

Power Electronics

Semester III

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Advance Engineering Mathematics	3	2	0	5	70	30	30	20	150	24
	Circuit & Networks	3	0	2	5	70	30	30	20	150	24
	Electrical Measurement and Measuring Instruments	3	0	2	5	70	30	30	20	150	24
	DC Machines & Transformer	4	0	2	6	70	30	30	20	150	24
	Basic Power Systems	3	0	0	3	70	30	0	0	100	24
	Principles of Power Electronics	4	0	2	6	70	30	30	20	150	24
	Total	20	2	8	30						

Semester IV

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Numerical Methods for Electrical Engineering	3	2	0	5	70	30	30	20	150	24
	Engineering Economics and Management	3	0	0	3	70	30	0	0	100	24
	AC Machines	4	0	2	6	70	30	30	20	150	24
	Signals and Systems	3	0	2	5	70	30	30	20	150	24
	Electromagnetic Field Theory	3	2	0	5	70	30	30	20	150	24
	Analog Electronics & its Applications	4	0	2	6	70	30	30	20	150	24
	Total	20	4	6	30						

Semester V

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Inst. Elective	3	0	2	5	70	30	30	20	150	24
	Control System Engineering	3	0	2	5	70	30	30	20	150	24
	Power Electronic Circuits-I	4	0	2	6	70	30	30	20	150	24
	Industrial Instrumentation	4	0	2	6	70	30	30	20	150	24
	Power Electronics Practice-I	0	0	2	2	70	30	30	20	150	24
	Digital Logic Design & Microprocessor	4	0	2	6	70	30	30	20	150	24
	Total	18	0	12	30						

Semester VI

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Electrical Power Utilization & Traction	4	0	0	4	70	30	0	0	100	24
	Microcontroller for Power Electronics	4	0	2	6	70	30	30	20	150	24
	Power Electronic Circuits ñ II	4	0	2	6	70	30	30	20	150	24
	Industrial Drives & Control-1	4	0	2	6	70	30	30	20	150	24
	Power Electronics Practice-II	0	0	2	2	0	0	100	50	150	24
	Dept. Elective ñ I	4	0	2	6	70	30	30	20	150	24
	Total	20	0	10	30						

Semester VII

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Advanced Power Electronics Devices & Interface Circuits	3	0	0	3	70	30	0	0	100	24
	Digital Signal Processing for Power Electronics	3	0	2	5	70	30	30	20	150	24
	Power Electronics Design	4	0	2	6	70	30	30	20	150	24
	Industrial Drives & Control-II	4	0	2	6	70	30	30	20	150	24
	Department Elective-II	4	0	2	6	70	30	30	20	150	24
	Project-I	0	0	4	4	0	0	100	50	150	24
	Total	18	0	12	30						

Semester VIII

Subject code	Subject name	Teaching Scheme (Hours)			Credits	Theory Marks		Practical Marks		Total Marks	Branch Code
		Theory	Tutorial	Practical		ESE(E)	PA (M)	Viva (V)	PA(I)		
	Power Electronics Applications	4	0	2	6	70	30	30	20	150	24
	Switch Gear & Protection	4	0	2	6	70	30	30	20	150	24
	Dept. Electives ñ III	4	0	2	6	70	30	30	20	150	24
	Project-II	0	0	12	12	0	0	100	50	150	24
	Total	12	0	18	30						

Dept. Elective – I

Industrial Communication System
 High Voltage Engineering
 Programmable Logic Devices & Applications

Dept. Elective – II

Industrial Automation
 Advanced Control Systems
 Embedded Systems for Power Electronics

Dept. Elective – III

Programmable Logic Controller
 Advanced Electrical Machines and Drives
 Digital Signal Controllers

Note: ALA Component, OEP Component and Design Module I, II and III (to be offered in 2nd Year , 3rd year and 4th year respectively) shall be displayed in the final teaching scheme