

**CURRICULUM SCHEME
FOR
B.TECH. ELECTRICAL ENGINEERING
With Effect from Session 2024-2025
(NEP COMPLIANT)**

2nd YEAR

SEMESTER-III

Scheme of Teaching & Examination of Bachelor of Technology III Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PCCEE301T	Mathematics for Electrical Engineering	2	1	0	3	40	60	100	3
2	N-PCCEE302T	Linear Electric Circuits	3	1	0	4	40	60	100	3
3	N-PCCEE302P	Linear Electric Circuits Lab	0	0	2	1	25	25	50	-
4	N-PCCEE303T	Analog Electronics	3	0	0	3	40	60	100	3
5	N-PCCEE303P	Analog Electronics Lab	0	0	2	1	25	25	50	-
6	N-MDM	Multidisciplinary Minor Course -1	3	0	0	3	40	60	100	3
7	N-OEC	Open Elective Course-1	3	0	0	3	40	60	100	3
8	N-HSSMEE301T	Economics and Finance for Engineers	2	0	0	2	20	30	50	2
9	N-VECEE301T	Universal Human Values	2	0	0	2	50	-	50	-
10	N-CEPEE301	Community Engagement Project (CEP)	0	0	4	2	50	-	50	-
	OR									
	N-FPEE301	Field Project (FP)								
11	N-MCEE301	Indian Constitution	2	0	0	-	50	-	50	-
TOTAL			20	2	8	24	420	380	800	

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SEMESTER-IV

Scheme of Teaching & Examination of Bachelor of Technology IV Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PCCEE401T	Electrical Machines - I	2	1	0	3	40	60	100	3
2	N-PCCEE401P	Electrical Machines – I Lab	0	0	2	1	25	25	50	-
3	N-PCCEE402T	Digital Electronics & Microprocessor	3	0	0	3	40	60	100	3
4	N-PCCEE402P	Digital Electronics & Microprocessor Lab	0	0	2	1	25	25	50	-
5	N-PCCEE403T	Elements of Electromagnetics	3	1	0	4	40	60	100	3
6	N-MDM	Multidisciplinary Minor Course -2	3	0	0	3	40	60	100	3
7	N-OEC	Open Elective Course-2	3	0	0	3	40	60	100	3
8	N-SEC	Skill Enhancement Course-1	0	0	2	1	25	25	50	-
9	N-SEC	Skill Enhancement Course-2	0	0	2	1	25	25	50	-
10	N-AEC	Ability Enhancement Course	2	0	0	2	50	-	50	-
11	N-HSSMEE401T	Entrepreneurship Development	2	0	0	2	20	30	50	2
12	N-VECEE401T	Environmental Studies	2	0	0	2	50	-	50	-
		TOTAL	20	2	8	26	420	430	850	

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3rd YEAR

SEMESTER-V

Scheme of Teaching & Examination of Bachelor of Technology V Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PCCEE501T	Electrical Power System - I	2	1	0	3	40	60	100	3
2	N-PCCEE502T	Power Electronics	2	1	0	3	40	60	100	3
3	N-PCCEE502P	Power Electronics Lab	0	0	2	1	25	25	50	-
4	N-PCCEE503T	Electrical Machines - II	2	0	0	2	20	30	50	2
5	N-PCCEE503P	Electrical Machines – II Lab	0	0	2	1	25	25	50	-
6	N-PCCEE504P	Electrical Drawing & Simulation Lab	0	0	2	1	25	25	50	-
7	N-PEC	Program Elective-1	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course -3	3	0	0	3	40	60	100	3
9	N-OEC	Open Elective Course-3	2	0	0	2	20	30	50	2
TOTAL			14	2	6	19	275	375	650	

Program Elective –1

Sr. No.	Course Code	Course Title
1	N-PECEE501T	Utilization of Electrical Energy
2	N-PECEE502T	Industrial Instrumentation and Automation
3	N-PECEE503T	Electric Drives

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3rd YEAR

SEMESTER-VI

Scheme of Teaching & Examination of Bachelor of Technology VI Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PCCEE601T	Electrical Power System-II	2	1	0	3	40	60	100	3
2	N-PCCEE602T	Control System	3	1	0	4	40	60	100	3
3	N-PCCEE602P	Control System Lab	0	0	2	1	25	25	50	-
4	N-PEC	Program Elective-2	3	1	0	4	40	60	100	3
5	N-PEC	Program Elective-3	3	1	0	4	40	60	100	3
6	N-MDM	Multidisciplinary Minor Course -4	3	0	0	3	40	60	100	3
7	N-SEC	Skill Enhancement Course-3	0	0	2	1	25	25	50	-
8	N-SEC	Skill Enhancement Course-4	0	0	2	1	25	25	50	-
TOTAL			14	4	6	21	275	375	650	

Program Elective – 2

Sr. No.	Course Code	Course Title
1	N-PECEE601T	Non Conventional Energy Sources
2	N-PECEE602T	PLC & SCADA
3	N-PECEE603T	Motors and Motor Control Circuits

Program Elective – 3

Sr. No.	Course Code	Course Title
1	N-PECEE604T	Solar Energy & Electrical System Design
2	N-PECEE605T	Advanced Industrial Automation
3	N-PECEE606T	Advanced Electric Drives

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4th YEAR

SEMESTER-VII

Scheme of Teaching & Examination of Bachelor of Technology VII Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PCCEE701T	High Voltage Engineering	3	0	0	3	40	60	100	3
2	N-PCCEE701P	High Voltage Engineering Lab	0	0	2	1	25	25	50	-
3	N-PCCEE702T	Switchgear and Protection	3	0	0	3	40	60	100	3
4	N-PCCEE702P	Switchgear and Protection Lab	0	0	2	1	25	25	50	-
5	N-PCCEE703P	Computer Applications in Power Systems Lab	0	0	2	1	25	25	50	-
6	N-PEC	Program Elective-4	3	0	0	3	40	60	100	3
7	N-PEC	Program Elective-5	3	0	0	3	40	60	100	3
8	N-MDM	Multidisciplinary Minor Course -5	2	0	0	2	20	30	50	-
9	N-PROJEE701	Project-I	0	0	8	4	75	75	150	-
TOTAL			14	0	14	21	330	420	750	

Program Elective – 4

Sr. No	Course Code	Course Title
1	N-PECEE701T	Electrical Installation Design
2	N-PECEE702T	Mechatronics
3	N-PECEE703T	Power Quality & FACTS

Program Elective –5

Sr. No	Course Code	Course Title
1	N-PECEE704T	EHV Substation Design & Erection
2	N-PECEE705T	Digital Signal Processing
3	N-PECEE706T	Power System Dynamics and Control

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4th YEAR

SEMESTER-VIII

Scheme of Teaching & Examination of Bachelor of Technology VIII Semester B.Tech. (Electrical Engineering)										
Sr. No.	Course Code	Course Title	Hours per week			Credits	Maximum Marks			ESE
			L	T	P		Continuous Evaluation	End Sem Exam	Total	Duration (Hrs)
1	N-PEC	Program Elective-6	3	0	0	3	40	60	100	3
2	N-RMEE801T	Research Methodology	3	0	0	3	40	60	100	3
3	N-PROJEE801	Project-II	0	0	12	6	100	100	200	-
TOTAL			6	0	12	12	180	220	400	
OR										
1	N-ELCEE801	Internship/On Job Training (OJT)	One Semester			12	100	100	200	-

Program Elective –6

Sr. No	Course Code	Course Title
1	PECEE801T	HVDC Transmission System
2	PECEE802T	Fuzzy Logic and Neural Networks
3	PECEE803T	Introduction to Smart Grid