexible AC Transmission Systems	3:0:0	3

Open Electives

	L:T:P	Credits
1. Operations Research	3:0:0	3
2. Neural Networks	3:0:0	3
3. Energy Policy	3:0:0	3