

Syllabus for M. Tech. EE in Power Systems

1st semester

Theory

Sl. No	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	EMM-101	Advanced Engineering Mathematics	3	1	0	4	4
2.	PSM-101	Advanced Power System Analysis	3	1	0	4	4
3.	PSM-102	High Voltage Transmission System	4	0	0	4	4
4.	PSM-103	Elective – I	4	0	0	4	4
5.	PSM-104	Elective - II	4	0	0	4	4

Practical/ Sessional

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	PSM-191	Laboratory I	0	0	3	3	2
2.	PSM-192	Laboratory II	0	0	3	3	2
3.	PSM-193	Seminar I	0	0	3	3	2
		Total of Practical/ Sessional				9	6
Total of Semester			18	2	9	29	26

2nd Semester

Theory

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	PSM-201	Power System Operation and Control	3	1	0	4	4
2.	PSM-202	Power System Instrumentation	3	1	0	4	4
4.	PSM-203	Advanced Power System Protection	4	0	0	4	4
4.	PSM-204	Elective – III	4	0	0	4	4
5.	PSM-205	Elective - IV	4	0	0	4	4

Practical/Sessional:

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	PSM-291	Laboratory III	0	0	3	3	2
2.	PSM-292	Laboratory IV	0	0	3	3	2
3.	PSM-293	Seminar II	0	0	3	3	2
Total of Practical/ Sessional						9	6
Total of Semester			17	3	9	29	26

3rd Semester

Theory

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	EMM-301	Introduction to Management	4	0	0	4	4
2.	PSM-301	Elective V	3	1	0	4	4

Practical/ Sessional

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	PSM-391	Pre-submission Defense of Dissertation	0	0	0	0	4
2.	PSM-392	Dissertation (Part I)	0	0	0	20	10
		Total of Sessional				20	14
Total of Semester			17	3	9	28	22

4th Semester

Sl. No.	Code	Paper	Contact periods per week			Total Contact hours	Credit
			L	T	P		
1.	PSM-491	Dissertation (Completion)	0	0	0	24	14
2.	PSM-492	Post submission defense of Dissertation	0	0	0	0	8
3.	PSM-294	Comprehensive Viva-Voce	0	0	0	0	4
Total of Semester						24	26

Total Credits: $26 + 26 + 22 + 26 = 100$

Elective I

- i) Power System Planning and Reliability - PSM 103 (a)**
- ii) Power System Apparatus - PSM 103 (b)**
- iii) Power Quality - PSM 103 (c)**

Elective II

- i) Optimization Techniques - PSM 104 (a)**
- ii) Soft Computing Technique - PSM 104 (b)**
- iii) Digital Signal Processing - PSM 104 (c)**
- iv) Object Oriented Programming - PSM 104 (d)**

Elective III

- i) Power System Transient – PSM 204 (a)**
- ii) Flexible A.C. Transmission System - PSM 204 (b)**
- iii) Advanced Electrical Drives - PSM 204 (c)**

Elective IV

- i) Advanced Control System- PSM 205 (a)**
- ii) Modeling and Simulation of dynamic systems - PSM 205 (b)**
- iii) Advanced Microprocessor and Microcontroller – PSM 205 (c)**

Elective V

- i) Non-conventional Energy - PSM 301 (a)**
- ii) Power System Harmonics - PSM 301 (b)**
- iii) Energy Management and Audit – PSM 301 (c)**