



# TAIWAN-KMUTT INTERNSHIP PROGRAM (TKIP)

July – August 2024

2024



KMUTT,  
Bangkok, Thailand

# TAIWAN-KMUTT INTERNSHIP PROGRAM (TKIP)

July - August 2024

KING MONGKUT'S UNIVERSITY OF TECHNOLOGY THONBURI

Bangkok, Thailand



Chin Chun Enterprise 2002  
บริษัท ชินจัน 2002 จำกัด



# Program Agenda for Opening and Closing Ceremonies

## The 5<sup>th</sup> Taiwan-KMUTT Internship Program (TKIP), 2024

---

### Sunday June 30, 2024

- TKIP students arriving and airport pick-up by KMUTT.
- TKIP students are to check into KMUTT Heliconia House.
- Accompanying professors from Taiwan are to check into hotels.

### Monday July 1, 2024

- Morning (10:00 am – 12:00 pm): Opening Ceremony to be presided by KMUTT President, Assoc. Prof. Dr. Suvit Saetia
- Participants: KMUTT's executives and faculty members, representatives of host companies, representative from Taipei Economic and Cultural Office and Taiwan Education Center, professors from Taiwan, and Taiwanese TKIP students.
- Afternoon (1:30 pm): Orientation by Dr. Chih-Way Lee of T-TECH College (BDI)

### Tuesday July 2, 2024

- Cultural excursion in Bangkok organized by KMUTT's International Affairs Office, visiting landmark places such as Wat Pho (Buddhist temple complex) and IconSiam.

### Wednesday July 3, 2024

- TKIP students are to be sent off to host companies
- 

### Thursday August 29, 2024

- TKIP students are to come back to KMUTT and check into a nearby hotel

### Friday August 30, 2024

- Closing Ceremony of TKIP at KMUTT Bangmod Campus
- Presentations by all 18 TKIP students
- Certificate awards ceremony
- Taiwanese TKIP students are to fly back to Taiwan in the evening

Notes: TKIP students will be staying at KMUTT for 3 nights during Orientation at Heliconia House and 1 night during Closing at an accommodation near KMUTT Bangmod Campus.

## Introduction

---

Internship has become an integral part in higher education. Students learn better and faster when they go through practical training in companies before graduating from universities. Better still, overseas internship offers students a chance to be exposed to other cultures at placement. As a result, King Mongkut's University of Technology Thonburi (KMUTT) recently initiated the Taiwan-KMUTT Internship Program (TKIP) with the following aims:

- ❑ Exchange of internship students between KMUTT and selected universities in Taiwan in research labs and private companies.
- ❑ Cultural exchanges and cross-learning between KMUTT and Taiwanese students

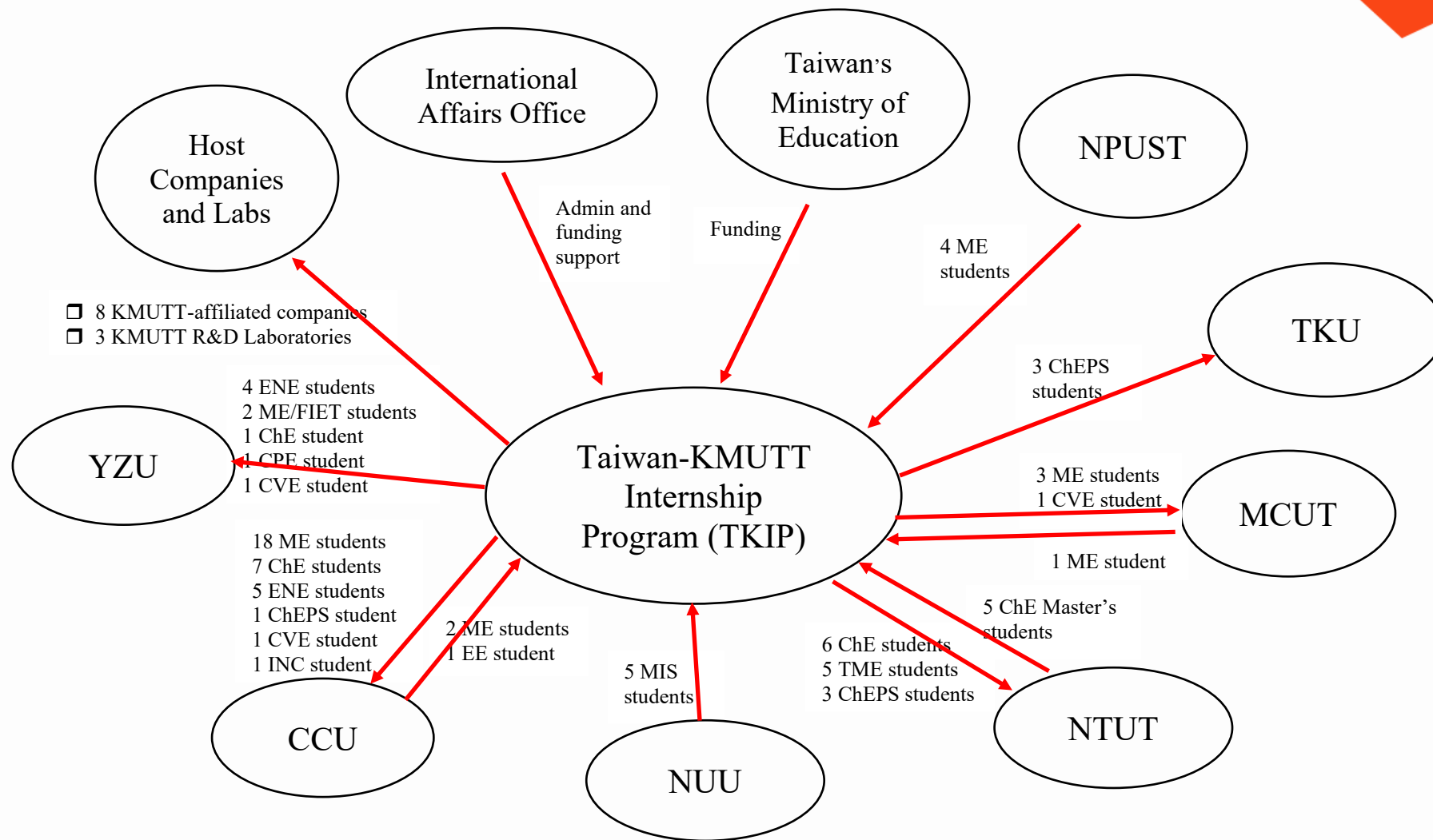
The establishment of TKIP is very timely, as the new Taiwanese government elected in 2016 has a new strategic "Southbound Policy" aimed at increasing cooperation and collaboration, both in academics and in trades, with neighboring countries to Taiwan's south. As such, the Ministry of Education (MoE) of Taiwan has seen a significant increase in its budget that will fund more Taiwanese students who wish to do internship in overseas countries such as Thailand, Malaysia, Singapore, etc.

Below is a diagram showing the working structure of TKIP at KMUTT. This year in 2024, the four universities in Taiwan who are TKIP's academic partners and sending their students to KMUTT are:

1. National Chung Cheng University (CCU)  
URL: <https://www.ccu.edu.tw/?Lang=en>
2. National Pingtung University of Science and Technology (NPUST)  
URL: [http://www.npust.edu.tw/index\\_en.aspx](http://www.npust.edu.tw/index_en.aspx)
3. National Taipei University of Technology (NTUT)  
URL: <http://www-en.ntut.edu.tw/bin/home.php>
4. National United University (NUU)  
URL: <https://www.nuu.edu.tw/>

CCU is a comprehensive and well-regarded university in Taiwan, located in a very scenic campus in Chiayi County. NPUST is very strong in food science/engineering and agricultural technologies. On the other hand, NTUT is very similar to KMUTT, both in world rankings and expertise, and has a very strong reputation in science and engineering. Finally, NUU is a well-rounded university with a reputable college of engineering and college of IT and information system management.





Academic Program Abbreviations: ChEPS = Chemical Engineering Practice School, ChE = Department of Chemical Engineering, CPE = Department of Computer Engineering, CVE = Department of Civil Engineering, ENE = Department of Electronic and Telecommunication Engineering, INC = Department of Control System and Instrumentation Engineering, ME = Department of Mechanical Engineering, ME/FIET = Department of Mechanical Engineering in the Faculty of Industrial Education and Technology, TME = Department of Tool & Materials Engineering

University Abbreviations: CCU = National Chung Cheng University, MCUT = Ming Chi University of Technology, NPUST = National Pingtung University of Science and Technology, NTUT = National Taipei University of Technology, NUU = National United University, TKU = Tamkang University, YZU = Yuan Ze University

## Host Companies and R&D Centers for Inbound and Outbound TKIP Students

KMUTT has enlisted a total of 8 companies and a number of KMUTT's R&D Labs to host 18 TKIP inbound Taiwanese students during their July-August internship in Thailand as shown in the table below.

Host Company and KMUTT R&D Labs	Fields of Internship	Number of Students
BDI Group	Mechanical Engineering	2
Chin Chun Enterprise 2002 Co., Ltd.	Management Information Systems	2
Day Grow Enterprise Co., Ltd.	Management Information Systems	1
First Rubber Co., Ltd.	Management Information Systems	1
GRD Tech Co., Ltd.	Chemical Engineering	2
HCP Pump (Thailand) Co., Ltd.	Electrical Engineering	1
King Shing Automobile Parts Co., Ltd.	Mechanical Engineering	1
Laconic Technology Co., Ltd.	Management Information Systems	1
Department of Tool and Materials Engineering	Materials Engineering	2
Excellent Center of Waste Utilization and Management	Chemical Engineering	3
Sensor Technology Laboratory	Materials Engineering	2

On the other hand, a total of 63 outbound KMUTT students (50 undergraduate students, 12 Master's students, and 1 research assistant) have gone to Taiwan for their summer internship (2 months) and research thesis (6 months), as shown in the table below.







<b>Fields of Research or Internship</b>	<b>Number of Students</b>
Chemical Engineering, Electronic & Telecommunication, Computer Engineering, and Mechanical Engineering at CCU	27 Undergraduates, 5 Master's, and 1 Research Assistant
Chemical Engineering and Materials Engineering at NTUT	11 Undergraduates and 3 Master's
Chemical Engineering, Civil Engineering, Electronic & Telecommunication, Computer Engineering, and Mechanical Engineering at YZU	8 Undergraduates and 1 Master's
Chemical Engineering and Civil Engineering at MCUT	4 Undergraduates
Chemical Engineering at TKU	3 Master's
<b>Total</b>	<b>63 Students</b>





## Placement of TKIP Inbound Taiwanese Students



	Student Name	Institution	Major	Status	Photograph
<b>TSC Solution Co., Ltd. (a subsidiary of BDI Group)</b>					
1	Ms. Kai-An Sun	CCU	Mechanical Engineering	Junior	
<b>BDI Alloy Enterprise Co., Ltd. (BAE, a subsidiary of BDI Group)</b>					
2	Mr. Ji-Yu Chen	MCUT	Mechanical Engineering	Junior	
<b>Chin Chun Enterprise 2002 Co., Ltd.</b>					
3	Mr. En-Yu Wei	NUU	Information Management	Junior	
4	Mr. Ming-Zhe Li	NUU	Information Management	Junior	
<b>Day Grow Enterprise Co., Ltd.</b>					
5	Ms. Hsien-An Lin	NUU	Information Management	Junior	
<b>GRD Tech Co., Ltd.</b>					
6	Mr. Ming-Chen Lin	NTUT	Chemical Engineering	Master's	



7	Mr. Chih-En Hsin	NTUT	Chemical Engineering	Master's	
<b>First Rubber Co., Ltd.</b>					
8	Ms. Ling Yang	NUU	Information Management	Junior	
<b>HCP Pump (Thailand) Co., Ltd.</b>					
9	Mr. Cheng-Tse Wu	CCU	Electrical Engineering	Sophomore	
<b>King Shing Automobile Parts Co., Ltd.</b>					
10	Mr. Yu Chen	CCU	Mechanical Engineering	Sophomore	
<b>Laconic Technology Co., Ltd.</b>					
11	Ms. Tzu-Chin Chang	NUU	Information Management	Junior	
<b>Department of Tool and Materials Engineering at KMUTT Bangmod Campus</b>					
12	Mr. Yun-Cheng Li	NPUST	Materials Engineering	Sophomore	
13	Mr. Wei-Cheng Huang	NPUST	Materials Engineering	Sophomore	
<b>Excellent Center of Waste Utilization and Management at KMUTT Bangkhuntien Campus</b>					
14	Ms. Yu-Yi Li	NTUT	Chemical Engineering	Master's	

15	Ms. Yung-Chieh Chuang	NTUT	Chemical Engineering	Master's	
16	Ms. Jing-Yu Kao	NTUT	Chemical Engineering	Master's	
<b>Sensor Technology Laboratory at KMUTT Bangkhuntien Campus</b>					
17	Ms. Wan-Jou Lee	NPUST	Materials Engineering	Sophomore	
18	Ms. Wan-Jou Wu	NPUST	Materials Engineering	Sophomore	

**Participating Universities:**

CCU = National Chung Cheng University

NPUST = National Pingtung University of Science and Technology

NTUT = National Taipei University of Technology

NUU = National United University

## Placement of TKIP Outbound KMUTT Students



No.	Student Name	Department	Status
<b>College of Engineering, CCU</b>			
1	Ms. Amornrat Srihthoungpusakul	Chemical Engineering (ChEPS)	Master's
2	Ms. Apisara Kittipoomwong	Chemical Engineering	Undergraduate
3	Ms. Samita Kaewintanin	Chemical Engineering	Undergraduate
4	Mr. Poonpiti Suvanit	Chemical Engineering	Undergraduate
5	Ms. Napaporn Tamiyajol	Chemical Engineering	Undergraduate
6	Mr. Panuwat Pramayan	Chemical Engineering	Undergraduate
7	Mr. Jirawat Pukchowna	Chemical Engineering	Undergraduate
8	Ms. Ploychompoo Sresakulwiwat	Chemical Engineering	Undergraduate
9	Mr. Natchapol Kiriwana	Electronic and Telecommunication Engineering	Undergraduate
10	Mr. Supannakot Nuchprayoon	Electronic and Telecommunication Engineering	Undergraduate
11	Mr. Jira Wareerak	Electronic and Telecommunication Engineering	Undergraduate
12	Mr. Techin Charoenprom	Electronic and Telecommunication Engineering	Undergraduate
13	Ms. Phyo PyaePyae Zaw	Electronic and Telecommunication Engineering	Undergraduate
14	Mr. Puttipong Jaiarsa	Mechanical Engineering	Undergraduate
15	Mr. Makasorn Sa-nguanngam	Mechanical Engineering	Undergraduate
16	Mr. Wisarut Tanakijkosol	Mechanical Engineering	Undergraduate
17	Ms. Fa-is Awae	Mechanical Engineering	Undergraduate
18	Ms. Pasuta Paisanpanich	Mechanical Engineering	Undergraduate
19	Mr. Pattarapol Suksamran	Mechanical Engineering	Undergraduate
20	Mr. Pormet Aiemsathit	Mechanical Engineering	Master's

21	Mr. Mengly Long	Mechanical Engineering	Master's
22	Mr. Poonapob Juntasri	Mechanical Engineering	Undergraduate
23	Ms. Suphawadi Siladaeng	Mechanical Engineering	Undergraduate
24	Ms. Tharnpet Toburi	Mechanical Engineering	Undergraduate
25	Ms. Natnicha Wisuthiko	Mechanical Engineering	Undergraduate
26	Mr. Nanthapong Kasemsukphaisal	Mechanical Engineering	Undergraduate
27	Ms. Natramon Kanasuwan	Mechanical Engineering	Undergraduate
28	Ms. Apiporn Sangketdee	Mechanical Engineering	Undergraduate
29	Ms. Paulrawin Parisutthiwanich	Mechanical Engineering	Undergraduate
30	Mr. Ponlakrit Passakornjaras	Mechanical Engineering	Undergraduate
31	Mr. Pirapat Orncumpa	Mechanical Engineering	Undergraduate
32	Mr. Sakolkit Pengkhum	Computer Engineering	Undergraduate
33	Mr. Siraphop Noiampaeng	Control System and Instrumentation Engineering	Undergraduate
<b>R&amp;D Centers, MCUT</b>			
34	Mr. Kiettipong Petchviset	Mechanical Engineering	Undergraduate
35	Ms. Panyatip Prasertsung	Mechanical Engineering	Undergraduate
36	Mr. Panuwat Kakaen	Mechanical Engineering	Undergraduate
37	Mr. Kajornsak Manadeepromb	Civil Engineering	Undergraduate
<b>Department of Materials and Mineral Resources Engineering, NTUT</b>			
38	Mr. Papangkorn Iamyen	Chemical Engineering	Undergraduate
39	Mr. Worrawich Boonpan	Chemical Engineering	Undergraduate
40	Ms. Chutima Naksraket	Chemical Engineering	Undergraduate
41	Ms. Intira Cantapasuntra	Chemical Engineering	Undergraduate
42	Ms. Nattanicha Tampong	Chemical Engineering	Undergraduate
43	Ms. Napat Montrisaweatkun	Chemical Engineering	Undergraduate
44	Mr. Kantapat Thanakiattraiphop	Tool and Materials Engineering	Undergraduate
45	Mr. Natthawat Phochanapun	Tool and Materials Engineering	Undergraduate
46	Mr. Jakkapat Jeephet	Tool and Materials Engineering	Undergraduate
47	Mr. Woradorn Phromphon	Tool and Materials Engineering	Undergraduate
48	Ms. Sasitorn Kaentown	Tool and Materials Engineering	Undergraduate

<b>Department of Chemical Engineering and Biotechnology, NTUT</b>			
49	Ms. Munchuporn Larprasoetkul	Chemical Engineering (ChEPS)	Master's
50	Ms. Onjira Sopakayang	Chemical Engineering (ChEPS)	Master's
<b>Graduate Institute of Environmental Engineering and Management, NTUT</b>			
51	Ms. Chanakan Sukmongkolwongs	Chemical Engineering (ChEPS)	Master's
<b>Department of Water Resources and Environmental Engineering, TKU</b>			
52	Ms. Matchima Konglom	Chemical Engineering (ChEPS)	Master's
53	Ms. Matimon Konteing	Chemical Engineering (ChEPS)	Master's
54	Ms. Nartsupang Chongcharoen	Chemical Engineering (ChEPS)	Master's
<b>College of Engineering, YZU</b>			
55	Ms. Supanuttanun Thanosawaun	Mechanical Engineering in Faculty of Industrial Education and Technology	Undergraduate
56	Ms. Nattawadee Pekthanu	Mechanical Engineering in Faculty of Industrial Education and Technology	Undergraduate
57	Ms. Mya Thinn Thinn Kyu	Electronic and Telecommunication Engineering	Undergraduate
58	Ms. Ei Nandar Khaing	Electronic and Telecommunication Engineering	Undergraduate
59	Ms. Nang Yein Mo Hsai	Electronic and Telecommunication Engineering	Undergraduate
60	Ms. Htoo Wint Htal	Electronic and Telecommunication Engineering	Undergraduate
61	Ms. Sudarat Kraisuwan	Chemical Engineering	Undergraduate
62	Mr. Marnie Gorgonia	Computer Engineering	Master's
63	Mr. Rayuth Lay	Civil Engineering	Undergraduate

### **Participating Universities:**

CCU = National Chung Cheng University  
 MCUT = Ming Chi University of Technology  
 NTUT = National Taipei University of Technology  
 TKU = Tamkang University  
 YZU = Yuan Ze University



## Profiles of Sponsoring Companies for Inbound Students

---

### **BDI Group**

[www.bdigroup.co.th](http://www.bdigroup.co.th)



BDI Group is a company that manufactures a wide array of products ranging from electrical appliances (necessary for daily life) to various industrial parts including motorcycle and automobile spare parts, machinery parts, and complex and delicate products of electronic parts with specific requirements on their use individually.

For a history of the company and its development from 1978 to 2021, visit [www.bdigroup.co.th/about-us/history](http://www.bdigroup.co.th/about-us/history). BDI Group consists of a number of subsidiaries including:

#### **TSC Solution Co., Ltd.**

<http://www.tscsolution.co.th/>



#### **BDI Alloy Enterprise Co., Ltd. (BAE)**

<https://www.bdialloy.co.th/>



## Chin Chun Enterprise 2002 Co., Ltd.

<https://www.chinchun2002.com/>



### History Chin Chun Enterprise 2002 Co., Ltd.

Chin Chun Enterprise 2002 Co., Ltd, established in January 2002 (formerly known as Jin Jiao Enterprises Thailand Co., Ltd, founded in September 1990), specializes in laminating, CNC, adhesive coating, and processing for industries such as footwear, luggage, packaging materials, garments, sports equipment, electric and electronic equipment, and automotive parts. As a leading company in Thailand, we manufacture and distribute high-quality parts and raw materials.

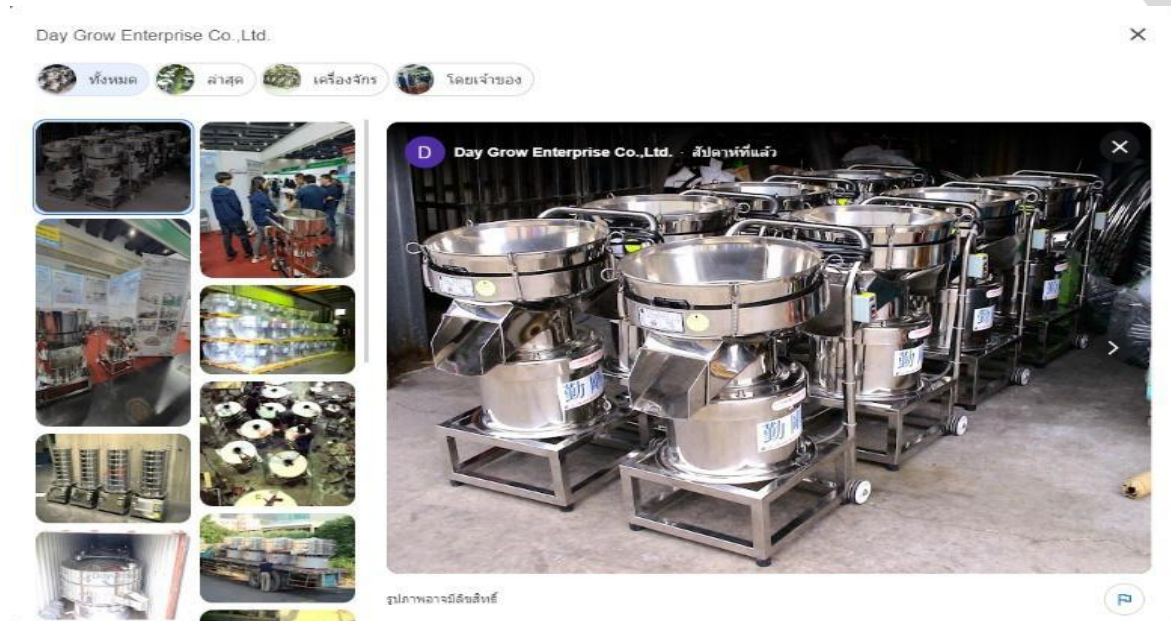
The company excels in design, manufacturing, sales, and customer service, leveraging modern production technology and continuous improvement to meet customer demands. Trusted by major companies both domestically and internationally, we design products and raw materials that help customers reduce production costs while maintaining quality.

Our policy focuses on CUSTOMER SATISFACTION, TIMELY DELIVERY, QUALITY ADVANCEMENT, and CONTINUOUS IMPROVEMENT, earning us widespread acceptance. We are certified in ISO 9001:2015 and TS16949 quality management systems, which enhance our organizational development and assure customers of our product and service quality.

Additionally, we strive to strengthen business-to-business relations by recruiting reliable suppliers and enhancing our procurement processes to be both efficient and appropriate.

## Day Grow Enterprise Co., Ltd.

<https://www.youtube.com/channel/UCtKd8qCHUBfRdr9usQupkwg>



Located in the Province of Chonburi in Thailand, the company is specialized in making tapioca pearl equipment, multi-layer separators and filters, pulverizer mills, and mixer conveyors, as well as providing whole plant design and consultancy.

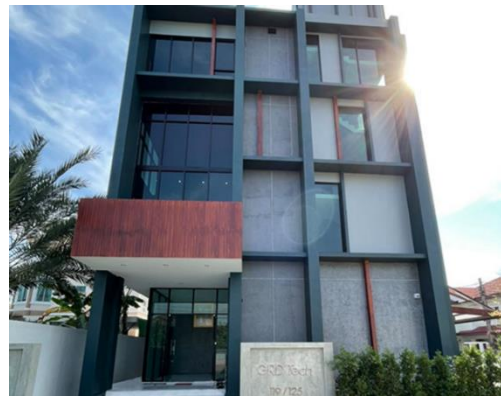
## GRD Tech Co., Ltd.

<https://www.grdtech-th.com/>



GRD TECH is a professional and specialty in the Chemistry and Process Engineering.

GRD TECH's seamless integration of chemistry expertise and engineering design enables clients to create innovative processes tailored to their specific needs. Our comprehensive understanding of novel chemistry, the intricacies of custom-engineered equipment, and the uniqueness of new processes is the cornerstone of GRD TECH's intelligent digital control systems. The company offers advanced engineering design software, tools, and machinery, including top-of-the-line Mazak CNC machines, to assist clients in developing cutting-edge equipment. All our resources are geared towards helping clients craft the perfect new solutions for their unique challenges.



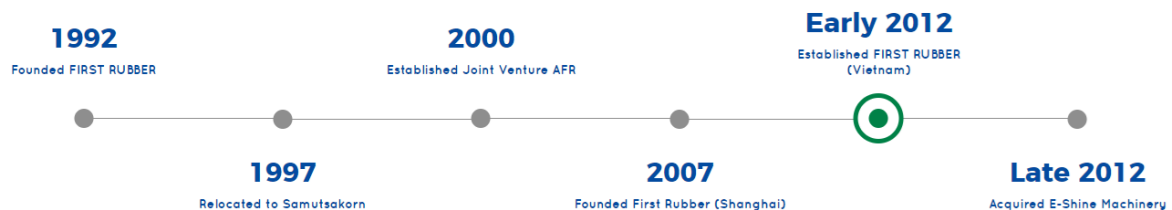


## First Rubber Co., Ltd.

<https://www.firstrubber.com/>



On September 1st, 1992, FIRST RUBBER was founded in a small, 140 square meter row house tucked in the outskirts of Bangkok by our President and Managing Director. With little capital, some production know-hows, and 6 employees, our founders embarked on an entrepreneurial journey in a foreign country. With decades of hard work and perseverance, FIRST RUBBER slowly earned trust and cooperation from many internationally recognized businesses. Through horizontal and vertical integration, FIRST RUBBER, today, has become an important multinational partner for the elastomer industry.





## HCP Pump (Thailand) Co., Ltd.

<https://www.hcppump.co.th/>



Established in 1979, HCP Pump Manufacturer Co., Ltd. is Taiwan's most successful submersible pump manufacturer. Throughout our journey, HCP has maintained a dedicated and enthusiastic team committed to advancing hydrodynamic technologies with reduced consumption. Our unwavering commitment to excellence extends to providing unparalleled customer service, aiming to achieve the highest satisfaction for domestic and international customers.

HCP pumps are widely used across various sectors, including dewatering, gardening, agriculture, aquaculture, construction, plant sewages, flood control stations, and mining. Wherever there is water, there is HCP PUMP. Embracing the vision of "make future flow," HCP is devoted to advancing pump technology for water resource development. Our inspiration is rooted in delivering efficient pump technology to our partners, ensuring sustainability in water recycling, and contributing to a brighter future for the environment.

## King Shing Automobile Parts, Co., Ltd.

[https://www.kingshing.com/index\\_tw.php](https://www.kingshing.com/index_tw.php)



### Products



KING SHING is a highly competitive company, and our guiding management philosophy centers on the pursuit of cutting-edge technology and the manufacture of top-quality products. We consistently leverage advanced technology and equipment to develop products that not only meet market demands but also ensure the utmost customer satisfaction. During our early years, our core focus was on the motor parts business. However, as time progressed, we diversified our offerings to encompass motor accessories in addition to parts. The 1980s brought a shift in industry trends, with a growing preference for front-wheel drive and horizontally positioned engines. In response, we made substantial investments to enhance our factory's machinery capabilities, allowing us to specialize in the production of fans for automotive radiators and air conditioning units. Our objective was clear - to establish KING SHING as a pioneering company in this field.

We are proud to hold the ISO 9001 certification for quality management, an accolade we have consistently maintained since the year 2000. Our commitment extends further as we endeavor to reach the IATF 16949 standards for excellence. Our motor designs adhere to the European Council Directive 89/336/EEC, as amended by Directives 92/31/EEC and 93/68/EEC, aligning with CE marketing requirements. Furthermore, our products comply with Directive 72/945/EEC, as last amended by Directive 95/54/EEC, ensuring they meet the rigorous e-mark approval standards.

## Laconic Technology Co., Ltd.

<https://www.laconi.co.th>



Laconic Technology Co., Ltd. was founded in 2004 by a team of engineers from the United States and Taiwan. We are a developer and provider of ERP software with a proven track record. Our “Enterprise ERP” product has been around for over 10 years, successfully supporting SMEs operating regionally and covering a wide range of specialized industry clusters. With our “ERP as a Service” (ERPaaS) product, we are expanding our customer base to SMEs in the trading, service, retail POS, and facility management sectors.

Since 2006, we have been granted the Thailand Board of Investment — BOI No.:1268(7)/2557 — privilege under Web-based, Application, and Cloud Computing, in line with the recently announced Thailand government push for Thailand 4.0, transforming traditional SMEs into smart enterprises and traditional services into high-value services.

Our ERP Financial functionalities are currently certified by the Thailand Revenue Department. We respond swiftly and reliably to customer demand. Across our entire customer base, our ERP is currently managing a total yearly revenue of THB 6 billion (around USD 190 million).



## Department of Tool & Materials Engineering at KMUTT

<https://tme.kmutt.ac.th/>



The Department of Tool and Materials Engineering is part of the Faculty of Engineering at King Mongkut's University of Technology Thonburi. It was officially established as a department by royal decree on June 30, 1997. The department is responsible for managing education, research and development, and providing academic services to society in the fields of metal forming technology, polymers, ceramics, glass, and composites.

The Department specializes in production technologies such as surface machining, cutting, heat treatment, coating, and the use of engineering materials to enhance product quality and reduce production costs.

The department began offering a bachelor's degree program in Tool and Materials Engineering in the 1993 academic year. Currently, the department offers three bachelor's degree programs in Tool Engineering, Materials Engineering, and Automotive Parts Manufacturing Engineering and one Master's and Doctoral program in Materials Forming Technology and Production Innovation.

## Excellent Center of Waste Utilization and Management (ECoWaste)

<http://w.pdti.kmutt.ac.th/th/index.php/content/view/88/34/>

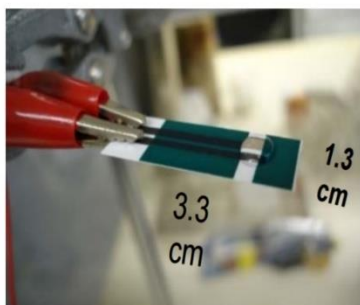


Excellent Center of Waste Utilization and Management (ECoWaste) is a collaborative research center between Pilot Plant Development and Training Institute (PDTI), King Mongkut's University of Technology Thonburi (KMUTT), School of Bioresources and Technology (SBT), KMUTT, and National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA). ECoWaste has particularly strong expertise in wastewater treatment for over 20 years, with an emphasis on high-rate anaerobic digestion system to develop technology and gain a deeper insight into the fundamental aspects of waste treatment systems. It has been initiated in the year 1980 by academic professors, researchers, and engineers who were interested and specialized in wastewater treatment. The center then emphasized in the anaerobic technology for the treatment of agro-industrial wastewaters, such as wastewater from cassava starch, rice starch, palm oil mill, food, and canned fruit industries.



## Sensor Technology Laboratory

<http://www.pdti.kmutt.ac.th/en/index.php/content/view/17/34/>



Advances in electrochemistry and sensor (biosensors and chemical sensors) research and development have come about due to the need to meet the indigenous demands of the food industry, for environmental analysis, and for biomedical applications. Research is carried out in three areas, for which there is a need to develop existing approaches for better performance of the sensors, improve analytical methods and explore possible new applications. The biosensors and chemical sensors technology group can be sub-divided into the following lines of study:

1. *Bio sensors*: Microbial BOD sensors, phenol enzyme biosensors, screen-printed glucose oxidase electrodes, and simultaneous determination of glucose and sucrose.
2. *Chemically modified electrodes*: Biocompatible redox polymer membrane, metal microparticles in polymer films, inorganic film modified electrodes, and nafion-coated probe in viscous/resistive media.
3. *Electroanalytical techniques*: Pulse amperometric detection, artificial neuron networks for interpreting voltammetric data, and stripping analysis.

The following are some current research projects in this group.

- Microbial BOD sensors
- Screen-printed electrodes for blood-glucose determination
- Screen-printed electrode for pesticide detection
- DNA-modified screen-printed electrode for Escherichia coli detection
- Development of solid polymer electrolyte of redox gases using interdigitated array microelectrodes

## Profiles of Taiwanese Host Universities for Outbound Students

---

### National Chung Cheng University (CCU)

<https://www.ccu.edu.tw/?Lang=en>

Address : No.168, Sec. 1, University Rd.,  
Minhsiung, Chiayi 621301, Taiwan (R.O.C.)  
Tel : 05-2720411 | E-mail : [secretar@ccu.edu.tw](mailto:secretar@ccu.edu.tw)



The University Emblem of National Chung Cheng University, designed by Professor Mao-sheng Su of National Normal University, was approved by the First Committee for Faculty Senate on October 18th, 1988. The design of the Emblem includes two parts: the two center characters of 'Chung Cheng' and the five pen-pointed tips which symbolize the five founding colleges of the university (College of Humanities, College of Sciences, College of Social Sciences, College of Engineering, and College of Management). It is the hope that CCU will reach her goal of providing higher education in the areas of humanities, social sciences, and science and technologies through the collaboration of the five colleges. The Emblem signifies the spirit of our perpetual striving for self-improvement.

The first public University founded after Taiwan's economic boom in the 1980's, National Chung Cheng University broke ground after the Executive Yuan passed the plan to build the university in 1986 in honor of the late president CHIANG Kai-Shek and to develop higher education in the Yun-lin, Chia-yi, and Tainan areas. It was officially founded on July 1, 1989 with Dr. LIN Ching-jiang being the first president of the University. During the early stage of the University, five colleges were set up: the College of Humanities, the College of Sciences, the College of Social Sciences, the College of Engineering, and the College of Management.

Dr. CHENG Kuo-Shung, who served a term of three years from October 21, 1996 to October 21, 1999, was the 2nd University President in CCU history. During his tenure, the College of Law and the College of Education were founded in 1998 and 1999, respectively. Altogether, the University currently consists of seven Colleges offering 29 Undergraduate Programs, 44 Master Programs, 29 Ph.D. Programs, 17 in-service Graduate Programs. The University has more than 960 faculty/staff members, and approximately 12,000 students.

As a research-oriented University, CCU aims to provide students with the advanced skills and profound knowledge in the fields of humanities, sciences, technology, law, and management. With the education of liberal arts and sciences,

CCU expects students learn to effectively deal with the complexity of challenges of the 21st century. Building on the foundation of the past 29 years, the current and 5th President, Dr. Zhang-Hua Fong, is leading the University to continue to strive for academic excellence, internationalization, and active interaction with the global community.

## Ming Chi University of Technology (MCUT)

<https://www.mcut.edu.tw/?Lang=en>

Address: 84 Gungjuan Rd., Taishan Dist.,  
New Taipei City 243303, Taiwan  
Tel: 886-2-2908-9899  
Fax: 886-2-2904-1914  
E-mail: [mcut@mail.mcut.edu.tw](mailto:mcut@mail.mcut.edu.tw)



### History and Features

During the 1960s, while both industrial and economic development were 'taking off' in Taiwan, there was a lack of mid-level industrial professionals. In response to the Taiwan's developmental needs, in December 1963 Mr. Y. C. Wang and Mr. Y. Z. Wang, founder of Formosa Plastics Group, donated funds for the establishment of the University.

Ming Chi University of Technology is located on the hillside of Kueizi Village in Taishan District, New Taipei City, and was originally named 'Ming Chi Institute of Technology.' The campus occupies 62 hectares with vast green areas and beautiful yet tranquil sceneries. More than 200 years ago, during the reign of Emperor Chienlong in the Ching Dynasty, a 'Gongsheng' (tributary scholar), Mr. Cho Yu Hu founded the 'Ming Chi Academy' in the vicinity of what is now the university. At that time, the academy was the intellectual center and culture hub of northern Taiwan. This university was named 'Ming Chi' with an aim to encourage the faculty and students to learn from their virtuous elders and to embrace heritage and vision as their own guiding principles.

Residential schooling' and 'part-time practical training' are two of MCUT's longstanding school traditions. To live on campus while studying helps students mold their characteristics and maintain a diligent attitude in daily life. With good reputation for education performance, the school was approved by the Ministry of Education to transform itself into "Ming Chi Institute of Technology" in 1999 and continued to establish relevant departments. In 2004, the institute was further renamed into "Ming Chi University of Technology". MCUT shall continue with our existing efforts and commitments in education, and, more importantly, focus the development of the university on the "Cooperation between the industry and the university". MCUT aims at elevating both the quality and quantity of our research through a close cooperation with the industries, in the meantime reciprocating its achievements to the industries. The ultimate purpose is to achieve a win-win situation through the simultaneous elevation of the educational effectiveness and the technological dynamics in industries. Moral education is a crucial educational strategy nowadays, and it is also MCUT's core value to see students gradually learn

the moral virtues of sincerity, integrity, mildness, manners, gratitude, thoughtfulness, industriousness and endurance along with the cultivation of leadership and a wholesome personality to serve mankind. As for working part-time outside the school, it is MCUT's objective to help students quickly accumulate practical abilities, gain real-life experiences, and learn the true meaning of diligence, perseverance, being down-to-earth, and searching to the root of things. Especially, MCUT's overseas practical training program that began in 2006 has become the pioneer among all universities and colleges in Taiwan.



## National Taipei University of Technology (NTUT)

<https://www-en.ntut.edu.tw/>

Address: 1, Sec 3, Zhongxiao E. Rd., Taipei  
10608 Taiwan

Tel: +886-2-2771-2171

Established in 1912, Taipei Tech is among one of the oldest universities in Taiwan. It was first established during the Japanese Colonial Period as the Auxiliary Industrial Institute of the Education Affairs Office of the Civil Administration Department. The Institute consisted of only three departments (Woodcraft, Metalwork and Electrical Engineering) ushered in an era of industrial education in Taiwan. In 1948 the school was renamed as Provincial Taipei Institute of Technology providing five-year associate degree programs. In 1997, the



school was promoted to University status, and was renamed as National Taipei University of Technology (Taipei Tech). And now Taipei Tech currently offers 19 undergraduate programs, 26 master programs and 17 Ph.D. programs within 6 colleges.

With the long-standing history and experience in education, Taipei Tech devotes to cultivating top technical professionals. Taipei Tech specializes in three fields: technology, design and management. In a recent teaching excellence evaluation by Taiwan's Ministry of Education, Taipei Tech was ranked first among all the other technological universities. It is also Number One Paradigm Technological University for its research and academic excellence. Taipei Tech alumni have contributed considerably to the economic development of Taiwan and have won wide praise from businesses of all industries. Taipei Tech graduates are the top favorite employees among Taiwan's top 1000 enterprises, as declared by Cheers magazine. Taipei Tech is also renowned as top World Green University. In UI Green Metrics University Rankings, Taipei Tech is ranked as the 1st Green University in Taiwan and the 6th in world in the city center category.

Taipei Tech campus is located at the apex of the Taipei Metro system. Not only can students enjoy a world-class education at Taipei Tech, but they also gain the opportunity to enjoy the rich traditional culture that Taipei offers. Attractions such as Taipei 101, the Palace Museum, and the Chiang Kai-shek Memorial Hall are in close proximity to Taipei Tech.

## Tamkang University (TKU)

<https://english.tku.edu.tw/>

Address: No. 151, Yingzhuan Rd,  
Tamsui District, New Taipei City,  
Taiwan  
Tel: +886 2 2621 5656



Founded in 1950 as the Tamkang Junior College of English by Mr. Ching-Sheng Chang and his son Dr. Clement C. P. Chang, TKU was Taiwan's first private college. It became the Tamkang College of Arts and Sciences

in 1958, before being elevated to Tamkang University in 1980. From its humble beginnings as one of the first schools of higher education in Taiwan, TKU now has four campuses: the Tamsui Campus, the Taipei Campus, the Lanyang Campus, and the Cyber Campus; comprised of 8 colleges, with total about 23,000 students, around 2,000 faculty and staff members, and around 300,000 alumni.

Tamkang is a university of ideals, vision, and creativity. It sees the pursuit of excellence and ongoing innovation as characterizing sustaining its fundamental management philosophy. Over 70 years, since its foundation, TKU has focused on developing academic research, teaching, and learning services with an innovative spirit. It was the first university in Taiwan to employ Total Quality Management (TQM), which it introduced in 1992. In 2006, the Tamkang Quality Award was initiated to recognize outstanding departments committed to TQM. It has generated impressive results and garnered positive public feedback. TQM efforts were significant in helping TKU win the prestigious National Quality Award in 2009.

Since its inception as a university, Tamkang has had six scholar-educators serving as president: Clement C. P. Chang, Yea-Hong Chen, Louis R. Chow, Yun-Shan Lin, Horng-Jinh Chang, Flora Chia-I Chang, and the current president, Huan-Chao Keh, who assumed the presidency on August 1st, 2018. President Huan-Chao Keh will lead TKU to continue developing and constructing the "Fifth Wave of Tamkang," enhance Tamkang Culture, refine and activate organization, strive for resources of industry, government and alumni and cooperate with the Ministry of Education's Higher Education Sprout Project, the government's "5+2" core industries and artificial intelligence industrial applications, as well as the New South-bound Policy. The new course of development of the "Fifth Wave of Tamkang" was launched "Transcend period," and taking the vision of the "Collaboratively Creation of a Great Tamsui; Embracing a Smart and Magnificent

Future" and implement local links, regional cooperation, international chains and innovation practice.

Tamkang's administrative teams have applied innovative strategies to promote the Three Circles and Five Disciplines of Education. The "Three Circles" refer to Tamkang's professional curriculum, general curriculum, and extracurricular curriculum, while the "Five Disciplines of Education" include conduct, intelligence, physical education, teamwork, and beauty. TKU has nurtured academic growth through its "Triple Objectives of Education," which refers to globalization (the spatial pattern of the future), information-oriented education (the life pattern of the future), and future-oriented education (the time frame of the future). With its motto of "Simplicity, Truthfulness, Firmness, and Perseverance," Tamkang strives to fully develop students' potential. It aims to help every Tamkangian establish a firm foothold at school and seeks to become a world-renowned, top quality comprehensive university by providing students with the most modern learning resources and training possible.

## Yuan Ze University (YZU)

[https://www.yzu.edu.tw/index\\_en.html](https://www.yzu.edu.tw/index_en.html)

Address: No. 135, Yuandong Rd.,  
Zhongli Dist., Taoyuan City 320315,  
Taiwan (R.O.C.)  
Tel: +886-3-463-8800

Established in 1989, Yuan Ze University may be young by traditional standards, yet it has been recognized as a model for newly emerging universities within the shortest period. As the first and the only university to win the



National Quality Award in 2003, Yuan Ze received an award from the Ministry of Education for the Teaching Excellence Project in 2005. Successively, it has been designated by the MOE as one of the top 12 universities in Taiwan, receiving an award for the "Aim for the Top University and Elite Research Center Development Project" since 2005. Granted with the highest honor in teaching, research and administration, Yuan Ze has become a marvel of higher education, in Taiwan.

Currently Yuan Ze has five colleges including the Colleges of Engineering, Informatics, Management, Humanities and Social Sciences, and Electrical and Communications Engineering. There are over 9,000 students with a 2:1 ratio between undergraduate and graduate students on campus. Aimed at housing key research centers in Taiwan, our Fuel Cell Center and Communications Research Centers have integrated all resources and recruited talents in all engineering-related departments at Yuan Ze through support from the Top Universities Project. With the success of these two centers, Yuan Ze also places heavy focus on the promotion of overall teaching and research capacity. The College of Management has established the first EMBA program in Taiwan and all the courses in the Graduate School of Management are conducted in English to further connect our students to the international marketplace. The College of Informatics is the first college in Taiwan to adopt information as the core for its teaching and research. It emphasizes on practical experience with the integration between technology and social studies. The College of Humanities and Social Sciences is working closely with our College of General Studies to promote teaching and research in humanities, general education, and ethics.

Giving top priority to students in the areas of teaching and counseling, Yuan Ze emphasizes education in both creativity and ethics. Moreover, we are active in the nation's pioneering "Classics 50 Reading Project," "YeSir Mentorship Program" and

promote all types of activities that will enrich students' extracurricular studies. Founded by the Far Eastern Group, we have established close relationships with all of its subsidiaries to form an industrial and academia alliance. The internship plan for both domestic and international students can be fully realized through such a network. Based on the unique niche Yuan Ze has created, we provide added value to students and faculty members and expect ourselves to be the benchmark university in industry-academia collaboration.

The main theme of the University's development strategy emphasizes differentiation and internationalization. Through differentiation in curriculum design and research, we will create our distinguishing characteristics and brand, while in recruiting outstanding foreign faculty and potential international students with provision of favorable packages and scholarships/fellowships. The International Language and Culture Center offers Mandarin and cultural programs for international students; hosts various cultural activities; and promotes cultural exchange on campus.

As the youngest and most energetic university of Taiwan's Top universities, we will continue to fully utilize our competitive advantages of "innovation," "quality," and "flexibility." We provide a challenging environment for students to enjoy learning, develop their potentials and surpass themselves; for faculty to devote themselves to inspiring and mentoring their students and the pursuit of truth and academic excellence; and for staff to promote the quality of service and fulfill personal growth.





## Contact

### **International Affairs Office (IA)**

The 2nd floor, Office of the President Building (N2)  
126 Pracha Uthit Rd., Bang Mod, Thung Khru,  
Bangkok 10140, Thailand

E-mail [orginter@kmutt.ac.th](mailto:orginter@kmutt.ac.th)

Tel 0 2470 8342

[www.kmutt.ac.th](http://www.kmutt.ac.th)

