Curriculum Structure of M.Tech in Power System Engineering,

Semester 1

Sl. No	Course Code	Name of the Course	L	T	P	C
1	MATH5001	Advanced Numerical & Statistical Methods	3	0	0	3
2	MPED1501	Analysis of Power Electronics Circuits	3	0	0	3
3	MPSE1501	Power System Operation and Control	3	0	0	3
4	MPSE1502	Advanced Power System Analysis	3	0	0	3
5	MPED1505	FACTS and HVDC	3	0	0	3
6	MPSE1511	Power System lab-I	0	0	2	1
		Total				**16**

Year	Semester	Credits
1st Year	Sem-1	16
	Sem-2	18
2nd Year	Sem-3	19
	Sem-4	15
	Total =	68

Semester II

Sl No	Course Code	Name of the Course	L	T	P	C
1	MPSE1601	Advanced Power System Protection	3	0	0	3
2	MPSE1603	Power System Transients	3	0	0	3
3	MPSE1606	Power Quality	3	0	0	3
4	*********	Program Elective-1	3	0	0	3
5	*********	Program Elective-2	3	0	0	3
6	MPSE2611	Power Quality Lab	0	0	2	1
7	CENG5001	Professional and Communication Skills	0	0	4	2
		Total				**18**

Semester III

Sl No	Course Code	Name of the Course	L	T	P	C
1	MPSE2502	Power System Dynamics and Stability	3	0	0	3
2	MPSE2506	Electric and Hybrid Vehicles	3	0	0	3
3	MPSE2505	Smart Grid and Energy Management	3	0	0	3
4	MPSE9998	Capstone Design-I	0	0	20	10
		Total				**19**

Semester IV

Sl No	Course Code	Name of the Course	L	T	P	C
1	MPSE9999	Capstone Design-II	0	0	30	15
		Total				**15**

Program Elective-1

Sl No	Course Code	Name of the Electives	L	T	P	C
1	MPSE1608	Power System Planning in Deregulated Environment	3	0	0	3
2	MPSE1609	Demand side Energy Management	3	0	0	3
3	MPSE1503	Power System Reliability	3	0	0	3
4	MPSE1504	Reactive Power Compensation & Management	3	0	0	3
5	MPSE1604	Renewable Energy Sources	3	0	0	3
6	MPED1503	Digital Control	3	0	0	3

Program Elective-2

Sl No	Course Code	Name of the Elective	L	T	P	C
1	MPED1610	Modelling, Simulation and Control of Power Electronics Systems	3	0	0	3
2	MPED1602	Power Electronics Applications in Renewable Energy Systems	3	0	0	3
3	MPED1606	System and Control Theory	3	0	0	3
4	MPED2504	Intelligent Control	3	0	0	3
5	MPED1604	Soft computing Techniques	3	0	0	3