

Department of Electrical Engineering

Contact Information

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Introduction

To offer a competitive career for students, our department integrates the disciplines of electrical, electronic, information, and control engineering into three core research areas: system-on-a-chip (SOC), multimedia and communication, and intelligent control and robotics. Currently, the department has 17 full-time faculty members, including one foreign professor. Additionally, the Educational Robotics Center has been set up as a hub of research development. In recent years, our department has been actively recruiting international research students while offering part of the curriculum in English. Upon graduation, our students are expected to hold international perspectives and be capable of both theoretical research and real-world applications in the fields of advanced technology.



Instructional Objectives

Master class

1. Cultivation of knowledge and skills in science and engineering to solve problems in electrical engineering independently.
2. Development of independent and creative thinking to realize lifelong learning.
3. Encouragement of teamwork and professional ethics for the development of a global perspective and social responsibilities.

Doctoral class

1. Cultivation of knowledge and skills in science and engineering to solve problems in electrical engineering.
2. Development of independent thinking as the basis for lifelong learning.
3. Encouragement of teamwork and professional ethics for the development of a global perspective and social responsibilities.
4. Establishment of abilities for innovative research and leadership excellence.

Degree Requirements

M.S. Program: Students must complete at least 31 credits, including 4 credits of compulsory courses, 21 credits of professional electives and 6 credits of general electives.

Ph.D. Program: Students must complete at least 22 credits, including 4 credits of compulsory courses, 12 credits of professional electives and 6 credits of general electives.

There are currently 18 courses fully taught in English. That number will be increased in the future.

Feature of the Curriculum

1. Our curriculum is designed in accordance with industrial developments and demands in the fields of electrical and electronic engineering. Emphasis has been placed on interdisciplinary integration of various fields such as electrical, electronic, information, and control engineering.

2. A feedback mechanism has been established to reflect students' needs in career development. Course structure and content are adjusted on demand; each course not only strengthens students' core abilities but also cultivates their abilities in practical applications.

3. Practical courses are offered on topics of industry trends. External professional experts are invited to realize short-term co-teaching opportunities. Students will gain deeper understanding of the industry status quo and potential developments.

4. Our department is active in recruiting international students. There are currently 18 courses fully taught in English on offer and that number will be increased. Students are encouraged to take up overseas exchange programs in the hope of creating talent capable of both theoretical research and real-world applications.

Career Prospects

Our students have many options for career development. Many of our alumni have demonstrated excellent performance in both their careers and further education.

1. Industry opportunities: Many of our alumni work as engineers in electrical, electronic, communication, automatic control, and information technology industries, either domestic or overseas. Major employers include TSMC, UMC, Mediatek, Realtek, HTC Corporation, Foxconn, IBM, Nvidia, Pegatron Corporation, Formosa Technologies Corporation, and ASUS. Our alumni also hold positions in related public enterprises, including: TRI, NCSIST, Chunghwa Telecom, Taiwan Power Company and China Steel, etc.

2. Teaching opportunities: Students may take courses offered by the department for accreditation to teach various disciplines in vocational high schools.

3. Our students have been accepted by internationally renowned universities for further education, including Cornell University (USA), Oxford University (UK), Keio University (Japan), University of Melbourne (Australia), University of Southern California (USA), University of California, Irvine (USA), New York University (USA), Brown University (USA) and Purdue University (USA).