

Master of Power Engineering

FIRST SEMESTER

Theoretical Courses	Subjects		Periods/Weeks		Marks		Credit Points
	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket							
Paper-I	PG / PE / T / 111A	Applied Thermodynamics	3		100		3
	PG / PE / T / 111B	Analysis of Electrical Machines					
Paper-II	PG / PE / T / 112A	Applied Fluid Mechanics	3		100		3
	PG / PE / T / 112B	Advanced Power System Principles					
Paper-III	PG / PE / T / 113A	Heat and Mass Transfer	3		100		3
	PG / PE / T / 113B	Digital Systems					
<p>Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-I, Paper-II and Paper-III</p>							
Inter-Disciplinary Basket							
Paper-IV	PG / PE / T / 114A	Power Generation Methodologies	3		100		3
		From the inter-disciplinary basket of ME, EE, IEE and Energy Science.					
Paper-V	PG / PE / T / 115A	Power Plant Cycles and Systems	3		100		3
		From the inter-disciplinary basket of ME, EE, IEE and Energy Science.					
Paper-VI	PG / PE / T / 116A	Energy Planning Management and Modeling	3		100		3
		From the inter-disciplinary basket of ME, EE, IEE and Energy Science.					
<p>Note: The students have to select 3 subjects from the inter-departmental basket, i.e. one subject each from the list given in the baskets of Paper-IV, Paper-V and Paper-VI .</p>							
Sessional Courses							
Sessional 1	PG / PE / S / 111	Laboratory-I		4		100	3
Sessional 2	PG / PE / S / 112	Seminar		3		100	3
			18	7	600	200	24

Total Periods/Week = 25

Total Marks = 800

SECOND SEMESTER

Theoretical Courses	Subjects		Periods/Weeks		Marks		Credit Points
	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Departmental / Specialization Basket							
Paper-VII	PG / PE / T/ 127A	Combustion Technologies	3		100		3
	PG / PE / T/ 127B	Advanced Electrical Drives					
	PG / PE / T/ 127C	Fan Blower Compressors					
	PG / PE / T/ 127D	Nuclear Power Engineering					
	PG / PE / T/ 127E	Non conventional Power Engineering					
Paper-VIII	PG / PE / T/ 128A	Steam and Gas Turbines	3		100		3
	PG / PE / T/ 128B	Computational Heat Transfer and Fluid Flow					
	PG / PE / T/ 128C	Power Apparatus					
	PG / PE / T/ 128D	Power Transducer Technology					
	PG / PE / T/ 128E	Impeller Pumps					
	PG / PE / T/ 128F	Computer Networking and Network Programming					
Paper-IX	PG / PE / T/ 129A	Advanced Power Cycles and Economics	3		100		3
	PG / PE / T/ 129B	Hydro Turbines					
	PG / PE / T/ 129C	Advanced Power System Operation					
	PG / PE / T/ 129D	Power Plant Control and Instrumentation					
	PG / PE / T/ 129E	Steam Generator					
	PG / PE / T/ 129F	Power system planning and Operation					

Note: The students have to select 3 subjects from the departmental/ specialization basket, i.e. one subject each from the list given in the baskets of Paper-VII, Paper-VIII and Paper-IX.

Inter-Disciplinary Basket	Subject Code	Subject Name	Lecture	Sessional	Examination	Sessional	
Paper-X	PG / PE / T/ 1210A	Real Time Embedded System	3		100		3
	PG / PE / T/ 1210B	Environmental Engineering					
	PG / PE / T/ 1210C	Experimental Techniques and Simulation					
		From the inter-disciplinary basket of ME, EE, IEE and Energy Science.					

Note: The students have the freedom to choose one subject from the list under Paper-X.

Sessional Courses							
Sessional 1	PG / PE / S/ 121	Term Paper Leading to Thesis		3		100	3
Sessional 2	PG / PE / S/ 122	Laboratory-II		3		100	3
			12	6	400	200	18

Total Periods/Week = 18

Total Marks = 600

THIRD and FOURTH SEMESTER

Courses							
1	PG / PE / TH / 21	Thesis Work		16		300	12
2	PG / PE / VV / 22	Viva-Voce on Thesis				100	
				16		400	12

Total Periods/Week = 16

Total Marks = 400