KLEF
Department of EEE
CURRICULUM STRUCTURE FOR Y22 M.TECH POWER ELECTRONICS & POWER SYSTEMS

SI	Course Code	Course Title		L	T	P	Cr
1	22EE5111	Analysis of Power Converters	PCC	3	1	2	5
2	22EE5112	Advanced Power System Analysis and Protection	PCC	3	1	0	4
3	22EE5113	Modelling and Analysis of Electrical Machines	PCC	3	1	0	4
4	22EE5104	Embedded Controllers and Applications	PCC	3	0	2	4
5	22EE5211	Advanced Electrical Drives	PCC	3	0	2	4
6	22EE5212	Power System Stability and Control	PCC	3	1	2	5
7	22EE5213	Grid Integration of Renewable Energy systems	PCC	3	1	0	4
8	22EE5204	AI and IOT for Modern Electrical Systems	PCC	3	1	0	4
9		PROFESSIONAL ELECTIVE-1		3	0	0	3
10		PROFESSIONAL ELECTIVE-2		3	0	0	3
11		PROFESSIONAL ELECTIVE-3		3	0	0	3
12		PROFESSIONAL ELECTIVE-4		3	0	0	3
13	22IE5249	SEMINAR		0	0	4	2
14	22CY1001	TERM PAPER		0	0	4	2
15	22EE2103	DISSERTATION (PART-I)		0	0	36	18
16	22UC3105	DISSERTATION (PART-II)		0	0	36	18
		Total Credits					86

		Elective-1					
1	22EE51A1	RELIABILITY ENGINEERING	PE-1	3	0	0	3
2	22EE51A2	APPLICATION OF PYTHON PROGRAMMING IN ELECTRICAL SYSTEMS	PE-1	2	0	2	3
3	22EE51A3	ENERGY MANAGEMENT SYSTEMS	PE-1	3	0	0	3
4	22EE51A5	DISTRIBUTED GENERATION AND MICRO-GRIDS	PE-1	3	0	0	3
		Elective-2					
1	22EE51B1	OPTIMIZATION TECHNIQUES	PE-2	3	0	0	3
2	22EE51B2	ADVANCED CONTROL THEORY	PE-2	3	0	0	3
3	22EE51D3	DEREGULATED POWER SYSTEMS	PE-2	3	0	0	3
4	22EE51D4	MICROGRID DYNAMICS AND CONTROL	PE-2	3	0	0	3
		Elective-3					
1	22EE52A1	DIGITAL SIMULATION OF POWER ELECTRONIC SYSTEMS	PE-3	3	0	0	3
2	22EE52A2	SWITCHED MODE POWER SUPPLY AND PWM TECHNIQUES	PE-3	3	0	0	3
3	22EE52C3	FACTS & POWER QUALITY	PE-3	3	0	0	3
4	22EE52C2	INTELLIGENT CONTROL TECHNIQUES	PE-3	3	0	0	3
		Elective-4					
1	22EE52D1	SMART GRID TECHNOLOGIES	PE-4	3	0	0	3
2	22EE52D2	ENERGY CONSERVATION & AUDIT	PE-4	3	0	0	3
3	22EE52D3	SMART APPLIANCES AND SMART CITIES	PE-4	3	0	0	3
4	22EE52D4	INTERNET OF THINGS AND SMART GRID ANALYTICS	PE-4	3	0	0	3