

COURSE STRUCTURE AND DETAILED SYLLABUS

for

M.Tech.

in

Power Electronics

With Effective from the academic year

2018-2019

M.Tech. COURSE STRUCTURE
Power Electronics Course Structure
I SEMESTER

S.No	Course Code	Name of the Subject	L	P	C
1	18EEPE101	Modelling and Analysis of Electrical Machines	4	-	3
2	18EEPE102	Analysis of Power Electronic Converters	4	-	3
3	18EEPE103	Power Semiconductor Devices and Modelling	4	-	3
4	18EEPE104	Power Electronic Control of DC Drives	4	-	3
5	Elective:1		4	-	3
	18EEPE105A	Special Electrical Machines			
	18EEPE105B	HVDC Transmission			
6	Elective:2		4	-	3
	18EEPE106A	Hybrid and Electrical Vehicles			
	18EEPE106B	Static VAR Controllers and Harmonic Filtering			
7	18EEPE151	Systems Simulation Laboratory	-	3	1.5
Total Credits					19.5

II SEMESTER

S.No	Course Code	Name of the Subject	L	P	C
1	18EEPE201	Power Electronic Control of AC Drives	4	-	3
2	18EEPE202	Power Converters for Renewable Energy Systems	4	-	3
3	18EEPE203	Custom Power Devices	4	-	3
4	Elective:3		4	-	3
	18EEPE204A	Artificial Intelligence Techniques			
	18EEPE204B	Digital Controllers			
5	Elective:4		4	-	3
	18EEPE205A	Modelling & Simulation of Power Electronics and Drive Systems			
	18EEPE205B	Smart Grid Technologies			
6	Elective:5		4	-	3
	18EEPE206A	Switch Mode and Resonant Converters			
	18EEPE206B	Optimization Techniques			
7	18EEPE251	Electrical Drives Laboratory	-	3	1.5
8	18EEPE252	Term Paper with seminar	-	-	3
Total Credits					22.5

III SEMESTER

S.No	Course Code	Name of the Subject	L	P	C
1	18EEPE301	Self Learning Course: Design of Photovoltaic Systems	-	-	3
2	18EEPE351	Project Work Phase – I	-	-	5
3	18EEPE352	Internship with seminar			4
Total Credits					12

IV SEMESTER

S.No	Course Code	Name of the Subject	L	P	C
1	18EEPE451	Project Phase-II	-	-	10
Total Credits					10

Total Credits: 19.5+22.5+12+10=64