

DELHI TECHNOLOGICAL UNIVERSITY
SCHEME OF TEACHING AND EVALUATION
MASTER OF TECHNOLOGY IN POWER SYSTEMS (PSY)

The following alphanumeric coding scheme has been adopted

Core Courses XXXYMN

Elective Courses XXXYCMN

XXX abbreviates a particular M. Tech. program, Y – (5 for M. Tech. 1 st year, 6 for M. Tech. 2 nd year),

C – credit of the course (4/3/2),

MN – Subject code (Odd number for odd semester and even number for even semester courses)

Semester-I														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group A	1	PSY501	Advanced Power System Analysis	Core	4	3	0	2	15	25	20	40	-	17
	2	PSY503	Advanced Power Electronics	Core	4	3	0	2	15	25	20	40	-	
Group B	3	PSY5401/5403/...	Elective 1	Elective	4	3	0	2	15	25	20	40	-	
	4	PSY5301/5303/...	Elective 2	Elective	3	3	0	0	20	-	30	50	-	
	5	PSY5201/5203/... /UEC5201/5203/...	Elective 3/ University Elective I	Elective	2	2	0	0	20	-	30	50	-	
Semester-II														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group C	1	PSY502	Advanced Power System Protection	Core	4	3	0	2	15	25	20	40	-	17
	2	PSY504	Power System	Core	4	3	0	2	15	25	20	40	-	

			Operation and Control											
Group D	3	PSY5402/5404/.....	Elective 4	Elective	4	3	0	2	15	25	20	40	-	
	4	PSY5302/5304/.....	Elective 5	Elective	3	3	0	0	20	-	30	50	-	
	5	PSY5202/5204/...../ UEC5202/5204/.....	Elective 6/ University Elective II	Elective	2	2	0	0	20	-	30	50	-	

Semester-III

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits	
	Track 1													12	
Group E	1	PSY651	Research Project	Core	12	0	0	12	0	-	0	100	0		
	Track 2														
	1	PSY601	Major Project I	Core	3							40	60		12
	2	PSY6401/6403/.....	Elective 7	Elective	4	3	0	2	15	25	20	40	-		
	3	PSY6301/6303/.....	Elective 8	Elective	3	3	0	0	20	-	30	50	-		
4	PSY6201/6203/.....	Elective 9	Elective	2	2	0	0	20	-	30	50	-			

Semester-IV

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
Group F	Track 1													
	1	PSY652	Research Project	Core	12	0		12	0	-	0	100	0	12

Track 2													
1	PSY602	Major Project II	Core	12	0	12	0	-	0	100	0	12	

LIST OF ELECTIVES :													
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 1	1	PSY5401	Power System Dynamics and Stability	Elective	4	3	0	2	15	25	20	40	-
	2	PSY5403	Advanced Control Systems		4	3	0	2	15	25	20	40	-
	3	PSY5405	Modelling of Electrical Machines		4	3	0	2	15	25	20	40	-
	4	PSY5407	Soft Computing Techniques		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 2	1	PSY5301	Power System Instrumentation	Elective	3	3	0	0	20	-	30	50	-
	2	PSY5303	Flexible AC Transmission Systems		3	3	0	0	20	-	30	50	-
	3	PSY5305	Optimization Techniques for Power Systems		3	3	0	0	20	-	30	50	-
	4	PSY5307	Applied Mathematics		3	3	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
	1	PSY5201	SEMINAR		2	2	0	0	2	-	100	-	-
Elective 3	2	PSY5203	Nuclear Energy and Power	Elective	2	2	0	0	20	-	30	50	-
	3	PSY5205	Forecasting Techniques in Power Systems		2	2	0	0	20	-	30	50	-
	4	PSY5207	Switched Mode Power Supplies		2	2	0	0	20	-	30	50	-

	5	PSY5209	Nuclear Energy and Power		2	2	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 4	1	PSY5402	Renewable Energy Systems	Elective	4	3	0	2	15	25	20	40	-
	2	PSY5404	High Voltage Engineering		4	3	0	2	15	25	20	40	-
	3	PSY5406	Power Quality		4	3	0	2	15	25	20	40	-
	4	PSY5408	Advanced Digital Signal Processing		4	3	0	2	15	25	20	40	-
	5	PSY5410	HVDC Transmission		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 5	1	PSY5302	Minor Project	Elective	3	0	0	-	-	40	-	-	60
	2	PSY5304	Intelligent Control Techniques		3	3	0	0	20	-	30	50	-
	3	PSY5306	Analog Filter Design		3	3	0	0	20	-	30	50	-
	4	PSY5308	Dynamics of Synchronous Machines		3	3	0	0	20	-	30	50	-
	5	PSY5310	Smart Grid		3	3	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 6	1	PSY5202	Restructured Power Systems	Elective	2	2	0	0	20	-	30	50	-
	2	PSY5204	Power System Planning		2	2	0	0	20	-	30	50	-

	3	PSY5206	Machine learning		2	2	0	0	20	-	30	50	-
	4	PSY5208	PMU and Advanced Metering		2	2	0	0	20	-	30	50	-
		PSY5210	EHV AC Transmission		2	2	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 7	1	PSY6401	SCADA & Energy Management	Elective	4	3	0	2	15	25	20	40	-
	2	PSY6403	Computer Aided Power System Analysis		4	3	0	2	15	25	20	40	-
	3	PSY6405	Microcontroller & Embedded Systems		4	3	0	2	15	25	20	40	-
	4	PSY6407	Advanced Electric Drives		4	3	0	2	15	25	20	40	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
Elective 8	1	PSY6301	Power System Reliability	Elective	3	3	0	0	20	-	30	50	-
	2	PSY 6303	Transients in Power Systems		3	3	0	0	20	-	30	50	-
	3	PSY6305	Advanced Distribution Systems		3	3	0	0	20	-	30	50	-
	4	PSY6307	Grid and Sub-Station Planning and Technologies		3	3	0	0	20	-	30	50	-
	5	PSY6309	Modern Electric Traction System		3	3	0	0	20	-	30	50	-
		S.No.	Course Code		Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE
Elective 9	1	PSY6201	Energy Auditing and Conservation	Elective	2	2	0	0	20	-	30	50	-

2	PSY6203	Electricity Market and Regulations	2	2	0	0	20	-	30	50	-
3	PSY6205	Digital Communication	2	2	0	0	20	-	30	50	-
4	PSY6207	Energy, Ecology and Environment	2	2	0	0	20	-	30	50	-
5	PSY6209	Artificial Intelligence	2	2	0	0	20	-	30	50	-