English Master Program

Department of Computer Science and Information Engineering
Tamkang University, Taiwan

CSIE

INTRODUCTION

The Department of Computer Science and Information Engineering was founded in 1969, placing it among the earliest programs of computer science and engineering in Taiwan. This program covers all aspects of computer science, information engineering, software applications and computer theory. The department also offers elective courses in these areas that adapt to the continuing advances in technology, computer networking, multimedia computing and telecommunication. This English master program admits both domestic and international students with a desire to create an international learning environment.

The department offers academic degrees of BS, MS, and PhD in Computer Science and Information Engineering, and an MS degree in information networking and communication. Research labs have been established for faculty and graduate students involved in a wide range of research projects, supported by the university as well as government funding agencies. Located in Tamsui, the campus is only a 40-minute drive from downtown Taipei.

APPLICATION

- Applications are open for international students from February to May. (Please check http://exam.tku.edu.tw/foreign for details.)
- The program starts in September and usually takes two years to finish.
- Score of TOEFL iBT or similar tests is required.
- Distinguished applicants are eligible for tuition waivers.

CONTACT

Chairperson: Prof. Hsu, Hui-Huang (h_hsu@mail.tku.edu.tw)
Staff: Mr. Li, Jian-Zong (teix@oa.tku.edu.tw)
Tel: +886-2-26215656 ext. 2616 or 2665   Fax: +886-2-26209749
Website: http://www.csie.tku.edu.tw
Address: Department of Computer Science and Information Engineering, Tamkang University
        151, Yingzhuan Rd., Tamsui Dist., New Taipei City, 25137, Taiwan (ROC)

OVERVIEW ▪ ▪ ▪ ▪ ▪

All courses in this top quality program are taught in English. The program's aim is to provide advanced knowledge and skills in the field of Computer Science by cultivating and developing students into professionals able to use their talents to contribute in related, academic fields globally. This program has produced outstanding alumni for over 40 years in various professions due to the excellent faculty and abundant academic resources.

Our graduates are renowned all over the world for their professional capability, and moreover, their interpersonal skills such as teamwork and leadership. TKU graduates have been ranked in the top 10 as preferred employees by over 100 companies for 10 consecutive years. This program has made a staggering contribution to research in computer science and will continue to cultivate international talent, making tomorrow a better place through the power of technology.

- **Graduation Requirement**

  A minimum of 26 credits plus a master's thesis

  *Required Courses***:** Research Methodology (I) & (II), Advanced Computer Algorithms.

  *Elective Courses***:** Internet Technology, Soft Computing, Data Compression, Information Hiding, Computer Networks, Data Mining, Pattern Recognition, Cryptographic Algorithms, Cryptography and Network Security, Wireless Local Area Networks, Wireless Sensor Networks and Internet of Things, Carrier Ethernet, Introduction to Vision System and Its Applications, Advanced Computer Vision, ...etc.

- **International Exposure**

  The department not only collaborates with companies and organizations locally, but also stands as the pioneer of international development among many educational institutions in Taiwan. It also regularly hosts international conferences/workshops and invites world-renowned scholars to provide esteemed lectures. Students may also choose to apply for overseas exchange programs to further broaden their horizons and enhance their international experience.

- **Alumni**

  There are over 10,000 alumni that serve in important occupations including government, academia and industrial positions. Members of the TKU CSIE alumni association are also extremely influential in the IT industry of Taiwan.

FACULTY MEMBERS ▪ ▪ ▪ ▪ ▪

Professor & Chairperson

Hsu, Hui-Huang	Ph.D., University of Florida (USA)	Data mining, big data analytics, ambient intelligence

Professor Emeritus

Chao, Louis R.Y.	Ph.D., Duke University (USA)	Computer communications

Professor

Chiang, Rui-Dong	Ph.D., University of Southwestern Louisiana (USA)	Objective-oriented database, data mining
Keh, Huan-Chao	Ph.D., Oregon State University (USA)	Objective-oriented programming, databases
Kuo, Chin-Hwa	Ph.D., University of Notre Dame (USA)	Multimedia processing, computer assisted language learning, adaptive systems
Chang, Chih-Yung	Ph.D., National Central University (Taiwan)	Embedded systems, wireless networks, programming of mobile devices
Wang, Ying-Hong	Ph.D., Tamkang University (Taiwan)	Mobile computing, software engineering
Shih, Kuei-Ping	Ph.D., National Central University (Taiwan)	Wireless networks, mobile computing, communication protocols design
Lin, Hwei-Jen	Ph.D., Northeastern University (USA)	Pattern recognition, image processing
Horng, Wen-Bing	Ph.D., University of North Texas (USA)	Image Processing/computer vision, information security

Associate Professor

Shyu, Yuh-Huei	Ph.D., Illinois Institute of Technology (USA)	Knowledge and experience transferring, universal gravitation for power generation
Wang, Bal	Ph.D., Pennsylvania State University (USA)	Logic programming, genetic algorithms
Chen, Po-Zung	Ph.D., University of Iowa (USA)	Distributed computing, petri nets model and performance analysis
Chung, Hsing-Tai	Ph.D., Florida State University (USA)	Web technologies, knowledge management, intelligent systems
Yen, Shwu-Huey	Ph.D., Northeastern University (USA)	Multimedia processing, morphological image analysis, and formal languages
Hwang, Ren-Junn	Ph.D., National Chung Cheng University (Taiwan)	Network security, information hiding
Hwang, Shin-Jia	Ph.D., National Chiao Tung University (Taiwan)	Applied cryptography, digital signatures, information security
Hwang, Lain-Jinn	Ph.D., Tamkang University (Taiwan)	Computer architecture, embedded systems
Chen, Chien-Chang	Ph.D., National Tsing Hua University (Taiwan)	Image processing, watermarking, visual cryptography, multimedia system
Chen, Jui-Fa	Ph.D., Tamkang University (Taiwan)	Software engineering, interactive distributed systems
Cheng, Chien-Fu	Ph.D., National Chiao Tung University (Taiwan)	Wired & wireless network, distributed fault tolerant computing, cloud computing
Chen, Chun-Hao	Ph.D., National Cheng Kung University (Taiwan)	Data mining, machine learning, fuzzy theory, artificial intelligence

Assistant Professor

Tsai, Yi-Chia	Ph.D., Michigan State University (USA)	High-speed computer networking, cluster computing
Lin, Chi-Yi	Ph.D., National Taiwan University (Taiwan)	Cloud computing, pervasive computing
Pan, Meng-Shiuan	Ph.D., National Chiao Tung University (Taiwan)	4G mobile network, personal area network, embedded software
Tu, Ching-Ting	Ph.D., National Cheng Kung University (Taiwan)	Computer vision, machine learning
Chang, Shih-Hao	Ph.D., Liverpool John Moores University (UK)	Wireless sensor networks (WSN), machine-to-machine (M2M)
Chen, Yi-Cheng	Ph.D., National Chiao Tung University (Taiwan)	Data mining, information retrieval, cloud computing