



# International Master Program of Information Technology and Applications

## Introduction

National Pingtung University (NPTU) is an unique university in Taiwan that provides three education systems including higher education, technological and vocational education, and teacher education. In NPTU, College of Computer Science (CCS) has the most comprehensive Information Technology (IT) related departments among the national universities in the south of Taiwan. CCS consists of five departments: Department of Computer Science and Information Engineering, Department of Computer and Communications, Department of Computer Science, Department of Intelligent Robot and Department of Information Management.

College of Computer Science



College of Computer Science

In addition, the amazing progress of IT in recent years has brought related applications (such as image recognition, voice recognition, intelligent robots, Virtual Reality (VR), Augmented Reality (AR), autonomous vehicles, etc.) to various industries. The revolutionary advancement of Artificial Intelligence (AI) technology has further led to a strong demand of IT talents, and further training of talents has become an urgent issue. Thus, CCS offers this International Master Degree Program in Information Technology and Applications to meet future development in IT industry.

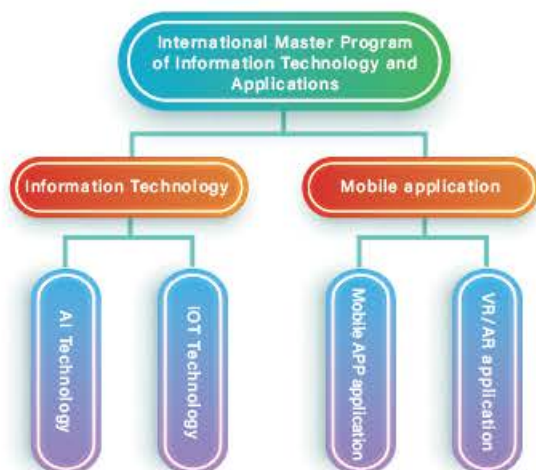
The curriculum of the program emphasizes "Technology in Practice", "Information Innovation", and "International Mobility" oriented courses to cultivate international mid- and high-level professionals with foresight in IT development. Through interdisciplinary cooperation, the program has been designed to combine different fields of expertise and research, and develop innovative IT and diverse applications.

## Mission and Objectives

- (1) Nurturing international (especially Southeast Asia) mid to high-level IT professionals.
- (2) Nurturing international professionals for "Industry 4.0".
- (3) Recruiting international professionals for interdisciplinary IT applications.

## Course Design

The goal of International Master Program of Information Technology and Applications is to foster international professionals and students in both theory and practice in IT applications. In recent years, Information and Communication Technology (ICT) industry (network multimedia, communication devices, mobile phone industry, Internet of Things (IoT), vehicular communications), intelligent robots, and big data analytics can be regarded as core industries of future global high technology. The program focuses on these core industries to train talents, conduct in-depth research, develop technologies, and work closely with domestic and international industries to cultivate international mid- and high-level professionals with research capabilities and technologies for industry development.



Course Design of International Master Program

The core courses of the program includes the following two fields:  
 (1) Information Technology courses: AI, IoT, intelligent robot, and cloud computing.  
 (2) Mobile Application courses: VR/AR, mobile apps, big data, and multimedia.

### Course of International Master Program

Academic year	Master's first year		Master's second year	
Semester	First semester	Second semester	First semester	Second semester
Required subject	1.Seminar I 2.Advanced operating systems	1.Seminar II 2.Project management	Thesis	Thesis
Optional subject	1.Mobile application software design 2.Advanced database system 3.Advanced software engineering 4.Advanced management information system 5.Network security	1.Advanced computer network 2.Advanced artificial intelligence 3.Advanced computer algorithm 4.Multimedia communication 5.Advanced electronic commerce	1.Special topics on IoT 2.Machine learning 3.Evolutionary computation 4.Special topics on VR/AR 5.Research of data security 6.Big data analytics	1.Cloud computing 2.Intelligent robotics 3.Deep learning 4.Human-machine interaction 5.Image and video indexing 6. Design and production of animation

### Faculty

The International Master Program of Information Technology and Applications is a new established program of CCS. The program faculty is from the professors in the departments of CCS, i.e., Department of Computer Science and Information Engineering, Department of Computer and Communications, Department of Computer Science, Department of Intelligent Robot, and Department of Information Management.

### Scholarships Information

Three levels of scholarships are available:

- Level 1 NPTU Elite Scholarship includes 1. Free tuition and incidental fee, 2. NTD 6,000 stipends per month (maximum for 2 years), and 3. Free dormitory fee
- Level 2 NPTU Brilliance Scholarship includes 1. Free tuition and incidental fee and 2. Free dormitory fee
- Level 3 NPTU Excellence Scholarship includes 1. Free tuition and incidental fee or 2. NTD 6,000 stipends per month or 3. Free dormitory fee

1. For fall semester, applications received after January 15 may not be considered for all scholarship programs and will be considered only if funds remain.
2. For spring semester, applications received after July 15 may not be considered for all scholarship programs and will be considered only if funds remain.



Web



Scholarships