2 Year M. Tech Programme in Power System

SEMESTER - I				
Sr. No.	**Subject Code**	**Courses**	**L-T-P**	**Credits**
		THEORY		
1	CE409/CE551	Operation Research	3-1-0	4
2	EE541	Power Transmission System	3-0-0	3
3	EE543	Power System Analysis & Operation	2-1-0	3
4	EE545/EE421	Transient over voltages in Power System	3-0-0	3
5		Elective - I	2-1-0	3
6		Open Elective-I	2-0-0	2
		PRACTICALS		
7	EE547	Power System Lab-I	0-0-3	2
8	EE549	Special Problem-I	0-0-3	2
9	GP501	General Proficiency	-	1
		Total	**15-3-6**	**23**
		Total Contact Hours	24	

SEMESTER – II				
Sr. No.	**Subject Code**	**Courses**	**L-T-P**	**Credits**
		THEORY		
1	MA402	Modelling and Simulation	3-1-0	4
2	EE542/EE414	Advance Power System Protection	3-0-0	3
3	EE544/EE404	Power System Planning & Reliability	2-1-0	3
4	EE546/EE416	Advanced Distribution System	2-1-0	3
5		Specialisation Elective-I	3-0-0	3
6		Open Elective-II	2-0-0	2
		PRACTICALS		
7	EE548	Power System Lab-II	0-0-3	2
8	EE550/EE434	Seminar	0-0-3	2
9	GP502	General Proficiency		1
		Total	**15-3-6**	**23**
		Total Contact Hours	24	

SEMESTER – III				
Sr. No.	**Subject Code**	**Courses**	**L-T-P**	**Credits**
		THEORY		
1	EE601/EE501	Power System Dynamics & Stability	3-0-0	3
2	EE603/EE503	High Voltage DC Transmission	2-1-0	3
3	EE605/EE505	Flexible AC Transmission Systems	3-1-0	4
4		Specialization Elective- II	3-1-0	4
5		Specialization Elective-III	3-0-0	3
		PROJECTS		
6	EE607	Special Problem-II	0-0-2	1
7	EE611	Research Project (Preliminary)	1**-0-3	3
8	GP601	General Proficiency		1
		Total	**15-3-5**	**22**
		Total Contact Hours	23	

*** This will not be a usual lecture session, but this is one to one interaction of each student with the concerned faculty member*

SEMESTER – IV				
Sr. No.	**Subject Code**	**Courses**	**L-T-P**	**Credits**
1	EE612	Research Project	------	21
2	GP602	General Proficiency	-	1
		Total	**------**	**22**

Grand Total Credits of Dual Degree = 90

List of Electives for M.Tech (Power System)

Elective-I

1. EE407: Reliability Analysis & Prediction
2. EE413: Failure Data Organization and Analysis
3. EE415: Restructured Power System
4. EE431: Soft Computing Techniques
5. EE433: Power Conditioning
6. EE435: Renewable & Non-Conventional Energy Sources
7. EE437: Project Engineering & Management

Specialization Elective-I

1. EE408: Optimal Power System Operation
2. EE410: Computer Aided Design of Electrical Machines
3. EE412: Reliability Centered Maintenance
4. EE418: Organization & Finance in Power Sector
5. EE420: Calibration and Testing of Electrical Equipments
6. EE422: Instrumentation in Power System

Specialization Elective –II

1. EE507: Power Converters & Applications
2. EE509: Probabilistic Risk Assessment
3. EE511: Computer Applications to Power System Analysis
4. EE513: High Voltage Engineering & Test Techniques
5. EE517: Data Mining and Pattern Recognition

Specialization Elective –III

1. EE521: Operation and Control of Power Systems
2. EE523: Power Quality Monitoring and Conditioning
3. EE525: Parallel & Distributed Computing
4. EE527: Load and Energy Management