

Essay

Overview and Expectations of Student Exchange Programs through International Internship



*Prasit Prapinmongkolkarn,
Professor Emeritus, Dr.,
Chulalongkorn University,
Chairman, The National Broadcasting and
Telecommunications Commission, Thailand,
Ex.Representative, IEICE Bangkok Section*

It is my great honor to be invited by IEICE for a short article on international cooperation through student exchange and internship. Within this context, I would like to share my knowledge and experiences with you, which I have gained while I was working as a Professor of the Department of Electrical Engineering, Chulalongkorn University (CU) (1976-2004), as a Commissioner of the National Telecommunications Commission (NTC) (2004-2008) and as Chairman of NTC (2008-2011).

Let me begin by introducing CU at first. It is the first academic institution for higher education in Thailand which was officially founded on March 26, 1917. Over the years, it has evolved to become an internationally recognized university with eighteen faculties, eleven research institutes, three teaching institutes and three other affiliated institutes.

In 1935, CU established three separate departments in the Faculty of Engineering (FOE), to foster the growth and advance of various disciplines in the field of engineering. Today, CU has 12 Departments offering Bachelor, Master and PhD degrees. The number of Faculty staff is 314 and the ratio of students to the Faculty staff is around 10:1 in reference to the number of students listed in Table 1.

Table 1 Current scale of Faculty of Engineering in Chulalongkorn University (the number of enrolled students in 2010)

Grade	Number	Rate
Undergraduate	Male	2,472
	Female	777
	Total	3,249
M.Eng.	1,112	85%
PhD	191	15%

Following the trend of globalization, students find themselves in need of a good command of English for studying and working abroad. In order to fulfill their expectations, the International School of Engineering (ISE) was established to cover 4 special programs, namely Automotive Design and Manufacturing Engineering (ADME), Aerospace Engineering (AERO), Information and Communication Engineering (ICE) and Nano Engineering (NANO) for the time being.

ISE also provides the internship program to CU students studying at various overseas universities and industries as shown in Table 2. On the other hand, the number of internship students studying in ISE in academic year 2010 is summarized in Table 3. Department of Electrical Engineering has established various Research Laboratories since 1950 as shown in Fig.1. These Laboratories accommodate international internship students. The

internship program is a compulsory course work with credits during the three

Table 2 Overseas Internship Program for international students dispatched from Chulalongkorn University in 2010

Recipient	University, Institution	Industry	Number of Students
USA	6	0	17
Canada	2	0	3
Japan	3	2	10
China	0	1	1
Hong Kong	0	1	1
Taiwan	1	0	1
Korea	1	0	2
Singapore	1	0	1
Sweden	1	0	2
Denmark	0	1	2
Germany	1	3	6
France	1	0	1
UK	3	0	10
Australia	0	1	1
Total	20	9	58

Table 3 Overseas Internship Program for international students dispatched from Chulalongkorn University in 2010

Program	Local	Overseas	Total
AERO	35	4	39
ADME	54	10	64
ICE	80	6	86
NANO	34	37	71
Total	203	57	260

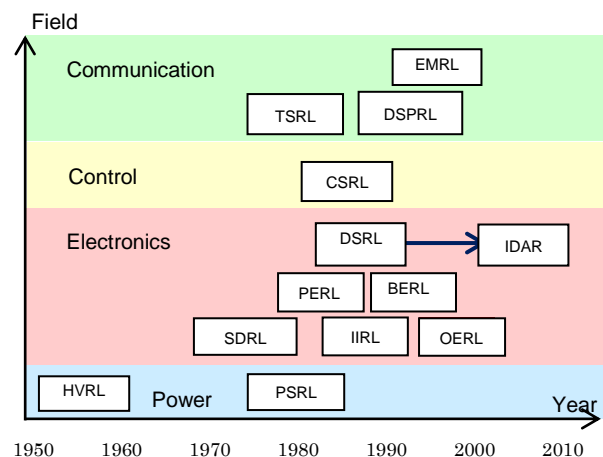


Fig.1 Evolution of research laboratories based on the future perspectives of Electrical Engineering field

- HVRL High Voltage Research Laboratories (RL)
- SDRL Semiconductor Device RL
- PSRL Power System RL
- TSRL Telecommunications Systems RL
- PERL Power Electronics RL
- CSRL Control Systems RL
- IDAR Integrated Circuit Design Application Research
- IIRL Industrial Instrumentation RL
- BERL Bioelectronics RL
- DSPRL Digital Signal Processing RL
- EMRL Electro-Magnetic RL
- OERL Optoelectronics RL

month summer vacation, authorized in the normal curriculum. Both local and overseas industries such as NEC, NTT etc. generously have accepted CU students.

On the other hand, the new National Broadcasting and Telecommunications Commission (NBTC) which merged NTC with National Broadcasting Commission (NBC) was established with 11 commissioners approved by House of Representatives in November 2011, grants more than 30 scholarships to both undergraduate and graduate students to study overseas at many prestigious universities around the world. Before that, NTC has granted various internships for students from both local and overseas universities, for years so far. Meanwhile, NTC also has engaged in exchange programs of officers between NTC and the other regulators in Asian region such as ASEAN Telecommunication Regulators' Council (ATRC). Furthermore, NTC also has organized the first Global Symposium for Regulators (GSR) in ASEAN to promote regional collaborations, in August/September 2000.

Your positive opinions are welcome. I hope this article will come across to you for your international collaborations.

Note for Prof. Prasit's Contribution

TFIPP, Kenzo Takahashi

Prof. Prasit received his PhD deg. from Osaka University in 1976 and served CU as Professor/FOE, Dir./Chula Unisearch (1989-1995) and DG/Intellectual Property Inst. (1996-2004). He concurrently served Communications Authority of Thailand as Board Director (1992-1993), APEC as Member of Tel WG (1998-1999). He is known as a world level leader in ICT education and research activities. He also has taken initiatives of telecommunications standardization as Chairman of National Telecommunication Commission (NTC) Thailand so far. His suggestions of international internship well matches the world trend of cooperative education between universities and industries, it will exactly encourage younger generation.

Hot Topics

Call for Papers The 18th Asia-Pacific Conference on Communications (APCC2012)

IEICE Communications Society

Summary

The 18th Asia-Pacific Conference on Communications (APCC 2012) will be held at Ramada Plaza Jeju Hotel in Jeju island, Korea, during October 15-17, 2012. APCC has been a technical forum for researchers and engineers to interact and disseminate information on the latest developments in advanced communication and information technologies so far since 1993. The Conference is organized by Korea Information and Communications Society (KICS) and technically co-sponsored by IEICE Communications Society, China Institute of Communications (CIC). See the details of the conference at <http://apcc2012.org/main/>.

Prospective authors are invited to submit original technical papers for presentation at the conference and publication in the conference proceedings. Potential topics are solicited in, but not limited to the following topics:

- Ad hoc and sensor networks
- Antennas and propagations
- Broadband wireless access
- Cognitive radio and networks
- Communication protocol and architecture
- Communication theory
- Cooperative communication and relaying
- Future Internet and networks
- Green communication systems and network
- Information theory and channel coding
- Mobility management

- Multimedia communications
- Multiple antenna techniques
- Network and information security
- Network applications and services
- Optical networks and systems
- QoS and resource management
- Satellite and space communications
- Signal processing for communications
- Switching and routing
- Wireless and mobile networks
- Wireless communications

Guidelines for Paper Submission

<Submission process> EDAS based. See the procedure at <http://edas.info/N12021>.

<Maximum paper length> Six pages including figures, tables, references and appendices, using the IEEE conference proceedings templates available at <http://www.ieee.org/web/publications/pubservices/confpub/AuthorTools/conferenceTemplates.html>.

<Citation> Accepted papers will be published in the APCC 2012 Conference Proceedings and simultaneously in IEEE Xplore, for which at least one author is required to register for the conference at the full rate.

Important Dates

Paper submission deadline	May 1, 2012
Notification of acceptance	June 30, 2012
Camera ready submission	July 31, 2012
Tutorial proposals	June 30, 2012

Contact Address

Please do not hesitate to contact the TPC Secretariat at secretariat@apcc2012.org or Dr. Takashi Shimizu, IEICE Communications Society at t-shimizu@m.ieice.org whenever you have any question of APCC2012.

2012 IEICE General Conference Provides Two English Sessions

IEICE TFIPP

2012 IEICE General Conference will be held at Okayama University, Okayama, Japan, on March 20-23 in 2012. It will provide the following complete English Sessions:

TK-1: Prof. Kukjin Chun, Seoul National University, President of The Institute of Electronics Engineers of Korea (IEEK) will give a memorial Keynote Speech on March 21.

TK-6: Representatives of 10 IEICE Overseas Sections will give speeches on the development trend of updated ICT and relevant research activities in each region on March 22, as a part of Special Sessions planned by the Conference Committee.

BS-3: English Session "Management and Control Technologies for Innovative Networks" planned by IEICE Communications Society will cover the most updated issues of network, wireless, service, management and control technologies, during the 4 days.

Upcoming International Conferences

WTC2012- IEICE Communications Soc., in Miyazaki, Japan, on March 5-6, 2012, <http://www.ieice.org/~wtc2012/>

APMP2012- IEICE Electronics Soc., in Kyoto, Japan, on April 25-27, 2012, http://www.apmp2012.org/Asia-Pacific_Microwave_Photonics_Conference_2012/Home.html

VTC2012- IEICE Communications Soc. & Engineering Sciences Soc., at Pacifico Yokohama in Yokohama, Japan, on May 6-9, 2012, <http://www.vtc2012spring.org/>

STF2012- IEICE Communications Soc., at Sarajevo, Bosnia and Herzegovina, on May 24-25, 2012, <http://www.iwwtf.com/>

ISAP2012- IEICE Communications Soc., in Nagoya, Japan, on October 29-November 2, 2012, <http://www.isap12.org/>

Message from TFIPP Secretariat

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