



KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
MINOR DOMAIN: POWER SYSTEMS AND POWER ELECTRONICS IN
ELECTRICAL ENGINEERING (MEE)
- MINOR DOMAIN: POWER SYSTEMS AND POWER ELECTRONICS
CURRICULUM
(Through NPTEL Domain certification)

S.No	Course Type	Course Code	Course Name (NPTEL Course Id)	Course Duration (weeks)	Credits
-	Core Courses	Core Courses (any 4 courses)			
1		U24MDEE1001	Basic Electrical Circuits/Network Analysis	8-12	8-12
2		U24MDEE1002	Electrical Machines-I	8-12	
3		U24MDEE1003	Electrical Machines-II	8-12	
4		U24MDEE1004	Power Systems Engineering	8-12	
5		U24MDEE1005	Fundamentals of Power Electronics	8-12	
6		U24MDEE1006	Power Electronics with Wide Band Gap Devices	8-12	
-	Elective Courses	Elective Courses (any 2 courses)			
7		U24MDEE1007	Control Engineering	8-12	4-6
8		U24MDEE1008	Electrical Measurement and Electronic Instruments	8-12	
9		U24MDEE1009	Fundamentals of Electric Drives	8-12	
10		U24MDEE1010	A Basic Course on Electric and Magnetic Circuits	8-12	
11	U24MDEE1011	Power System Protection	8-12		
12		U24MDEE1012	Smart Grid: Basics to Advanced Technologies	8-12	
13		U24MDEE1013	Power Quality	8-12	
14		U24MDEE1014	Design of Electric Motor	8-12	
-	Laboratory Courses	Laboratory Courses (any 2 courses)			
16		U24MDEE1015	Electrical Circuits & Simulation Lab	2	2
17		U24MDEE1016	Electrical Machines Lab	2	
18		U24MDEE1017	Power Systems Lab	2	
19		U24MDEE1018	Power Electronics & Drives Lab	2	
20	Mini-project (Optional)	U24MDEE1019	Mini-project (Optional)		2
Total Credits					18