

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

(Established by Andhra Pradesh Act No.30 of 2008)

Kukatpally, Hyderabad – 500 085, Andhra Pradesh (India)

B.TECH. (ELECTRICAL & ELECTRONICS ENGINEERING)**I YEAR**

Code	Subject	L	T/P/D	Credits
	English	2	-	4
	Mathematics – I	3	1	6
	Mathematical Methods	3	-	6
	Engineering Physics	3	-	6
	Engineering Chemistry	3	-	6
	Computer Programming	3	-	6
	Engineering Drawing	2	3	6
	Computer Programming Lab	-	3	4
	Engineering Physics & Engineering Chemistry Lab	-	3	4
	English Language Communication Skills Lab	-	3	4
	Engineering Workshop/IT Workshop	-	3	4
	Total	19	16	56

II YEAR I SEMESTER

Code	Subject	L	T/P/D	Credits
	Mathematics – III	4	-	4
	Fluid Mechanics and Hydraulic Machinery	4	-	4
	Electronic Devices & Circuits	4	-	4
	Electrical Circuits	4	-	4
	Electromagnetic fields	4	-	4
	Electrical Machines-I	4	-	4
	Fluid Mechanics and Hydraulic Machinery Lab	-	3	2
	Electronic devices & Circuit labs	-	3	2
	Total	24	6	28

II YEAR II SEMESTER

Code	Subject	L	T/P/D	Credits
	Managerial Economics & Financial Analysis	4	-	4
	Power Systems-I	4	-	4
	Electronic Circuits	4	-	4
	Switching Theory and Logic Design	4	-	4
	Network Theory	4	-	4
	Electrical Machines-II	4	-	4
	Electrical Machines lab -I	-	3	2
	Electrical Circuits and Simulation Lab	-	3	2
	Total	24	6	28

III YEAR I SEMESTER

Code	Subject	L	T/P/D	Credits
	IC Applications	4	-	4
	Management Science	4	-	4
	Power Systems-II	4	-	4
	Control Systems	4	-	4
	Power Electronics	4	-	4
	Electrical Machines-III	4	-	4
	Electrical Machines lab –II	-	3	2
	Control Systems and Simulation Lab	-	3	2
	Total	24	6	28

III YEAR II SEMESTER

Code	Subject	L	T/P/D	Credits
	Electrical and Electronics Instrumentation	4	-	4
	Static Drives	4	-	4
	Computer Methods in Power Systems	4	-	4
	Microprocessors and Interfacing Devices	4	-	4
	Environmental Studies	4	-	4
	Open Elective Disaster Management Intellectual Property Rights Human Values and Professional Ethics	4	-	4
	Advanced Communication Skills Lab	-	3	2
	Power Electronics and Simulation Lab	-	3	2
	Total	24	6	28

IV YEAR I SEMESTER

Code	Subject	L	T/P/D	Credits
	Switch Gear and Protection	4	-	4
	Utilization of Electrical Energy	4	-	4
	Digital Signal Processing	4	-	4
	Power System Operation and Control	4	-	4
	Elective-I High Voltage Engineering VLSI Design Digital Control Systems Data Structures	4	-	4
	Elective-II Optimization Techniques Electrical Distribution Systems Electrical Estimation and Costing	4	-	4
	Microprocessors and Interfacing Devices Lab	-	3	2
	Electrical Measurements Lab	-	3	2
	Total	24	6	28

IV YEAR II SEMESTER

Code	Subject	L	P	Credits
	Fundamentals of HVDC and FACTS Devices	4	-	4
	Elective-III Neural Networks and Fuzzy Logic Renewable Energy Sources Principles of Reliability Engineering	4	-	4
	Elective-IV Advanced Control Systems EHV AC Transmission Introduction to Nanotechnology	4	-	4
	Industry Oriented Mini Project	0	0	2
	Seminar	0	6	2
	Project Work	0	15	10
	Comprehensive Viva-Voce	0	0	2
	Total	12	21	28

Note:All End Examinations (Theory and Practical) are of three hours duration.

T-Tutorial L – Theory P – Practical/Drawing C – Credits