

2019-20 Course Structure for M.TECH - POWER SYSTEMS						
S E M E S T E R - 1						
S.No	Course Code	Course Title	L	T	P	Cr
1	18EE5101	Power System Dynamics & stability	3	1	0	4
2	18EE5102	Advanced Power System Analysis	3	1	2	5
3	18EE5103	Deregulated Operation of Power Systems	3	1	0	4
4	18EE5104	Modern Control Theory	3	1	0	4
5		Elective –I	3	0	0	3
6		Elective – II	3	0	0	3
7	18IE5149	Seminar	0	0	4	2
			18	4	6	25
S E M E S T E R - 2						
1	18EE5205	Real Time Control of Power System	3	1	2	5
2	18EE5206	AI Techniques in Power Systems	3	1	0	4
3	18EE5207	Smart Grids Technologies	3	1	0	4
4	18EE5208	Digital Protection of Power Systems	3	1	0	4
5		Elective –III	3	0	0	3
6		Elective - IV	3	0	0	3
7	18IE5250	Term Paper	0	0	4	2
Total			18	4	6	25
S E M E S T E R - 3 & 4						
1	18IE6050	Dissertation / Practise School	0	0	72	36
Total Credits						86
ELECTIVES COURSES						
Elective-1						
1	18EE51A1	Reactive Power Compensation & Management	3	0	0	3
2	18EE51A2	Distribution System Planning & Automation	3	0	0	3
3	18EE51A3	Power System Reliability	3	0	0	3
Elective-2						
6	18EE51B1	Alternate Sources of Electrical Energy	3	0	0	3
7	18EE51B2	Digital Signal Processors and Applications	3	0	0	3
8	18EE51B3	Optimization Techniques	3	0	0	3
Elective-3						
10	18EE52C1	FACTS	3	0	0	3
11	18EE52C2	Energy Conservation & Audit	3	0	0	3
12	18EE52C3	Adaptive Control Systems	3	0	0	3
Elective-4						
13	18EE52D1	EHVAC & HVDC Transmission	3	0	0	3

14	18EE52D2	Power Quality	3	0	0	0	3
15	18EE52D3	Integration of Energy Sources	3	0	0	0	3

2019-20 Course Structure for M.TECH - POWER ELECTRONICS AND DRIVES							
S E M E S T E R - 1							
S.No	Course Code	Course Title	L	T	P	S	Cr
1	18EE509	Modeling and Analysis of Electrical machines	3	1	0	0	4
2	18EE510	Analysis of Power Converters	3	1	2	0	5
3	18EE5111	Electrical Drives	3	1	0	0	4
4	18EE5112	Modern Control Theory	3	1	0	0	4
5		Elective –2	3	0	0	0	3
6		Elective – 2	3	0	0	0	3
7	18IE5149	Seminar	0	0	4	0	2
			18	2	4	0	25
S E M E S T E R - 2							
1	18EE5113	Advanced Power Converters	3	1	2	0	5
2	18EE5114	Advanced Electrical Drives	3	1	0	0	4
3	18EE5115	Smart Grid Technologies	3	1	0	0	4
4	18EE5116	FPGA controllers and Applications	3	1	0	0	4
5		Elective – 3	3	0	0	0	3
6		Elective - 4	3	0	0	0	3
7	18IE5150	Term Paper	0	0	4	0	2
Total			18	2	4	0	25
S E M E S T E R - 3 & 4							
1	18IE6050	Dissertation / Practise School	0	0	72	0	36
Total Credits							86
ELECTIVES COURSES							
Elective-1							
1	18EE51E1	Microcontrollers and Applications	3	0	0	0	3
2	18EE51E2	Digital Simulation of Power Electronic Systems	3	0	0	0	3
3	18EE51E3	Industrial Control Electronics	3	0	0	0	3
Elective-2							
6	18EE51F1	Soft Computing Techniques	3	0	0	0	3
7	18EE51F2	Digital Signal Processor and Applications	3	0	0	0	3
8	18EE51F3	Optimization Techniques	3	0	0	0	3
Elective-3							
10	18EE52G1	FACTS Devices	3	0	0	0	3
11	18EE52G2	Electric and Hybrid Vehicles	3	0	0	0	3

12	18EE52G3	Adaptive Control Systems	3	0	0	0	3
Elective-4							
13	18EE52H1	EHVAC & HVDC Transmission	3	0	0	0	3
14	18EE52H2	Power Quality	3	0	0	0	3
15	18EE52H3	Power Electronics for Renewable Energy Systems	3	0	0	0	3