DEPARTMENT OF ELECTRICAL ENGINEERING

M.Tech. (Electric Drives & Power Electronics)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1st YEAR			Semester- I (Autumn)											
1.	EEN-580	Advanced Linear Control Systems	PCC	4	3	1	2/2	3	-	15-30	20	15-25	30-40	-
2.	EEN-540	Advanced Power Electronics	PCC	4	3	1	2/2	3	-	15-30	20	15-25	30-40	-
3.	EEN-541	Analysis of Electrical Machines	PCC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
4.	EEN-542	Power Electronic Controlled Electric Drives	PCC	4	3	1	2/2	3	-	15-30	20	15-25	30-40	-
5.	EEN-543	FACTS Devices	PCC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
		Total		20										
			Semester-II (Spring)											
1.	EEN-xxx	Program Elective Course-I	PEC	4	-	-	-	-	-	-	-	-	-	-
2.	EEN-700	Seminar	SEM	2	-	-	-	-	-	-	-	-	100	-
3.	EEN-xxx	Program Elective Course-II	PEC	4	-	-	-	-	-	-	-	-	-	-
4.	EEN-xxx	Program Elective Course-III	PEC	4	-	-	-	-	-	-	-	-	-	-
5.	EEN-xxx	Program Elective Course-IV	PEC	4										
		Total		18										
2nd YEAR			Semester- I (Autumn)											
1.	EEN-701A	Dissertation Stage–I (to be continued next semester)	DIS	12	-	-	-	-	-	-	-	-	100	-
		Total		12										
Note: Students can take 1 or 2 audit courses as advised by the supervisor, if required.														
			Semester-II (Spring)											
1.	EEN-701B	Dissertation Stage–II (contd. From III semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
		Total		18										
		Total Credits		**68**										

Program Elective Courses (EDPE)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	EEN-640	Advanced Electric Drives	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
2.	EEN-641	Microcontroller and its Applications to Power Converters	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
3.	EEN-642	DSP Controlled Electric Drives	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
4.	EEN-643	Electric Drives for Hybrid Vehicles	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
5.	EEN-644	Design of Electric Drives	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
6.	EEN-645	Instrumentation in Electric Drives	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
7.	EEN-646	Drive System in Electric Traction	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
8.	EEN-647	Control Techniques in Power Electronics for AC Drives	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
9.	EEN-648	Pulse Width Modulation for Power Converters	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
10.	EEN-649	Enhanced Power Quality AC-DC Converters	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
11.	EEN-650	Switch Mode Power Supply	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
12.	EEN-651	Power Quality Improvement Techniques	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
13.	EEN-652	CAD of Power Apparatus	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
14.	EEN-653	Selected Topics in Machines and Transformers	PEC	4	3	0	2	3	-	10-25	25	15-25	30-40	-
15.	EEN-654	Synchronous Machines and System Stability	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
16.	EEN-655	Special Machines	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
17.	EEN-656	Testing and Commissioning of Electrical Equipment	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
18.	EEN-564	HVDC Transmission Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
19.	EEN-690	Advanced Computer Controlled Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
20.	EEN-657	Digital Control of Power Converters	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
21.	EEN-658	Communication Techniques in Smart Grid	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
22.	EEN-659	Control and Management of Smart Grid	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
23.	EEN-660	Power Converter Topologies in Smart Grid	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-

24	EEN-611	FPGA Implementation of Signal Processing Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
25	EEN-612	Electrical Transients in Power Systems	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-
26	EEN-613	Sliding Mode Control and Observation	PEC	4	3	1	0	3	-	20-35	-	20-30	40-50	-