

**GALGOTIAS UNIVERSITY**  
**Department of Electrical, Electronics and Communication Engineering**  
**PROGRAM STRUCTURE (2023-2025)**  
**Curriculum Structure of M.Tech. in Power System Engineering**

<b>Semester 1</b>							
<b>Sl. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
1	Advanced Numerical & Statistical Methods	MATH5001	3	0	0		3
2	Analysis of Power Electronics Circuits	MPED1501	3	0	1		4
3	Power System Operation and Control	MPSE1501	3	0	0		3
4	Advanced Power System Analysis	MPSE1502	3	0	1	1	5
5	FACTS and HVDC	MPED1505	3	0	0		3
					Total		<b>18</b>

<b>Semester 2</b>							
<b>Sl. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
1	Advanced Power System Protection	MPSE1601	3	0	0		3
2	Power Electronics Applications in Renewable Energy Systems	MPSE1504	3	0	1		4
3	Power Quality	MPSE1606	3	0	1	1	5
4	Electric and Hybrid Vehicles	MPSE2506	3	0	0		3
5	Power System Dynamics and Stability	MPSE2502	3	0	0		3
6	Professional and Communication Skills	CENG5001	0	0	4		2
					Total		<b>20</b>

<b>Semester 3</b>							
<b>Sl. No</b>	<b>Name of the Course</b>	<b>Course Code</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
	Program Elective-1	*****	3	0	0		3
	Program Elective-2	*****	3	0	0		3
	Capstone Design-I	MPSE9998	0	0	20		10
					Total		<b>16</b>

Semester 4							
Sl. No	Name of the Course	Course Code	L	T	P	S	C
	Capstone Design-II	MPSE9999	0	0	30		15
					Total		15

Semeters	Credit
Semeters-1	18
Semeters-2	20
Semeters-3	16
Semeters-4	15
<b>Total</b>	<b>69</b>

Electrive Courses							
Sl. No	Name of the Course	Course Code	L	T	P	S	C
1	Power System Planning in Deregulated Environment	MPSE1608	3	0	0		3
2	Demand side Energy Management	MPSE1609	3	0	0		3
3	Power System Reliability	MPSE1503	3	0	0		3
4	Reactive Power Compensation & Management	MPSE1504	3	0	0		3
5	Renewable Energy Sources	MPSE1604	3	0	0		3
6	Digital Control	MPED1503	3	0	0		3
7	Modelling, Simulation and Control of Power Electronics Systems	MPED1610	3	0	0		3
8	Power Electronics Applications in Renewable Energy Systems	MPED1602	3	0	0		3
9	System and Control Theory	MPED1606	3	0	0		3
10	Intelligent Control	MPED2504	3	0	0		3
11	Soft computing Techniques	MPED1604	3	0	0		3