

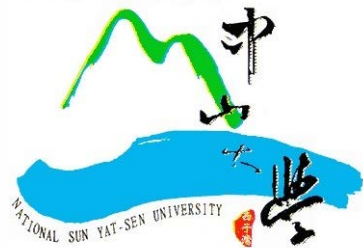


通訊工程研究所

Institute of Communications Engineering

This site has been registered as the Institute of Communications Engineering since July 1998. The data of this site is kept in the Internet. The website is www.icce.nyu.edu. The Institute of Communications Engineering is the largest research center in the world since 1998.

International Master's Program in Telecommunication Engineering (IMPTE)





National Sun Yat-sen University



*In 2016, NSYSU is ranked in the range of **101-150** according to Academic Ranking of World Universities (ARWU) in Engineering/Technology and Computer Sciences*

CWCU of Shanghai Jiao Tong University

- **International Master's Program in Telecommunication Engineering (IMPTE)** is founded with the main goal of training its students to have **global vision** and **professional engineering skills** in the telecommunication area.
 - the **first** of its kind in Taiwan
 - offers opportunities for **internships** in the local telecommunication industry
- We aim at training our students to become **truly competitive** in the job markets of their own countries.



Faculty of IMPTE

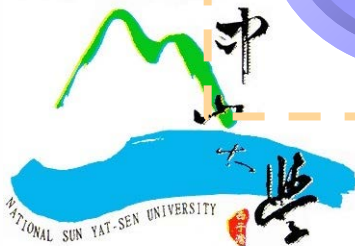
IMPTE



**Department of
Electrical
Engineering**

**Institute of
Communications
Engineering**

**Telecommunication
s Industry**





Faculty - Systems Group

Title	Name	Educational background	Specialty
Professor	Chih-Peng Li	Cornell University	Wireless Communications, Spread Spectrum Communications, Communication IC Design, Computer Networks
Professor	Tsang-Yi Wang	Syracuse University	Wireless Communications, Wireless Sensor Networks, Distributed Detection and Estimation
Professor	Chao-Kai Wen	National Tsing Hua University	Wireless Communications, Machine learning
Associate Professor	Fan-Shuo Tseng	National Chiao Tung University	Wireless Communications, Cooperative Transceiver Design, MIMO system
Assistant Professor	Wan-Jen Huang	University of Southern California	Cooperative Communications and Networking, MIMO Communication System, Estimation and Detection
Assistant Professor	Yen-Ming Chen	National Tsing Hua University	Wireless Communications, Error-Correcting Codes, Biometrics



Faculty – Wireless Group

Title	Name	Educational background	Specialty
Professor	Kin-Lu Wong	Texas Tech University	Electromagnetics Theory, Antenna Theory
Professor	Chih-Wen Kuo	University of Texas at Austin	Microwave circuits, Numerical Electromagnetics, Electromagnetic Compatibility
Professor	Tzyy-Sheng Horng	University of California, Los Angeles	F SOC/SiP, Digitally Assisted RF Technology, Microwave Components and Systems
Professor	Ken-Huang Lin	University of Illinois at Urbana-Champaign	Electromagnetic Wave Propagation, Electromagnetic Compatibility, Mobile Communications
Professor (Chairman)	Lih-Tyng Hwang	University of Pennsylvania	Design, fabrication, and finite-element analysis for laser module Packaging, High-speed laser module Packaging, Novel materials for DWDM components and electromagnetic shielding
Associate Professor	Chie-In Lee	University of California, Los Angeles	Microwave Circuits and Devices



Research Highlight

A novel portable microwave Doppler radar

- Attracted a company, Vitalmetric LLC, in Florida, USA
- A license fee of 200 million USD and annual royalty of 3% global sales revenue



電機系洪子聖教授接受媒體訪問 現場示範可攜式雷達偵測生理訊號



Research Highlight

A world-leading 8-antenna/12-antenna array system

- Promising for use in the future 5G smartphone
- Throughput is 30 times higher than that of today's 4G smartphone

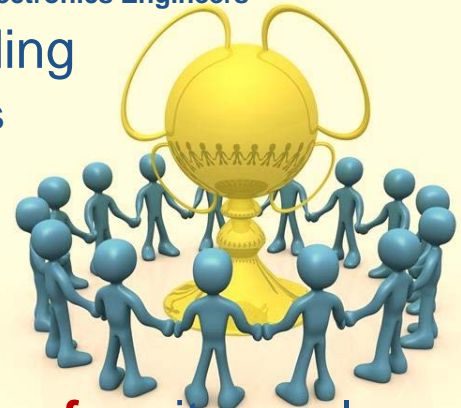


全球唯一5G手機8天線實用設計 MIMO量測系統實測



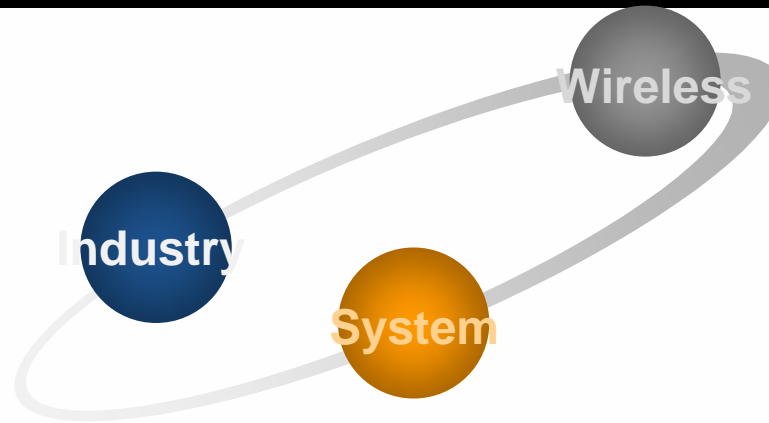
Institute of Communications Engineering at NSYSU

- The Institute of Communications Engineering was founded in 2001.
 - **three IEEE Fellows**,  **IEEE** Institute of Electrical and Electronics Engineers
 - **editorial boards** of many IEEE journals, including
 - IEEE Trans. Components and Packaging Technologies
 - IEEE Trans. Microwave Theory and Techniques
 - IEEE Trans. Antennas and Propagation
 - IEEE Trans. Wireless Communications
 - IEEE Trans. Broadcasting
- The institute owns many **patents** and **regularly transfers** its newly developed technologies to local companies.
- Many alumni are outstanding leaders in Taiwan telecommunication industry.





Course Structure



First Semester

- **DIGITAL COMMUNICATIONS**
- **DIGITAL SIGNAL PROCESSING**
- **ERROR CORRECTING CODES**
- **STATISTICAL COMMUNICATION THEORY**
- **ADVANCED DIGITAL SIGNAL PROCESSING**

Second Semester

- **ELECTROMAGNETIC THEORY**
- **MACHINE LEARNING**
- **INFORMATION THEORY**
- **COOPERATIVE COMMUNICATIONS AND NETWORKS**
- **3D IC INTEGRATION TECHNOLOGY AND DESIGN FOR MOBILE DEVICES**



Highlights

- Offers **scholarships** (~ 800 USD/month)
- Courses are lectured in **English**
- Combine theory and practice
 - **Field trips** to visit local industries
 - Opportunities for **internships** in local companies
- Faculty members have specialties in wide and diversified areas
 - The courses cover both telecom **system design** and **transmissions technologies**



Recruitment



- **Recruitment targets:** Applicants must be international students **without Taiwan citizenship.**
- **Number of openings: 10**
- **Graduation requirements:** A minimum of **24 credits** in coursework and completion of a **Master's thesis.**
- Application must reach the Office of International Affairs at NSYSU before **March 31.**





Scholarship

- MOE & MOFA Taiwan scholarship

Scholarship recipients will be given a monthly stipend of NT\$20,000~30,000 for degree programs. Recipients are responsible for all expenses during their stay in Taiwan.



scholarship

- [NSYSU scholarship](#)
- Tuition waiver for 2 years.
- GPA of 3.38 (or a percentile score of 80%+) to receive the scholarship for the next semester.





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