

Department of Electronics Engineering

1. Department Overview

Established in 2002, the Department of Electronics Engineering is a core division within the Faculty of Electrical and Electronics Technology at the Ho Chi Minh City University of Industry and Trade (HUIT). The department is staffed by a dedicated and highly qualified academic team comprising 03 PhDs, 01 PhD candidate, and 04 Master's degree holders. This faculty group is recognized for its youthful energy, enthusiasm, and creative approach to both pedagogical excellence and technical innovation.



The faculty members of the Department of Electronics Engineering.

2. Educational Programs and Inter-departmental Training

The department plays a pivotal role in cultivating a high-quality technical workforce essential for national industrial development. Originally serving as a foundational support unit for various engineering disciplines, the department significantly expanded its academic scope in 2012 with the official launch of its University-level degree program in Electronic Engineering.

Today, the department continues to provide essential inter-disciplinary training and specialized knowledge for several other majors across the university:

- **Programs within the Faculty of Electrical and Electronics Technology:**
 - Electrical Engineering
 - Control and Automation Engineering
- **Programs within the Faculty of Mechanical Technology:**
 - Mechanical Manufacturing

- Mechatronics
- Thermal Engineering

3. Laboratory Facilities and Modern Infrastructure

To bridge the gap between theory and practice, the department has invested in a suite of modern, large-scale laboratories. These facilities provide students with an immersive environment for technical experimentation and specialized training in the following areas:

- Basic Electronics
- Power Electronics
- Microcontrollers
- Embedded Programming
- Industrial Production Line Control
- Internet of Things (IoT)
- Artificial Intelligence (AI)



Power Electronics Laboratory



Industrial Production Line Control Practice

4. Scientific Research and Academic Excellence

The faculty maintains a robust commitment to scientific research, viewing it as a vital mechanism for updating academic curricula and enhancing training quality. Faculty members regularly contribute to the global body of knowledge, publishing significant findings in prestigious domestic and international journals indexed in ISI and Scopus.

The department's primary research pillars focus on emerging technologies and sustainable solutions:

- Industrial electronics and IoT
- Power electronics converters
- Control systems and artificial intelligence
- Power electronics applications in renewable energy

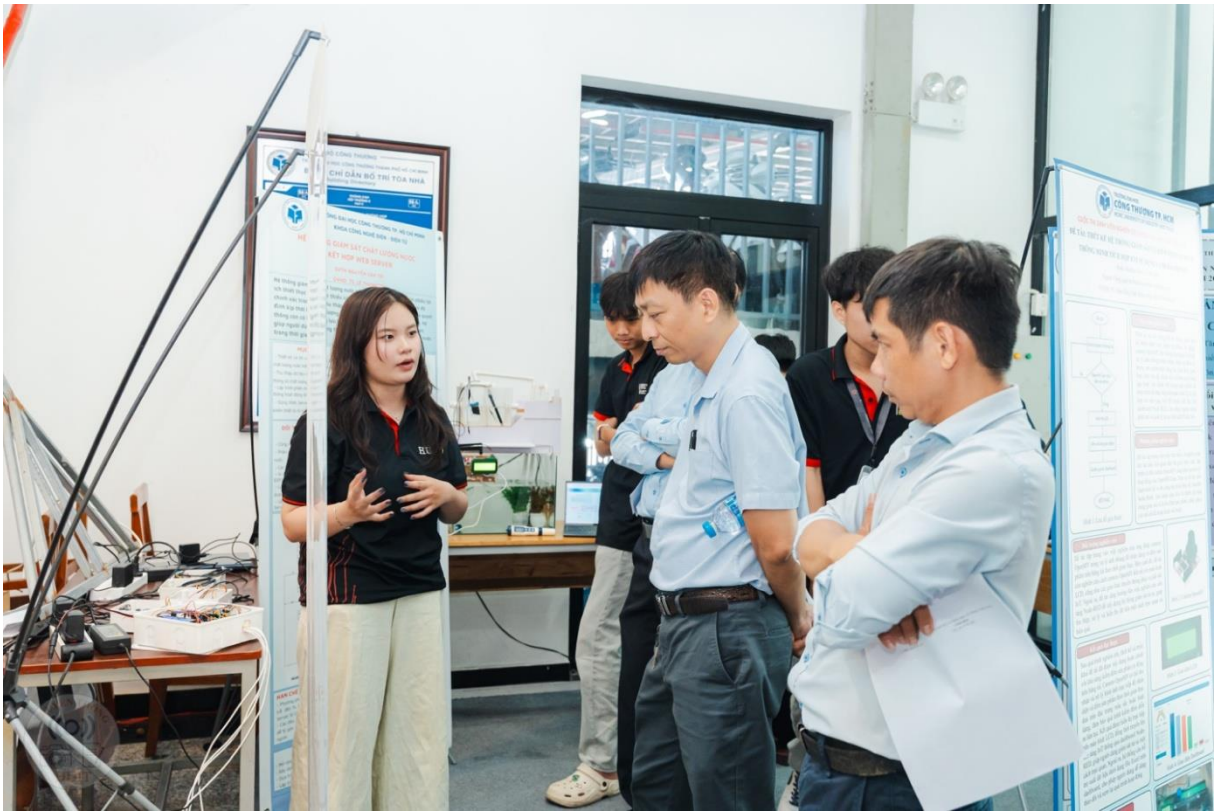
5. Student Academic Activities and Research Initiatives

The department actively bridges the gap between faculty expertise and student development by orienting research initiatives toward practical applications. By leveraging the department's strengths in AI, control systems, and IoT, students are encouraged to participate in academic competitions that foster creative thinking and self-directed learning.

A hallmark of this success is the research and fabrication of the "Badminton training support machine," which secured second prize in the University-level Student Scientific Research competition. Students also maintain a strong presence in robotics competitions and annual faculty-level research symposiums.



Research and fabrication of a badminton training support machine, winning second prize in the University-level Student Scientific Research competition.



The Departmental Review Board evaluating student scientific research projects.



Faculty-level Student Scientific Research competition for the upcoming 2025-2026 academic year.