

Schemes and Syllabus

(For academic session 2025-26 onwards)

B. Voc. in Electrical



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SECTION 1

Program Outcomes and Program Specific Outcomes

Program Outcomes

PO1: Professional Knowledge: It helps the students to train on subjects Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Science & Calculation and Employ-ability Skills related to job role.

PO2: Research/Project Orientation: The program helps students to recognize and apply basic research methods to different training in Electrical.

PO3: Entrepreneurship Capability: It helps the students to develop their ethical and social value.

PO4: Conformist: Relating political, social, cultural, historical issues as affecting life of the individual, group and society.

PO5: Critical Thinking Mindset: Students will develop their critical thinking skills to analyze and evaluate the ways in which social scientists to examine the world.

PO6: Leadership and Teamwork: Student will learn about the leadership traits and conformity of a group and how to work as a team all these traits will be developed through the study.

PO7: Professional Ethics: It will help the students to recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO8: Professional Empowerment: Student is entrusted to make/do project work and Extra Curricular Activities to build up confidence.

PO9: Communication: It will help the students the ability to communicate to other about their viewpoints and connecting peoples by exchange ideas and opinions

PO10: Social Responsibility and Environmental Conservation: It will help the students to understand the issues of environmental contexts and the importance of environment conservation and social responsibility.

PO11: Modern Analytical Knowledge: Inculcate among students an ability to determine modern issues and outlook for their solutions.

PO12: Life Long Skills: Acquire the ability to engage in independent and life-long learning in the broadest context socio-political changes.

Program Specific Outcomes

PSO1: Plan and organize the work to make job as per specification applying different types of basic fitting operation and Check for dimensional accuracy following safety precautions.*[Basic fitting operation – marking, Hack sawing, Chi-selling, Filing, Drilling, Taping and Grinding etc. Accuracy: $\pm 0.25\text{mm}$]*

PSO2: Perform Inner & Outer Thread cutting on Metal & Studs and thread cutting on different types of pipes & fittings accessories.

PSO3: Install and maintain different Electric pumps.

PSO4: Join fittings for different purposes on PVC pipe line.

SECTION 2

Semester wise Scheme

First Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
B. Voc. ELEC-101	Basics of Computer	4	-	-	4	4	40	60	100
B. Voc. ELEC -102	Electrical Technology	4	-	-	4	4	40	60	100
B. Voc. ELEC -103	Electrical Machine - I	4	-	-	4	4	40	60	100
B. Voc. ELEC -104	OJT-I (On Job Training NSQF Level-4)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Second Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
B. Voc. ELEC -201	Professional Communication	4	-	-	4	4	40	60	100
B. Voc. ELEC -202	Electrical Wiring	4	-	-	4	4	40	60	100
B. Voc. ELEC -203	Electrical Machine - II	4	-	-	4	4	40	60	100
B. Voc. ELEC -204	OJT-II (On Job Training NSQF Level-5)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Third Semester

Course Code	Course Title	L	T	P	C H	C P	Int. A	ESE	Total
B. Voc. ELEC - 301	Environment Studies	4	-	-	4	4	40	60	100
B. Voc. ELEC - 302	Soft skills - I	4	-	-	4	4	40	60	100
B. Voc. ELEC - 303	Industrial Electronics And control ofdrives -I	4	-	-	4	4	40	60	100
B. Voc. ELEC - 304	OJT-III (On Job Training NSQF Level-6)	-	-	3 6	36	18	500		500
	TOTAL	12	-	3 6	48	30			800

Fourth Semester

Course Code	Course Title	L	T	P	C H	C P	Int. A	ESE	Total
B. Voc. ELEC - 401	Human Values & Ethics	4	-	-	4	4	40	60	100
B. Voc. ELEC - 402	Power System - I(Generation, Transmission and Distribution of Electrical Power)	4	-	-	4	4	40	60	100
B. Voc. ELEC - 403	Modern Electric Tractionsystem	4	-	-	4	4	40	60	100
B. Voc. ELEC - 404	OJT-IV (On Job Training NSQF Level-6)	-	-	3 6	36	18	500		500
	TOTAL	1 2	-	3 6	48	30			800

Fifth Semester

Course Code	Course Title	L	T	P	C H	C P	Int. A	ESE	Total
B. Voc. ELEC - 501	Disaster Management	4	-	-	4	4	40	60	100
B. Voc. ELEC - 502	Industrial Electronics And control of drives -II	4	-	-	4	4	40	60	100
B. Voc. ELEC - 503	Installation and Maintenance Of Electrical equipment	4	-	-	4	4	40	60	100
B. Voc. ELEC - 504	OJT-V (On Job Training NSQF Level-7)	-	-	3 6	36	18	500		500
	TOTAL	1 2	-	3 6	48	30			800

Sixth Semester

Course Code	Course Title	L	T	P	C H	C P	Int. A	ESE	Total
B. Voc. ELEC - 601	Current Affairs	4	-	-	4	4	40	60	100
B. Voc. ELEC - 602	Electrical Vehicle-I	4	-	-	4	4	40	60	100
B. Voc. ELEC - 603	Electrical Vehicle-II	4	-	-	4	4	40	60	100
B. Voc. ELEC - 604	OJT-VI (On Job Training NSQF Level-7)	-	-	3 6	36	18	500		500
	TOTAL	1 2	-	3 6	48	30			800

Assessment Criteria (100 Marks Per Subject)
(For General Components)

S. No.	Components	Maximum Marks
1	Assignment-1	20
2	Assignment-2	20
3	ESE	60

Assessment Criteria (500 Marks) (For OJT)
For Skill Component

S. No.	Components	Maximum Marks
1	Attendance	50
2	General Behaviour & Discipline	50
3	Technical Skill	200
4	Presentation Skill	200