

COURSE STRUCTURE

B. Tech. in Electrical Engineering - 4 years Program

Deptt.	Semester/ Elective	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
B. Tech. (EE) Semester – I								
EE	1	HS 1101	Communicative English	3	0	0	3	
EE	1	PH 1101	Physics	3	0	3	5	
EE	1	MA 1101	Mathematics - I	3	1	0	4	
EE	1	EE 1101	Basic Electrical Engineering	3	0	3	5	
EE	1	IT 1101	Fundamentals of Information Technology	3	0	3	5	
EE	1	ME 1102	Engineering Graphics	2	0	3	4	
EE	1	GE 1101	EAA I - NSS					26.0
B. Tech. (EE) Semester – II								
EE	2	HS 1202	Organizational Behaviour and Industrial Psychology	3	0	0	3	
EE	2	CH 1201	Engineering Chemistry	3	0	3	5	
EE	2	MA 1202	Mathematics - II	3	1	0	4	
EE	2	CE 1201	Engineering Mechanics	3	0	3	5	
EE	2	ME 1201	Elements of Mechanical Engineering	3	0	3	5	
EE	2	ME 1203	Workshop	2	0	3	4	
EE	2	GE 1202	EAA- II - NSS					26.0
B. Tech. (EE) Semester – III								
EE	3	EC 1302	Basic Electronics	3	0	3	5	
EE	3	EE 1302	Electrical Machine - I	3	0	3	5	
EE	3	MA 1303	Mathematics – III	3	1	0	4	
EE	3	CS 1301	Object Oriented Programming	2	0	3	4	
EE	3	EC 1301	Solid State Physics and Devices	3	1	0	4	
EE	3	ME 1307	Thermodynamics	3	1	0	4	
EE	3	GE 1303	EAA- III - NSS					26.0
B. Tech. (EE) Semester – IV								
EE	4	EC 1403	Digital Electronics	3	0	3	5	
EE	4	MA 1404	Numerical Methods and Computational Techniques	3	0	3	5	
EE	4	EE 1404	Electrical Machine - II	3	0	3	5	
EE	4	CE 1402	Environmental Science	3	0	3	5	
EE	4	EE 1405	Power System – I	3	1	0	4	
EE	4	HS 1403	Industrial Economics and Accountancy	3	0	0	3	
EE	4	GE 1404	EAA- IV - NSS					27.0
B. Tech. (EE) Semester – V								
EE	5	EC 1505	Analog Electronics	3	0	3	5	
EE	5	EE 1506	Network Theory	3	0	3	5	
EE	5	EE 1509	Power System - II	3	1	0	4	
EE	5	EE 1507	Electromagnetic Field Theory	3	1	0	4	
EE	5	EE 1508	Electrical Instruments and Measurements	3	0	3	5	
EE	5	IT 1509	Information Security	3	0	0	3	26.0
B. Tech. (EE) Semester – VI								
EE	6	CS 1602	Computer Architecture	3	0	0	3	
EE	6	EC 1608	Intelligent Instruments	3	0	3	5	
EE	6	EC 1604	Introduction to Communication Systems	3	0	3	5	
EE	6	EE 1612	Microprocessor and its	3	0	3	5	

Deptt.	Semester/ Electives	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
EE	6	EE 1610	Application Power Electronics	3	0	3	5	
EE	6	EE 1611	Signals and Systems	3	1	0	4	27.0
B. Tech. (EE) Semester – VII								
EE	7	EE 17XX	Elective I	3	1	0	4	
EE	7	EE 17XX	Elective II	3	1	0	4	
EE	7	EE 1780	Industrial Training				2	
EE	7	EE 1713	Linear Control Theory	3	0	3	5	
EE	7	EE 1715	Power System Design	1	0	3	3	
EE	7	EE 1781	Project (Minor)	0	0	6	4	
EE	7	EE 1714	Protection of Power Apparatus and Systems	3	0	3	5	27.0
B. Tech. (EE) Semester – VIII								
EE	8	EE 18XX	Elective III	3	1	0	4	
EE	8	EE18XX	Elective IV	3	1	0	4	
EE	8	EE 1816	Modern Control Theory	3	1	0	4	
EE	8	HS 1804	Personnel Management and Industrial Relation	3	0	0	3	
EE	8	EE 1883	Project (Major)	0	0	8	5	
EE	8	EE 1882	Seminar	0	0	4	3	
EE	8	EE 1817	Utilization of Electrical Power	3	1	0	4	27.0
B. Tech. (EE) Electives								
EE	EI	CS 1X02	Advanced Computer Architecture	3	0	0	3	
EE	EI	CS 1x09	Database Systems	3	0	3	5	
EE	EI	CS 1X14	Computer Networks	3	0	0	3	
EE	EI	CS 1x18	Artificial Intelligence	3	0	3	5	
EE	EI	EC 1x07	Optical Fiber Communication	3	1	0	4	
EE	EI	EC 1x13	Digital Signal Processing	3	0	3	5	
EE	EI	EC 1X66	Digital System Design	3	0	3	5	
EE	EI	EC 1X67	Digital Image Processing	3	0	3	5	
EE	EI	EC 1X70	Embedded Systems Design	3	1	0	4	
EE	EI	EC 1X71	VLSI - Design	3	1	0	4	
EE	EI	EE 1X20	Digital Control System	3	1	0	4	
EE	EI	EE 1X31	Computer Aided Power System Analysis	3	1	0	4	
EE	EI	EE 1X32	Advanced Electrical Machines	3	1	0	4	
EE	EI	EE 1X33	Computer Aided Network Analysis	3	1	0	4	
EE	EI	EE 1X34	EHV Power Transmission	3	1	0	4	
EE	EI	EE 1X35	Control System Design	3	1	0	4	
EE	EI	EE 1X36	Computer based Process Control	3	0	3	5	
EE	EI	EE 1X37	Computer Aided Machine Design	3	1	0	4	
EE	EI	EE 1X38	Direct Energy Conversion	3	1	0	4	
EE	EI	EE 1X39	Modern Power System Operation and Control	3	1	0	4	
EE	EI	EE 1X40	Power System Dynamics and Reliability	3	1	0	4	
EE	EI	EE 1X41	Fuzzy Logic Control	3	1	0	4	
EE	EI	EE 1X42	Neural Networks System	3	1	0	4	
EE	EI	EE 1X43	Switched Mode Power Converters	3	1	0	4	
EE	EI	EE 1X44	Electrical Machine Modeling and Analysis	3	1	0	4	
EE	EI	EE 1X47	Industrial Drives and Control	3	1	0	4	
EE	EI	EE1X45	Microcontroller and its	3	0	3	5	

EE	EI	EE1X46	Application High Voltage Engineering	3	0	3	5
EE	EI	IT 1X24	Multimedia Technology and Application	3	0	0	3
EE	EI	ME 1X33	Robotics and Robot Applications	3	1	0	4

COURSE STRUCTURE UNDER TRANSITORY REGULATION

B. Tech. in Electrical Engineering Program for 2006-07 batch:

From 3rd to 8th semesters same as of the B. Tech. Regular Semester Course Structure effective from session 2007-08.

B. Tech. in Electrical Engineering Program for 2005-06 batch:

Deptt.	Semester/ Electives	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
B. Tech. (EE) Semester – V (2005-06 Batch)								
EE-T5	5	EC 1505	Analog Electronics	3	0	3	5	
EE-T5	5	EE 1504	Electrical Machine – II	3	0	3	5	
EE-T5	5	EE 1508	Electrical Instruments and Measurements	3	0	3	5	
EE-T5	5	EE 1507	Electromagnetic Field Theory	3	1	0	4	
EE-T5	5	EE 1506	Network Theory	3	0	3	5	
EE-T5	5	EE 1505	Power System - I	3	1	0	4	28.0
B. Tech. (EE) Semester – VI (2005-06 Batch)								
EE-T5	6	CS 1602	Computer Architecture	3	0	0	3	
EE-T5	6	EE 1603	Electrical Power Generation and Economics	3	1	0	4	
EE-T5	6	EC 1604	Introduction to Communication Systems	3	0	3	5	
EE-T5	6	EE 1612	Microprocessor and its Application	3	0	3	5	
EE-T5	6	CS 1601	Object Oriented Programming	2	0	3	4	
EE-T5	6	EE 1611	Signals and Systems	3	1	0	4	25.0
B. Tech. (EE) Semester – VII (2005-06 Batch)								
EE-T5	7	EE 17xx	Elective I	3	1	0	4	
EE-T5	7	EC 1709	Electronic Instrumentation	3	0	3	5	
EE-T5	7	EE 1713	Linear Control Theory	3	0	3	5	
EE-T5	7	EE 1710	Power Electronics	3	0	3	5	
EE-T5	7	EE 1715	Power System Design	1	0	3	3	
EE-T5	7	EE 1781	Project (Minor)	0	0	6	4	
EE-T5	7	EE 1717	Utilization of Electrical Power	3	1	0	4	30.0
B. Tech. (EE) Semester – VIII (2005-06 Batch)								
EE-T5	8	EE 18xx	Elective II	3	1	0	4	
EE-T5	8	EE 18xx	Elective III	3	1	0	4	
EE-T5	8	HS 1806	Engineering Economics and Management	3	0	0	3	
EE-T5	8	EE 1809	Power System – II	3	1	0	4	
EE-T5	8	EE 1883	Project (Major)	0	0	8	5	
EE-T5	8	EE 1814	Protection of Power Apparatus and Systems	3	0	3	5	
EE-T5	8	EE 1882	Seminar	0	0	4	3	28.0

B. Tech. in Electrical Engineering Program for 2004-05 batch:

Deptt.	Semester/ Elective	Course Code	Course Title	L	T	P	Credits	Total Credit/ Sem
B. Tech. (EE) Semester – VII (2004-05 Batch)								
EE-T4	7	EE 17xx	Elective I	3	1	0	4	
EE-T4	7	EC 1709	Electronic Instrumentation	3	0	3	5	
EE-T4	7	EE 1713	Linear Control Theory	3	0	3	5	
EE-T4	7	EE 1710	Power Electronics	3	0	3	5	
EE-T4	7	EE 1715	Power System Design	1	0	3	3	
EE-T4	7	EE 1781	Project (Minor)	0	0	6	4	
EE-T4	7	EE 1717	Utilization of Electrical Power	3	1	0	4	30.0
B. Tech. (EE) Semester – VIII (2004-05 Batch)								
EE-T4	8	EE 18xx	Elective II	3	1	0	4	
EE-T4	8	HS 1806	Engineering Economics and Management	3	0	0	3	
EE-T4	8	EC 1804	Introduction to Communication Systems	3	0	3	5	
EE-T4	8	EE 1809	Power System - II	3	1	0	4	
EE-T4	8	EE 1883	Project (Major)	0	0	8	5	
EE-T4	8	EE 1814	Protection of Power Apparatus and Systems	3	0	3	5	
EE-T4	8	EE 1882	Seminar	0	0	3	2	
EE-T4	8	EE 1822	Simulation Lab	1	0	3	3	31.0