



Dr. Ambedkar Institute of Technology for Divyangjan, Kanpur
Department of Electronics Engineering



Professor Rachna Asthana
Head of Department

HOD's Desk

Department of Electronics Engineering was started in the year of 2004. The department is especially designed for Divyangjans .Through this journey of 21 years, the state-of-the-art infrastructure is developed with all facilities like e-class rooms and laboratories with latest equipment, hardware and software. The department is having experienced senior faculty. We ensure overall development of our students by organizing academic initiatives in the department for research, innovations, skills enhancement and interdisciplinary interactions. Outcome based learning is implemented in teaching learning process. There is also a center of excellence in the department of electronics engineering established with the support of **Texas instruments**. The department has recently **NBA Accredited** in session 2022-23.

Vision

To prepare competent Electronics Engineering who can effectively contribute towards building harmonious society by providing environment friendly technological solutions .

Mission

- M1: To provide state of the art technical education to the students.
- M2: To groom students with leadership, transparency, accountability and professional ethics.
- M3: To upgrade the faculty and supporting staff to enhance their knowledge through relevant pedagogical activities.
- M4: To develop labs to impart state of the art practical knowledge to students.
- M5: To provide inclusive education environment for students to make them proficient for higher education and industry.

Program Educational Objective

PEO1 : To provide students the basic concepts of engineering and applied sciences to have successful carrier in academia, industries associated with electronics engineering or successful entrepreneurs with human values.

PEO2 : To prepare students with necessary technical skills to critically analyze and find the economically feasible and environment friendly solutions of real life technical problems.

PEO3 : To develop skills of management, communications and team work to serve the society as competent and responsible citizens.

Program Outcomes

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes

PSO1 : Students will be able to design, analyze and to provide solution to real life engineering problems by obtaining knowledge of electronics engineering course.

PSO2 : Students should be able to establish skill to apply advanced software and hardware in real life engineering problems.

Technical Column

Alumni Insight: The Future of Electronics – Where AI Meets Hardware

By [ADITYA SINGH], Embedded Systems Engineer,

[Company]

Today's electronics is no longer just about resistors and relays — it's about intelligent, connected, and efficient systems. As someone working in embedded AI, I can say this: the future lies at the intersection of hardware and intelligence.

AI isn't just Python and models — it needs optimized, low-power hardware. This is where embedded systems and VLSI engineers are stepping in. From smart wearables and home automation to industry-grade sensors — devices now process data locally using edge AI on chips like STM32 or ESP32.

On the VLSI side, India is entering a semiconductor growth phase, creating demand for chip designers, verification engineers, and layout specialists. Tools like Verilog, Vivado, and UVM are regaining prominence.

If you're a student:

Learn both C/C++ for microcontrollers and basics of AI logic.

Build projects combining sensors and intelligence.

Understand how AI models can run on embedded hardware.

In short — electronics is evolving fast, and those who adapt will lead. The future won't just be smart; it'll be smartly embedded.



Student Blog: How I Got Started with PCB Designing

— by [Devendra Srivastava], 3rd Year

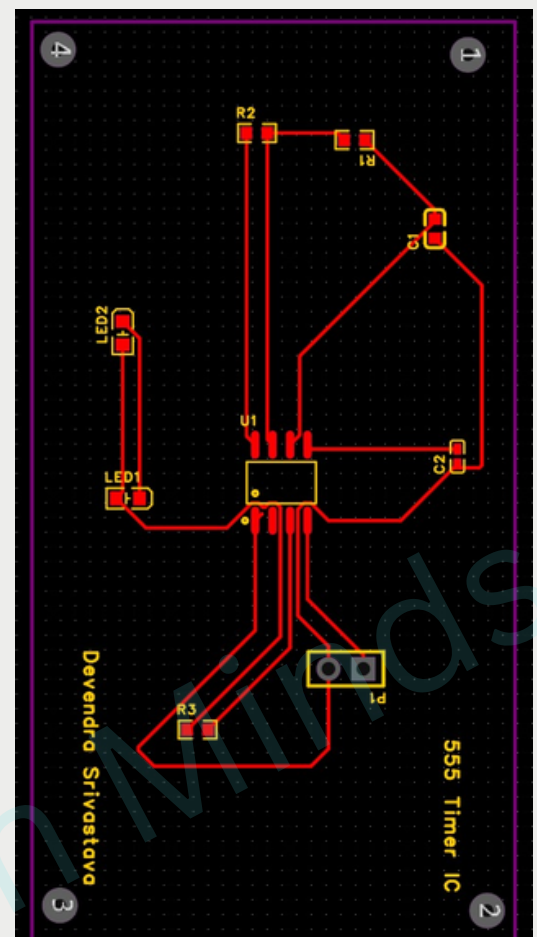
Ever looked at a green board full of tracks and thought, "Wow, how do people even design this?" That's exactly how I felt before I tried PCB designing for the first time. Turns out — it's not as scary as it looks!

I started with EasyEDA, an online tool that's beginner-friendly and free. First, I took a simple circuit (a 555 timer-based LED flasher) and made a schematic diagram using the drag-and-drop components. Then came the fun part — routing the PCB. It felt like solving a puzzle!

I learned about footprints, tracks, vias, and copper layers — terms I had only heard in theory before. After designing, I exported the Gerber files and ordered my PCB from a fabrication service. When the board arrived, it felt surreal to solder components on a board I had designed myself.

My advice? Start small. Pick a simple circuit, watch 1–2 tutorials, and just try. It's one of the best ways to learn electronics hands-on.

Who knew that clicking on virtual tracks could one day light up a real LED on your custom board?



ALUMNI THOUGHT

Reflecting on my journey at AITD as an Electronics Engineering student, "AITD wasn't just a college — it was the place where dreams took shape, friendships turned into family, and every challenge became a stepping stone. The journey here taught me to believe in consistency over perfection, and purpose over pressure. Today, wherever I stand, a part of AITD walks with me — in my confidence, my resilience, and my gratitude. Here's to the place that built more than just engineers — it built individuals with vision."



MR. RUDRASEN PAL,
AE , UPRVUNL

2012-2016 Electronics Engineering

STUDENT'S ACHIEVEMENTS

Internship:

- PLANTECH
- EMERTXE
- ASTREUS NEXT GEN



TOPPER



Divyanshi Dubey	1901660300016
Mihir Lalwani.	2001660300035
Amit Tiwari	2101660300011
Princy Kushwaha.	2101660300038
Abhishek	2101660300001
Vishal Mourya.	2201660300064
Ashok Pal.	2201660300017
Abhishek Verma.	2201660300001

STUDENT’S ACHIEVMENTS :

GATE QUALIFICATION :

- Akash Gupta
- Esha Pandey
- Simran Bajpai
- Ravi Kumar Yadav
- Ritik Sharma
- Sarthak Kanchan

COMPANIES VISITED:

1. Intel
2. BNY Mellon Technology



PHOTO’S:

