# Department of Electrical Engineering

#### Introduction

The Department of Electrical Engineering (EE) at the National Chiayi University (NCYU) was founded in 2008, where located in the heart of Chiayi City, Taiwan. The EE department has always been one of the top choices to high school students. Each year the number of applicants seeking admission to the Department exceeds by many times the number of available openings. The competition for admission is extremely intense. Therefore, entrants with high potential are widely known. The faculty is actively dedicated to teaching and state-of-the-art research. Over ten research grants and SCI papers are awarded by governments and are published in journals by faculty each year, respectively, which make the Department to be one of the most competitive Departments at NCYU. Moreover, the Graduate Institute of Electrical Engineering was established in 2013 fall with a Master's degree program.

#### Mission Statement

The mission of the Department of EE on the undergraduate program is to impart a basic understanding of electrical engineering built on a foundation of physical science, mathematics, computing, and technology. Undergraduate students in the department take a common core of three subjects that serves as their introduction to electrical engineering, computer science and control system. Students can systematically build up wide groundwork. Laboratory subjects, independent projects and research opportunities provide engagement with principles and techniques of analysis, design, and experimentation in a variety of fields. The department also offers a range of programs that enable students to obtain experience in industrial settings, ranging from collaborative industrial projects done on campus to long-term experiences at partner companies. Graduate study in the department moves students towards dominion of areas of individual interest, through course work and significant research, often defined in interdisciplinary areas that take advantage of the enormous range of faculty expertise in the department.

#### Academics and Admissions

The EE offers a Graduate Program with Master of Science and Undergraduate programs. Our flexible curriculum gives students a holistic view of the field, and an understanding of how to solve problems, from software, control, communication to bioengineering. Bachelor of Science in EE program provides a solid foundation in the fundamentals of engineering and science and a variety of electives to tailor studies to

a specific technical interest. The program is offered as a full-time program, and the average length of time it takes students to complete the full-time program is 3 to 4 years. And nine thematic laboratories of Department of EE are organized into as follows. Intelligent Sensing, Learning, Recognition Laboratory, Integrated Circuit Design and Electro-Optical System Application Laboratory, Mixed-Signal Integrated Circuits and Systems laboratory, Signal Processing Laboratory, RF/Microwave Communication Laboratory, Power Electronics and Renewable Energy Laboratory, Optical Fiber Communication Laboratory, Wireless Communication System Laboratory, and Automatic Control Laboratory. Besides, the department provides a computer classroom for software development, an electronic circuit experimental classroom for VLSI development, a multimedia classroom for interactive teaching, and a meeting room for research discussion.

## Faculty and Advisors

So far, the EE department employs over 9 academic faculty members who come from a variety of extraordinary research institutes and top industries in the world. Their research backgrounds are organized into major developmental areas of specializations: Electromagnetics, VLSI Systems, Digital Signal Processing, Energy, Imaging Processing, Telecommunications, Computer Systems, Optics and Power Electronics. The list of EE faculty provides links to profiles that present detail information for biographies, publications, research interests and contact information.

### **Career Perspective**

Taught by world class faculty, EE students explore subjects critical to advancement in today's high-tech society-from computer system and artificial intelligence to circuit design and power electrics, electromagnetics and communication theory. There are three career perspectives can be explored by students. A. Electrical Engineering is still a main stream in Taiwan's industries. EE department at National Chiayi University provides an excellent research environment for people who would like to pursuit higher degree. Students will combine fundamental science combined with the excitement of discovery in the academic level. C. Studying abroad is another great choice for students to seek higher accomplishment in their life.

# Welcome to Department of EE

Welcome to the Department of Electrical Engineering (EE) at National Chiayi University. Our faculty and students continue to advance the state-of-the-art, define new directions for electrical engineering, and develop new technologies to help

society in the field of communication, energy, control, power electrics and etc. Even more important mission in EE department is to continue commitment to our students in order to help them learning, growing, and arriving their goals. If you are joining us as a student, we look forward to your contributions to the department and to EE in general. We hope to be part of your success.

