

**SCHEME OF TEACHING & EXAMINATION**

**III SEMESTER**

**ELECTRICAL AND ELECTRONICS ENGINEERING**

Subject Code	Title	Teaching Dept.	Teaching hours/week		Examination			
			Theory	Practical	Duration in hours	Marks		
						I. A	Theory/ Practical	Total Marks
10MAT - 31	Engineering Mathematics - III	Mat	04		03	25	100	125
10ES – 32	Analog Electronic Circuits	@	04		03	25	100	125
10ES – 33	Logic Design	@	04		03	25	100	125
10ES – 34	Network Analysis	@	04		03	25	100	125
10EE– 35	Electrical and Electronic Measurements And Instrumentation	E&EE	04		03	25	100	125
10EE – 36	Electric Power Generation	E&EE	04		03	25	100	125
10ESL – 37	Analog Electronics Lab	@		03	03	25	50	75
10ESL – 38	Logic Design Lab	@		03	03	25	50	75
		Total	24	06	24	200	700	900

Note : @ indicates concerned discipline. ES ( for theory) & ESL ( for Lab) in the subject code indicates that the subject is common to electrical and electronics stream consisting of EE/EC/IT/TC/ML/BM branches of engineering. EE indicates, subjects specific to E & EE branch only.

**IV SEMESTER  
ELECTRICAL AND ELECTRONICS ENGINEERING**

Subject Code	Title	Teaching Dept.	Teaching hours/week		Examination			
			Theory	Practical	Duration in hours	Marks		
						I. A	Theory/ Practical	Total Marks
10MAT - 41	Engineering Mathematics - IV	Mat	04		03	25	100	125
10ES- 42	Microcontrollers	@	04		03	25	100	125
10ES - 43	Control Systems	@	04		03	25	100	125
10EE - 44	Field Theory	E&EE	04		03	25	100	125
10EE- 45	Power Electronics	E&EE	04		03	25	100	125
10EE - 46	Transformers and Induction Machines	E&EE	04		03	25	100	125
10ESL - 47	Microcontrollers Lab	@		03	03	25	50	75
10EEL - 48	Power Electronics Lab	E&EE		03	03	25	50	75
		Total	24	06	24	200	700	900

Note : @ indicates concerned discipline.ES ( for theory) & ESL ( for Lab) in the subject code indicates that the subject is common to electrical and electronics stream consisting of EE/EC/IT/TC/ML/BM branches of engineering. EE indicates, subjects specific to E & EE branch only.

**V SEMESTER**

**ELECTRICAL AND ELECTRONICS ENGINEERING**

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
01	10AL51	Management and Entrepreneurship	@	4	-	3	25	100	125
02	10EE52	Signals and Systems	E&EE	4	-	3	25	100	125
03	10EE53	Transmission and Distribution	E&EE	4	-	3	25	100	125
04	10EE54	D.C. Machines and Synchronous Machines	E&EE	4	-	3	25	100	125
05	10EE55	Modern Control theory	E&EE	4	-	3	25	100	125
06	10EE56	Linear IC's and Applications	E&EE	4	-	3	25	100	125
07	10EEL57	Measurements and Circuit Simulation Laboratory	E&EE	-	3	3	25	50	75
08	10EEL58	Transformers and Induction Machines Laboratory	E&EE	-	3	3	25	50	75
Total				24	06	24	200	700	900

@ Any Engineering department or department of Business study.

## VI SEMESTER

## ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching		Examination			
				Hrs / Week		Duration (Hrs)	Marks		
				Theory	Practical		IA	Theory / Practical	Total
1	10EE61	Power System Analysis and Stability	E&EE	4	-	3	25	100	125
2	10EE62	Switchgear & Protection	E&EE	4	-	3	25	100	125
3	10EE63	Electrical Machine Design	E&EE	4	-	3	25	100	125
4	10EE64	Digital Signal Processing	E&EE	4	-	3	25	100	125
5	10EE65	E- CADD	E&EE	1	3	3	25	100	125
6	10EE66X	Elective-I (Group A)	E&EE	4	-	3	25	100	125
7	10EEL67	D.C. Machines and Synchronous Machines Laboratory	E&EE	-	3	3	25	50	75
8	10EEL68	Control Systems Laboratory	E&EE	-	3	3	25	50	75
Total				21	09	24	200	700	900

Elective-I (Group A)

10EE661-Operation Research

10EE662 - Advanced Power Electronics

10EE663 – Fuzzy Logic

10EE664 - Object Oriented Programming using C++

10EE665 - Embedded Systems

10EE666 – Electrical Engineering Materials

## VII SEMESTER

### ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10EE71	Computer Techniques in Power System Analysis	E&EE	4	-	3	25	100	125
2	10EE72	Electrical Power Utilization	E&EE	4	-	3	25	100	125
3	10EE73	High Voltage Engineering	E&EE	4	-	3	25	100	125
4	10EE74	Industrial Drives and Applications	E&EE	4	-	3	25	100	125
5	10EE75X	Elective-II (Group B)	E&EE	4	-	3	25	100	125
6	10EE76X	Elective-III (Group C)	E&EE	4	-	3	25	100	125
7	10EEL77	Relay and High Voltage Laboratory	E&EE	-	3	3	25	50	75
8	10EEL78	Power System Simulation Laboratory	E&EE	-	3	3	25	50	75
Total				24	06	24	200	700	900

#### Elective-II (Group B)

10EE751 - HVDC Transmission  
 10EE752 - Programmable Logic Controllers  
 10EE753 - Artificial Neural Network  
 10EE754 - Operating System  
 10EE755 - Digital System with VHDL  
 10EE756 - Testing and Commissioning of Electrical Equipment

#### Elective-III (Group C)

10EE761 - Power System Planning  
 10EE762 - Computer Control of Electrical Drives  
 10EE763 - Data Structure  
 10EE764 - VLSI Circuits and Design  
 10EE765 - Micro & Smart System Technology  
 10EE766 - Electromagnetic Compatibility

### VIII SEMESTER

### ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10EE81	Electrical Design, Estimation and Costing	E&EE	4	-	3	25	100	125
2	10EE82	Power System Operation and Control	E&EE	4	-	3	25	100	125
3	10EE83X	Elective-IV (Group D)	E&EE	4	-	3	25	100	125
4	10EE84X	Elective-V (Group E)	E&EE	4	-	3	25	100	125
5	10EEP85	Project Work	E&EE	-	6	3	100	100	200
6	10EES86	Seminar (on a latest topic relevant to the branch and independent of the project work)	E&EE	-	3	-	50	-	50
Total				16	09	15	250	500	750

#### Elective-IV (Group-D)

10EE831 - Reactive Power Management  
 10EE832 - Flexible A.C. Transmission Systems (FACTS)  
 10EE833- Advanced Instrumentation System  
 10EE834 - AI Applications to Power Systems  
 10EE835 - Data Base Management Systems (DBMS)  
 10EE836 - Renewable Energy Sources

#### Elective-V (Group-E)

10EE841 - Power Systems Dynamics and Stability  
 10EE842 - Energy Auditing & Demand Side Management  
 10EE843 - Data communications and Networking  
 10EE844 - Electrical Distribution Systems  
 10EE845 - Insulation Engineering  
 10EE846 - Intellectual Property Rights  
 10EE847 - Electrical Power Quality