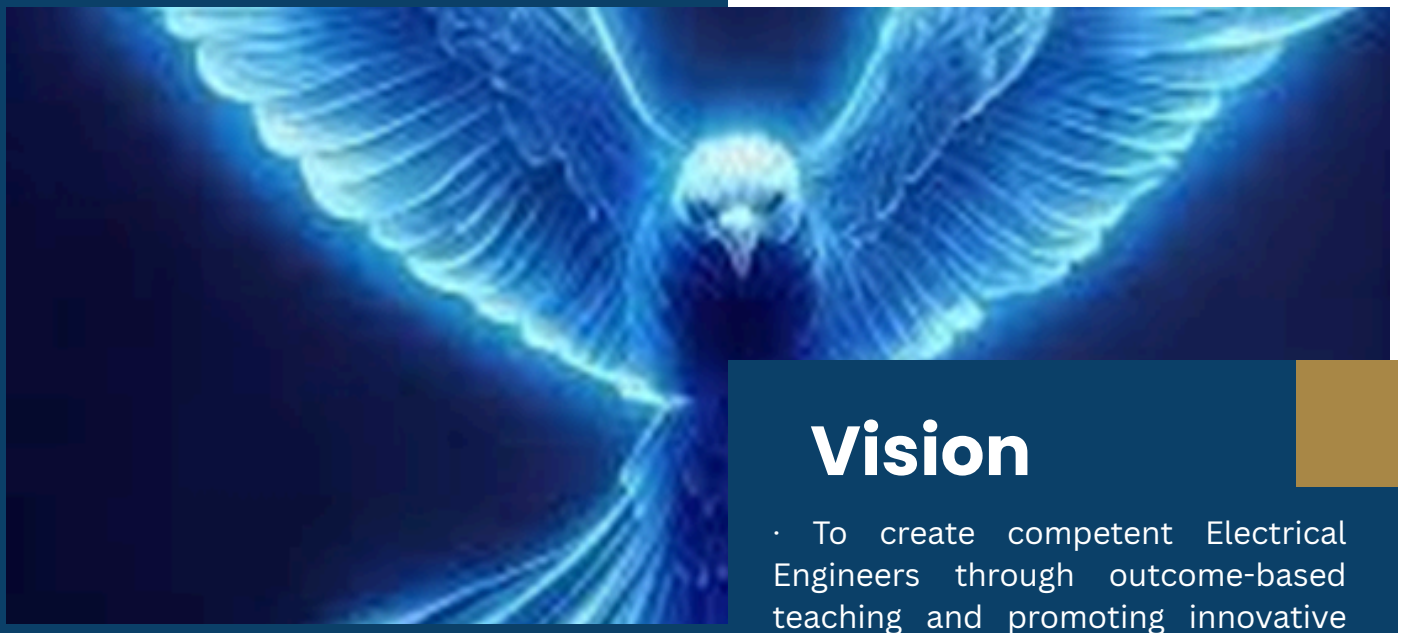
THUNDERBIRD 3.0

DEPARTMENT OF ELECTRICAL ENGINEERING

March 2025



Vision

· To create competent Electrical Engineers through outcome-based teaching and promoting innovative research to serve society with the knowledge and skills earned.

· To make the Institute excellent in technological education and research by imparting equitable, inclusive, ethical, flexible and multidisciplinary knowledge to budding technologists to serve the society.

Mission

·To impart quality education for Electrical Engineering through outcome- based teaching to produce industry-ready Electrical Engineers.

·Toimpart entrepreneurial spiritfor the need for sustainable development of the region & of the nation to train students in industrial practices and their evolution.

·To establish the center of excellence for promoting research in the field of Electrical Engineering through in-house & industry projects.

Email ID: deptee@svu.ac.in

Objective

·To impart knowledge, develop skills and prepare graduates in achieving global excellence in Electrical Engineering education, industry and research.

Innovation
Excellence
Entrepreneurship

About the Department

The Electrical Engineering program at Swami Vivekananda University is meticulously crafted to nurture globally competent and industry-ready professionals. With a strong emphasis on academic excellence and real-world application, the curriculum integrates cutting-edge knowledge with hands-on experience, ensuring students gain a competitive edge in today's dynamic engineering landscape.

Students thrive in a stimulating environment enriched by live projects, technical seminars, and case-based learning, fostering a culture of innovation and intellectual curiosity. The university's robust Industry-Academia interface further empowers learners with practical exposure, enabling them to master the design, analysis, development, and maintenance of advanced electrical systems and machinery.

This holistic approach not only sharpens technical proficiency but also cultivates leadership, adaptability and critical thinking - preparing graduated to excel in diverse professional arenas across the globe.

Welcome onboard, to the Department of EE!

Departmental Members

Dr. Sudip Das
Mr. Abhishek Dhar
Dr. Rituparna Mitra
Dr. Rituparna Mukherjee
Dr. Suryendu Dasgupta
Mr. Avik Datta
Mr. Titas Kumar Nag
Mrs. Susmita Dhar Mukherjee
Mr. Promit Kumar Saha
Mr. Suvraujjal Dutta
Ms. Arunima Mahapatra
Mr. Sujoy Bhowmik
Mr. Parshan Bandopadhyay
Mr. Soumen Pal
Ms. Suravi Singha
Mr. Ayan Ghosh
Mr. Sourav Ghosh
Mr.Joydip Mondal
Mr. Anirban Mondal

Newsletter Edited by:

Dr. Sudip Das

Dr. Sudip Das
Associate Professor
Head of the Department
Department of Electrical Engineering

From the Desk of HOD

Various simulation software programs provide students with interactive tools to understand complex concepts. The department is always enthusiastic in conducting various seminars and workshops for the faculty and students to permeate advances in technology. At present, the department offers a three-year diploma course (Electrical Engineering), four-year undergraduate programme, B Tech (Electrical Engineering), two year post graduate program (Power System and Power Electronics) and PhD programme in core Electrical Engineering specializations. The focus of this curriculum is keeping in view with the current and upcoming industry requirements in future.

It gives me immense pleasure in welcoming, on behalf of the Department of Electrical Engineering at Swami Vivekananda University. As a well- known fact, we cannot imagine the world without electricity, and nowadays, the electrical and electronic devices have become an essential and inevitable part of our daily lives. The

Department focus is to train our students to get strong academic knowledge in the frontier areas of both electrical and electronics engineering and also to make the students ready to face real-world challenges. The faculty members display a high level of

dedication and enthusiasm towards both teaching and state-of-the-art research. The department offers core courses in Power Systems, Control Systems, Electrical Machines, Instrumentation, Switchgear and Industrial Protection, Microprocessors and Microcontrollers etc. In coordination with the highly stimulating lectures and quality enhancing tutorials in these courses, various practical courses are also held in the state-of-the-art Lab facilities of the department like Machine Lab, Power System Lab, Control System Lab, Power Electronics & Drives Lab, Measurement Lab, Circuit Theory Lab, Robotics Lab, Renewable Energy Lab, PLC Automation Lab to name a few.

The Electrical Engineering graduate has a wide range of career opportunities in Power industries, Government PSUs, R&D Units, IT industries, Electricity Boards/Utility companies, Telecommunications industries, Manufacturing industries, Private industrial firms and Start-up companies.

I am confident that with the dedication of our faculty, the enthusiasm of our students, and the support of our stakeholders, the Electrical Engineering Department Swami Vivekananda University will continue to excel and contribute significantly to the field.

II look forward to a future of academic achievements, collaborative endeavors, and personal growth for each member of our department.

Best wishes for a successful academic year!
Warm regards,

Dr. Sudip Das
Associate Professor
Head of the Department
Department of Electrical Engineering
Swami Vivekananda University

Ms. Arunima Mahapatra
Assistant Professor
&
Departmental Coordinator
Department of Electrical Engineering

From the Desk of Departmental Coordinator

As the academic year progresses with vibrant energy here, the Department of Electrical Engineering at Swami Vivekananda University, West Bengal continues its unwavering commitment to fostering innovation and academic excellence. Our students are deeply engaged in cutting-edge research and hands-on projects, pushing the boundaries of electrical engineering knowledge. We are also incredibly proud of our faculty, whose dedication to teaching and mentorship is shaping the next generation of brilliant engineers. This newsletter aims to keep our community informed about the exciting developments, achievements, and upcoming events within our dynamic department.

As we move forward, we remain committed to creating a vibrant learning environment that inspires curiosity, critical thinking, and innovation. We encourage all members of our community—students, faculty, alumni —to stay connected and contribute to our shared vision of excellence. Together, let us continue to build a future driven by knowledge, integrity, and transformative ideas.

Thank you for being a part of the journey with the Department of Electrical Engineering at Swami Vivekananda University.

Student's Strength

Courses	1st year	2nd Year	3rd Year	4th Year
Diploma	112	147	149	NA
B.Tech.	41	356	312	177
M.Tech.	16	19	NA	NA
PhD	7	NA	NA	NA

Student's Achievement

Our students actively participate in internships and industry-sponsored projects with leading tech companies, gaining practical experience and solving real-world challenges. Teams from our department have won prestigious hackathons, robotics contests, and circuit design challenges, bringing accolades to the college

. Our students frequently receive merit-based scholarships and fellowships from national organizations for their outstanding academic and extracurricular achievements. Our graduates are employed in top global companies, research institutions, and universities, making significant contributions to the field of electrical engineering worldwide


NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)
Skill India
This certificate is awarded to
RUPESH SHAW
for successfully completing the course
A Basic Course on Electric and Magnetic Circuits
with a consolidated score of 45 %
Online Assignments 14.56/25 | Proctored Exam 30/75
Total number of candidates certified in this course: 112
Jul-Oct 2024
(12 week course)
Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur
Indian Institute of Technology Kharagpur
swayam
Roll No: NPTEL24EE125S665100175 To verify the certificate No. of credits recommended: 3 or 4


NPTEL ONLINE CERTIFICATION
(Funded by the MoE, Govt. of India)
Skill India
This certificate is awarded to
SUBHADIP DAS
for successfully completing the course
Modeling, Analysis and Estimation of Three Phase Unbalanced Power Network
with a consolidated score of 49 %
Online Assignments 16.25/25 | Proctored Exam 32.25/75
Total number of candidates certified in this course: 21
Prof. Kaushik Ghosh,
Professor(Chemistry)
Coordinator CEC
Jul-Oct 2024
(12 week course)
Prof. Ranjana Pathania,
Professor (BSBE)
Coordinator (NPTEL)
Indian Institute of Technology Roorkee
swayam
Roll No: NPTEL24EE121S552300594 To verify the certificate No. of credits recommended: 3 or 4

ACTIVE RECRUITING PARTNERS

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each interaction matters

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Adding Value

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TOWARDS EXCELLENCE

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Praise the Lord | Touching you with Special Technology!

SigiloTech
Discover Advanced Solutions

ROIMA
INDIA

KYB
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Offline Certification Courses

Multiple students from the Department of Electrical Engineering, Swami Vivekananda University have successfully completed a 40-hour training program on CADENCE, organized by Ardent Computech Pvt. Ltd., an ISO 9001:2015 certified company.

The program provided hands-on training in electronic design automation (EDA) using CADENCE tools, covering essential concepts in circuit design and simulation. This industry-oriented training has enhanced the students' technical proficiency and strengthened their readiness for careers in electronics and embedded system domains.

We congratulate all participating students for their dedication to skill development and wish them great success in their future endeavors.

B. Tech: Semester – VI	B. Tech: Semester - VI
	

INTERSHIP UPDATE

We are pleased to announce that the following students from the Department of Electrical Engineering, Swami Vivekananda University, have been selected for an internship **at West Bengal State Electricity Transmission Company Limited (WBSETCL)**

- Subhadip Das
- Ashok Bera
- Sayan Dey
- Sagar Das

This internship opportunity will provide them with hands-on experience in the field of electrical power transmission, enabling them to enhance their technical skills and industry exposure.

West Bengal State Electricity Transmission Co. Ltd.
(A Govt. of West Bengal Enterprise)
Office of the General Manager (HR&A), TP&AS
Registered Office: Vidyut Bhavan, Block–D.J, Sector–II, Bidhannagar, Kolkata–91

WBSETCL

Annexure

LIST OF TRAINEES

(OFFICE ORDER NO: GM (HR&A)/TP&AS/ 370 /2025 DATE: 08.05.25)

College Name	Name of the Student (Sri/Smt.)	Stream	Period of Training	Place of Training/ Reporting Officer
National Institute of Technology, Durgapur	Pritam Das Laxmi Tudu Purnima Oraon Pratishtha Barua	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & Incharge, Durgapur 220 KV S/S Ph- 9434910247
Jalpaiguri Government Engineering College, Jalpaiguri	Sumu Mondal Kingshuk Debnath Sneha Sarkar Pallab Halder Satyajit Pramanik Bithika Roy Suparna Roy Riyanna Sultana	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & Incharge, NJP 220 KV S/S Ph- 9434910260
Heritage Institute of Technology, Kolkata	Swastick Dhar Pradipta Das Shreya Roy Soumyadeep Pal	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & In-charge, Kasba 220 KV S/S, Ph - 9434910122
College of Engineering & Management, Kolaghat	Anirban Barik Subhajit Santra Soumyajit Halder Shuvo Maity	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & In-charge, Haldia 220 KV S/S, Ph - 9434910216
Academy of Technology, Adisaptagram	Aditya Basak Kartick Basak Sayan Sen Ronish Chakraborty	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & Incharge, Rishra 220 KV S/S, Ph- 9434910226
Govt. College of Engineering & Textile Technology, Berhampore	Moulendu Mandal Sudip Biswas Joydeep Ghosh Masud Rana Newton Sarkar Abhijit Layek Bikram Murmu Diganta Rudra	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	AE (E) & Incharge, Berhampore 132 KV S/S Ph- 9434910159
Kalyani Government Engineering College, Kalyani	Debjit Ray Subha Chowdhury Souvik Baishnab Ankur Paul Anandana Chatterjee Juin Trivedi Partha Pratim Ghorai Subhadip Patra	Degree in Electrical Engineering (4th Year)	03.06.2025 To 23.06.2025	AE (E) & Incharge Kalyani 132 KV S/S Ph- 9434910097
Aliah University, Kolkata	Arup Das Mohd Sajid Siddiqui Tameem Tanveer Suvam Ghosh	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & Incharge, New Town AA-III 220 KV S/S Ph- 9434910166
Swami Vivekananda University, Bara Kanthalia	Subhadip Das Ashok Bera Sayan Dey Sagar Das	Degree in Electrical Engineering (3rd Year)	03.06.2025 To 23.06.2025	DE (E) & In-charge, Barasat 220 KV S/S Ph- 9434910199

8/5/25

(Sujoy Goswami)
General Manager (HR&A)
Training, Planning & Allied Services

Activities & Achievements Outside Academics

We are proud to share that a student of B.Tech 4th Semester, Department of Electrical Engineering, Subhajit Satpati has brought laurels to Swami Vivekananda University by securing the **Bronze Medal** in the Deadlift category (83 kg class) at the **Telangana National Powerlifting Championship.**

The event witnessed intense competition from across the nation, and this achievement reflects not just physical strength, but also discipline, dedication, and perseverance. Balancing academics and sports at such a level is a testament to the student's all-round excellence.

The University extends heartfelt congratulations and wishes for continued success in both academic and athletic pursuits.

Centre Of Excellence(CoE) Establishment

The Department of Electrical Engineering, Swami Vivekananda University, proudly announces the establishment of a Centre of Excellence (CoE) with support from the ICICI Foundation and funding from ICICI Bank Private Ltd., along with Schneider Electric as the equipment provider. This initiative bridges the gap between academics and industry by offering hands-on training in automation, electrical systems, renewable energy, and industrial applications. The CoE focuses on teaching electrical wiring systems and standards, identifying wiring types like conduit and PVC, interpreting electrical drawings, and preparing single-line diagrams. Students also learn to install switches, sockets, MCBs, distribution boards, and earthing systems following safety regulations. Equipped with advanced infrastructure and specialized programs, the CoE empowers students with industry-ready skills, fostering innovation, entrepreneurship, and research. The university gratefully acknowledges the ICICI Foundation's support in nurturing a skilled, future-ready generation.

Fig. Training kit installed in CoE

EDUCATIONAL INDUSTRIAL VISIT TO

BELLMER INDUSTRIES PVT.LTD.

The **Department of Electrical Engineering** at **Swami Vivekananda University, Kolkata** organized an insightful **Industrial Visit** to **Bellmer Industries Pvt. Ltd.**, located at *Kalyani Industrial Park, West Bengal*. This initiative was aimed at bridging the gap between academic learning and real-world industrial practices .During the visit, students were guided by Parshan Bandopadhyay, Assistant Professor of the Electrical Department, and had the opportunity to gain valuable exposure and hands-on experience in several core areas of the electrical and automation industry, including:

- Transformer Operation and Design
- Programmable Logic Controller (PLC) Programming and Applications
- High Voltage Line Infrastructure
- DC Generator Working Principles
- Hands-on Experience with Industrial Equipment

Fig. Visit to BELLMAR INDUSTRIES PVT.

Students gained real-time exposure to how theoretical concepts are applied in industrial settings. The learning experience was profoundly enhanced by Mr. Rajendra Rout, *Senior Deputy General Manager*, whose depth of knowledge and clear, insightful explanations left a lasting impression oneveryone present.

Special thanks are due to Dr. Sudip Das, whose dedicated efforts and seamless coordination played a crucial role in making this visit a resounding success. His commitment to student development and experiential learning is sincerely appreciated.

The industrial visit significantly contributed to the students' professional development by providing practical exposure to real-world electrical systems, effectively reinforcing their theoretical knowledge. Through direct interaction with industrial equipment and expert professionals, they gained valuable insights into current technologies and industry practices.

The hands-on training sessions boosted their technical confidence and enhanced their problem-solving abilities. Exposure to areas such as automation, power

Fig : Glipmes from the visit at the industrial site

Fig : Glipmes from the visit

and renewable energy resources has better prepared them for industry-relevant roles. Overall, this experience laid a strong foundation for future internships, placements, and successful engineering careers.

Workshop on Energy Conservation and Audit

The **Department of Electrical Engineering** at **Swami Vivekananda University** successfully hosted an insightful workshop on **Energy Conservation and Audit**. The session was delivered by **Mr. Sampad Bose**, esteemed faculty member of the **Petroleum Conservation Research Association (PCRA), Government of India**.

The workshop focused on the importance of energy efficiency, auditing practices, and conservation techniques in various industrial and domestic sectors. Students and faculty members alike greatly benefited from Mr. Bose's deep knowledge and practical insights. The session emphasized the role of future engineers in promoting sustainable and energy-efficient technologies.

Fig. Glimpses from the session

Fig.. Mr. Sampad Bose & Dr. Sudip Das

Empowering Future Electrical Engineers

A Hands-on Training Initiative

In a significant step toward empowering students with practical skills and industry readiness, the Department of Electrical Engineering at Swami Vivekananda University recently conducted a comprehensive training program on Electrical Wiring and Installation. This impactful initiative, funded by ICICI Bank Private Ltd. and supported by Schneider Electric as the maker's brand, was designed specifically for students enrolled in the Diploma in Electrical Engineering. A total of 40 students enthusiastically participated in this program, which was conducted

Fig. **Training session on fundamentals**

offline under the expert guidance of Mr. Sujoy Bhowmik and Mr. Suvraujjal Dutta, both Assistant Professors in the department.

The training was thoughtfully structured into two integral sections—Life Skills and Technical Knowledge—to ensure holistic development. The life skills component focused on enhancing interpersonal abilities, professional conduct, teamwork, and communication skills, essential for navigating modern workplaces.

The technical section, meanwhile, offered in-depth, hands-on experience in electrical wiring, making the program both enriching and career-oriented.

Throughout the course, students were introduced to different types of wiring systems, including conduit, casing-capping, and PVC wiring. Special emphasis was placed on understanding and applying IS/IEC wiring standards, fostering a strong foundation in regulatory compliance and best practices. Students learned to interpret electrical drawings and single-line diagrams, preparing them to confidently handle wiring layouts for residential, commercial, and industrial installations. The course included supervised training in the installation of switches, sockets, MCBs, distribution boards, and earthing systems, reinforcing practical application of classroom concepts.

One of the highlights of the program was the fault detection and troubleshooting module, where students gained hands-on experience using real-time testing instruments and tools to locate and correct common faults in wiring systems. Safety was woven into every module, with students trained in electrical safety protocols, the proper use of personal protective equipment (PPE), and standard isolation procedures.

In addition, the program offered valuable insights into material estimation and cost calculation for electrical projects, a critical skill for both budding

Fig.Training session on Smart Setup

professionals and aspiring entrepreneurs. Students also explored energy-efficient wiring practices, learning how to reduce power loss and improve overall system reliability. To bridge the gap between theory and real-world application, the course included live project work such as residential wiring, industrial control wiring, and motor control panel assembly, using industry-grade equipment.

A unique aspect of the training was the focus on team collaboration and technical documentation. Students worked in teams to execute tasks, maintain records, and communicate their findings—mirroring the collaborative environment of today's electrical industry.

This training has successfully equipped students with the skills and knowledge required to enter the job market or start their own ventures in the electrical domain The Department of Electrical Engineering takes immense pride in organizing such future-forward programs and extends heartfelt thanks to ICICI Bank Private Ltd. and Schneider Electric for their generous support in making this initiative a success.

Training on Robotics and Automation For Diploma and UG courses

The Department of Electrical Engineering at Swami Vivekananda University organized a Robotics and Automation Training Program for Diploma and Undergraduate students. Conducted by Parshan Bandopadhyay, Assistant Professor of Electrical Engineering, the program bridged the gap between academics and industry by providing hands-on experience with automation technologies, robotic systems, and control logic. Through practical sessions and demonstrations, students learned about sensors, actuators, microcontrollers, and programming interfaces. This training enhanced their technical skills and prepared them for roles in robotics, industrial automation, and smart systems

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Fig. Training session on Robotics and Automation

Fig. Training session on Robotics and Automation

The training not only strengthened the students' core knowledge of robotics and automation but also offered valuable exposure to current industry trends and technologies used in leading companies. Participants gained insights into how automation is being integrated into manufacturing, logistics, and smart infrastructure projects. The training emphasized real-world applications, fostering a deeper understanding of how robotics and control systems are deployed in research and development (R&D) environments to drive innovation and efficiency.

This industry-oriented approach provided students with the skills and confidence needed to contribute effectively to future R&D initiatives, aligning their academic foundation with the expectations of a rapidly evolving technological landscape.

Future Development Plan

1. Curriculum Enhancement

- Update and align the curriculum with industry trends, focusing on areas such as smart grid technology, renewable energy, artificial intelligence (AI), and electric vehicles (EVs).

- Introduce multidisciplinary programs combining electrical engineering with emerging fields like data science, robotics, and automation.

2. Infrastructure Development

- Establish advanced laboratories for power systems, renewable energy, robotics, and IoT applications.

- Equip classrooms and labs with modern software tools such as MATLAB, Simulink, PSCAD, and ANSYS for practical learning.

- Develop a Center of Excellence in Renewable Energy and Smart Grids to support research and innovation.

3. Research and Development

- Promote research in sustainable energy solutions, AI-driven control systems, and energy storage technologies.

- Seek national and international research collaborations to secure grants and funding for projects.

- Encourage faculty and students to publish in high-impact journals and present at global conferences.

4. Industry Collaboration

- Strengthen partnerships with leading companies for internships, industrial training, and collaborative projects.

- Host industry-focused workshops, seminars, and hackathons to enhance practical knowledge and skills.

- Develop MoUs with organizations for technology transfer and consultancy services.

5. Global Engagement

- Foster academic partnerships with international universities for exchange programs, joint research initiatives, and dual-degree options.

- Organize global technical conferences and webinars to bring diverse perspectives to the department.

6. Student Development Programs

- Launch certification courses on cutting-edge topics like PLC/SCADA programming, EV technology, and embedded systems.

- Introduce mentorship programs with industry experts and alumni to guide students in career planning.

- Provide financial support and resources for students to participate in competitions, internships, and startup incubators.

7. Sustainability Goals

- Focus on green campus initiatives, such as solar power installations and energy-efficient systems.

- Integrate sustainability concepts into the curriculum and encourage projects aligned with environmental conservation.

8. Entrepreneurship and Innovation

- Establish an Innovation Hub for students to develop and prototype entrepreneurial ideas.

- Offer training and workshops in business planning and project management for aspiring entrepreneurs.

- Collaborate with startups in the energy and automation sectors for exposure and guidance.

9. Digital Transformation

- Implement e-learning platforms and virtual labs for remote experimentation and simulations.

- Adopt AI-powered learning management systems to personalize education and track student progress.

10. Alumni and Community Engagement

- Leverage the alumni network to create opportunities for mentorship, funding, and knowledge-sharing.

- Organize community outreach programs to raise awareness about energy efficiency and renewable energy use.

By focusing on innovation, sustainability, and industry readiness, the department aims to prepare students for the rapidly evolving technological landscape and contribute meaningfully to society.