

M.Tech (Electrical Power Engineering)
Course Structure and Syllabus
Academic Year: 2014-2015

I YEAR - I Semester

Code	Subject	L	T	P	Credits	Marks	
						Int.	Ext.
4X101	Power System Dynamics	3	1	--	3	40	60
4X102	Optimization & Control	3	1	--	3	40	60
4X103	Advanced Power Electronics	3	1	--	3	40	60
4X104	Computer Methods in Power Systems	3	1	--	3	40	60
	Elective – I	3	1	--	3	40	60
	Elective – II	3	1	--	3	40	60
4X171	Power System Simulation Lab – I	--	--	6	3	40	60
4X172	Technical Paper Writing and Seminar	--	--	3	2	50	--
Total Credits		18	6	9	23	330	420

I YEAR - II Semester

Code	Subject	L	T	P	Credits	Marks	
						Int.	Ext.
4X211	Power System Stability	3	1	--	3	40	60
4X212	Advanced Power System Protection	3	1	--	3	40	60
4X213	Flexible AC Transmission Systems	3	1	--	3	40	60
4X214	Power Quality	3	1	--	3	40	60
	Elective – III	3	1	--	3	40	60
	Open Elective	3	1	--	3	40	60
4X273	Power System Simulation Lab – II	--	--	6	3	40	60
4X274	Technical Seminar (Independent Review Paper)	--	--	3	2	50	--
Total Credits		18	6	9	23	330	420

Elective – I: Any one subject to be selected

Elective – II: Any one subject to be selected

Code	Subject
4X105	High Voltage DC Transmission
4X106	Distribution Planning & Automation
4X107	Microprocessors & Microcontroller Systems

Code	Subject
4X108	High Voltage Engineering
4X109	Energy Conversion Systems
4X110	Advanced Operation and Control

Elective – III: Any one subject to be selected

Code	Subject
4X215	Soft Computing Techniques
4X216	Restructuring in Electrical Power Systems
4X217	Power System Harmonics

Open Elective: Any one subject to be selected

Code	Subject
4ZC03	Banking Operations, Insurance and Risk Management
4H233	Indian Values, Ethics, Culture and Intellectual Property Rights

4T216	Embedded and Real time control
--------------	--------------------------------

II Year - I Semester

Code	Subject	L	T	P	Credits	Marks	
						Int.	Ext.
4X375	Comprehensive Viva	--	--	--	2	--	50
4X376	Project Seminar-I	--	--	--	2	50	--
4X377	Project work (Part – I) (Project Status Report) (Excellent/ Good/ Satisfactory/ Un-Satisfactory	--	--	--	18	Grading	--
Total Credits		--	--	--	22	50	50

II Year - II Semester

Code	Subject	L	T	P	Credits	Marks	
						Int.	Ext.
4X478	Project Seminar-II	--	--	--	2	50	--
4X479	Project work and Dissertation (Excellent/ Good/ Satisfactory/ Un-Satisfactory)	--	--	--	20	--	Grading
Total Credits		--	--	--	22	50	--

L - Lectures; T = Tutorial; P = Practical; C = Credits