## **Department of Electrical Engineering**

## NEP courses for the batch admitted from AY 2024-25

Departmental Compulsary (DC) Courses									
S. No.	Course Code	Course Name	L-T-P	Credit	Course Type				
1	NEEC501	Advanced control system	3-1-0	4	Theory				
2	NEEC502	Power system analysis	3-1-0	4	Theory				
3	NEEC503	HVDC transmission and FACTS	3-1-0	4	Theory				
4	NEEC504	Advanced power system lab	0-0-3	1.5	Practical				
5	NEEC505	Advanced electrical machine lab	0-0-3	1.5	Practical				
6	NEEC506	Advanced control system lab	0-0-3	1.5	Practical				
7	<u>NEEC507</u>	Smart grid technology	3-1-0	4	Theory				
8	NEEC508	Soft computing techniques	3-1-0	4	Theory				
9	NEEC509	Advanced power system protection	3-1-0	4	Theory				
10	NEEC510	Electromagnetic compatibility of power converters	3-1-0	4	Theory				
11	NEEC511	Digital control of power electronics and drives	3-1-0	4	Theory				
12	NEEC512	Electric and hybrid electric vehicles	3-1-0	4	Theory				
13	NEEC513	Advanced power system protection lab	0-0-3	1.5	Practical				
14	NEEC514	Modelling of electrical machines	3-1-0	4	Theory				
15	NEEC515	Converter controlled machine drives	3-1-0	4	Theory				
16	<u>NEEC516</u>	Advanced power electronics lab	0-0-3	1.5	Practical				
17	NEEC517	Advanced drives lab	0-0-3	1.5	Practical				
18	<u>NEEC518</u>	Advanced simulation lab	0-0-3	1.5	Practical				
19	NEEC519	Advanced measurement and instrumentation lab	0-0-3	1.5	Practical				
20	NEEC595	Research methodology and statistics for electrical engineering	3-0-0	3	Theory				
21	NEEC596	Research methodology and statistics for ee	3-0-0	3	Audit				
22	NEEC597	Thesis	0-0-0	20	Non-contact				
23	NEEC598	Thesis	0-0-0	20	Non-contact				
24	NEEC599	Thesis	0-0-0	20	Audit				

## **Details of Departmental Compulsary (DC) Courses**

Details of Departmental Elective (DE) Courses									
Departmental Elective (DE) Courses									
S. No.	Course Code	Course Name	L-T-P	Credit	Course Type				
1	NEED501	High voltage engineering	3-0-0	3	Theory				
2	<u>NEED502</u>	Power system transients	3-0-0	3	Theory				
3	NEED503	Power system dynamics	3-0-0	3	Theory				
4	NEED504	Power quality	3-0-0	3	Theory				
5	NEED505	High power converters	3-0-0	3	Theory				
6	<u>NEED506</u>	Power electronics for renewable energy system	3-0-0	3	Theory				
7	<u>NEED507</u>	Wireless power transfer	3-0-0	3	Theory				
8	<u>NEED508</u>	Design of power converters	3-0-0	3	Theory				
9	<u>NEED509</u>	Advanced machine drives	3-0-0	3	Theory				
10	<u>NEED510</u>	Power system optimization	3-0-0	3	Theory				
11	NEED511	Mine instrumentation	3-0-0	3	Theory				
12	NEED512	Multivariable Control and Estimation	3-0-0	3	Theory				
13	NEED513	Course not assigned against this code							
14	NEED514	Renewable Energy Resources	3-0-0	3	Theory				