November 22, 2010
Ha Noi University of Science and Technology

Graduate Programs in Electrical Engineering at Chulalongkorn University

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Postgraduate Study Coordinator &
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Department of Electrical Engineering, Faculty of Engineering
Chulalongkorn University, Bangkok, THAILAND.

Outline

• Introduction of EECU
• Graduate Program in EE
• AUN/SEED-Net Supporting Programs & Scholarships

Faculty of Engineering

established in 1913, first engineering institution in Thailand.

Chulalongkorn University established in 1916.

Department of Electrical Engineering created in 1929.

In 1933, Professor Dr. Charles M. Son. Gewertz, a Swedish graduate of MIT, the first Head of EE Department with a mandate to start a Bachelor's degree program in electrical engineering.

Professor Dr. Charles M. Son Gewertz
EE Faculty: 55 Members

- Academic Position
  - Prof.: 2 (4%)
  - Assoc. Prof.: 17 (35%)
  - Instructor: 48

- Degree Holders
  - Master's: 17 (31%)
  - Doctoral: 48

Current Students

- Undergraduate: 362 (66.2%)
- Master's: 121 (22.1%)
- Doctoral: 40 (7.3%)
- Int'l postgrad: 24 (4.4%)
- Total: 547 (100%)

Current Int'l Students at CU

<table>
<thead>
<tr>
<th>Master's</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>EEE</td>
</tr>
<tr>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>CE</td>
<td>EEE</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

Total: 33 students

Int'l Graduates from CU

<table>
<thead>
<tr>
<th>Master's</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>EEE</td>
</tr>
<tr>
<td>36</td>
<td>9</td>
</tr>
<tr>
<td>EEE</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>6</td>
</tr>
</tbody>
</table>

Total: 94 graduates
The department of Electrical Engineering consists of four divisions.

- Power
- Control Systems
- Electronics
- Communication

Strategic Research Areas & Departmental Laboratories

Research Facilities

Strategic Partners
CU-EE Curriculum (2010)

**B.ENG**
- FREE ELEC (6)
- 4xx, 5xx, 6xx, 7xx, 8xx + non-EE (E-12)
- EE & DIVISION CORE (50)
- ENG CORE (44+6)
- GEN ED: LANGUAGE (6+6)

**M.ENG**
- 790
- 792 794
- 791
- 795 791
- EEE Sem 791 795 792 794
- SRA Approve (9)
- PUBICATION

**Ph.D.**
- 793 794
- 8xx
- QAULIFY EXAM 897
- PhD THESIS I (28 (48)
- EE Sem 791 795 792 794
- ENG CORE (44+6)
- GEN ED: LANGUAGE (6+6)
- GROUP 1: BREADTH (18-4)
- ELECT (0-24)
- INT. JOURNAL PUBLICATION

Admission Requirements

**Programs**
- Master's
- Ph.D.
- Plan A
- Plan B
- Plan C

<table>
<thead>
<tr>
<th>Course work</th>
<th>Thesis / Dissertation</th>
<th>Seminars</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td>24</td>
<td>48</td>
<td>8</td>
</tr>
</tbody>
</table>

- TOEFL/CU-TEP: >= 450 (PhD), >= 400 (Master)
- TOEFL/CU-TEP: >= 450 (PhD), >= 400 (Master)
- Ph.D. Plan A for Master Graduate with GPA > 3.50
- Ph.D. Plan B for Master Graduate with GPA > 3.50
- Ph.D. Plan C for Bachelor's Degree Graduate

Graduation Criteria for Master Program

- Complete course work with GPA > 3.00
- Pass oral presentation for thesis proposal
- Pass oral thesis defense examination
- Have a conference proceeding or journal publication
- Retire if GPA < 2.50
- Academic probation if GPA < 3.00 (Must be equal to or greater than 3.00 within 3 semesters)

Graduation Criteria for Ph.D.

- Complete course work with GPA > 3.00 (for plans B and C)
- Pass qualifying examination
- Pass oral presentation for dissertation proposal
- Pass oral dissertation defense examination
- Publish an international journal article
AUN/SEED-Net Programs

Scholarships:
- Master's Degree Program
- Doctoral Degree Sandwich Program
- Doctoral Degree Program in Japan
- Doctoral Degree Program in Singapore (Direct PhD)

Research support:
- Collaborative Research (CR) Program

Academic networking:
- AUN/SEED-Net Regional Conference/Workshop

After-graduation support:
- AUN/SEED-Net Alumni Network

Field of Study | Host University
--- | ---
1. Chemical Engineering (ChE) | De La Salle University, Philippines
2. Environmental Engineering (EnvE) | University of Philippines – Dilliman, Philippines
3. Manufacturing Engineering (ManUE) | University of Malaya, Malaysia
4. Material Engineering (MatE) | Universiti Sains Malaysia, Malaysia
5. Civil Engineering (CE) | Chulalongkorn University, Thailand
6. Electrical & Electronic Engineering (EEE) | Chulalongkorn University, Thailand
7. Information & Communication Technology (ICT) | King Mongkut’s Institute of Technology Lad Krabang, Thailand
8. Geological Engineering (GeoE) | Gadjah Mada University, Indonesia
9. Mechanical & Aeronautical Engineering (ME/AE) | Institut Teknologi Bandung, Indonesia

2-year Master's Program

- Study research-based Master’s program at any Host Institution according to your field of study
- Receive co-supervision of a Japanese professor from recognized Japanese university
- Financial support to conduct research and attend regional/international conference in ASEAN or Japan
- Eligible to join AUN/SEED-Net Regional Conference/Workshop

3-year Doctoral Degree Sandwich program

- Mainly study at any relevant Host Institution in ASEAN according to your field of study and eligible to spend up to 6 months in Japan to do research.
- Receive co-supervision of a Japanese professor from recognized Japanese university
- Financial support to conduct research and attend regional/international conference in ASEAN or Japan
- Eligible to join AUN/SEED-Net Regional Conference/Workshop
Scholarship Supports*

- Living Allowance
- Book allowance
- Orientation Fee
- Registration Fee
- Tuition/Research Fee
- Student Affairs
- Visa fee
- Life & Health Insurance
- Other expenses required by university

Master’s Degree Program

- Scholarship quota: 5/field
- Duration of scholarship: 2 years
- Announcement: 10 Nov
- Application deadline: 31 Jan

An applicant can send a maximum of 2 HI applications.

PhD Sandwich Program

Scholarships quota: 3/field
Duration of scholarship: 3 years
(≥28 months at HI plus ≤8 months in JPN)

An applicant can send a maximum of 2 HI applications.

<table>
<thead>
<tr>
<th>Batch</th>
<th>Announcement</th>
<th>Application deadline</th>
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</thead>
<tbody>
<tr>
<td>1st</td>
<td>10 Nov</td>
<td>31 Jan</td>
</tr>
<tr>
<td>2nd</td>
<td>10 May</td>
<td>30 Jun</td>
</tr>
</tbody>
</table>

Short-Term Visit Program in ASEAN

- Supports faculty staff at MI to visit other MI
- Priority given to faculty staff from CLMV countries or AUN/SEED-Net graduates who are working at home institution
- Target number = 30
- Visiting period from 7-30 days
- Visiting period from 7-30 days

24
AUN/SEED-Net Regional Conference/Workshop (RC/RW)

• 14 AUN/SEED-Net Conference/Workshop every year

• A great channel for academicians and experts to disseminate and/or exchange their knowledge or research works in respective engineering field.

• Conference themes focus on the nine fundamental fields and interdisciplinary areas (common issues)

• While pursuing the degree, AUN/SEED-Net scholars are encouraged to join the RC/RW on their respective field of study where they can present research progress

Regional Conference in EEE Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>Date / Place</th>
<th>Name of Conference</th>
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</thead>
<tbody>
<tr>
<td>2009</td>
<td>28-29 September 2009 Hua Hin, Thailand</td>
<td>ASEAN Symposium on Power and Energy System (ASPES) 2009</td>
</tr>
<tr>
<td>2010</td>
<td>8-9 September 2010 Manila, Philippines</td>
<td>International Conference on System On Chips Design Challenge (ICoSoC) 2010</td>
</tr>
<tr>
<td>2011</td>
<td>January 2012 (BKK/Ho Chi Minh)</td>
<td>2012 ASEAN Symposium on Automatic Control (ASAC 2012)</td>
</tr>
<tr>
<td>2012</td>
<td>Bangkok, Thailand</td>
<td>Regional Conference : Advanced Information and Systems</td>
</tr>
</tbody>
</table>

Scholarships (for 1st semester June 2011)

• AUN/Seed-Net Graduate Scholarship Program
  - (deadline February 15, 2011)
  - 5 Master’s scholarship
  - 3 Ph.D. Sandwich Program scholarship

• PTT Thailand
  - (deadline February 15, 2011)
  - 1 Ph.D. scholarship

• Chulalongkorn University Scholarship for Neighbouring Countries
  - (deadline extended to January 2011)
  - 5 Master’s Scholarship for Applicants from Cambodia, Myanmar, Lao, and Vietnam
For further inquiries

Assistant Professor Dr. Supavadee Aramvit
Associate Head for Information and International Affairs
E-mail: Supavadee.A@chula.ac.th

AUN/SEED-Net  www.seed-net.org
FoE CU  www.eng.chula.ac.th
EE CU  www.ee.eng.chula.ac.th
ISE  www.ise.eng.chualac.th

Room 412, Building C9, HUST
14.00 – 15.00 Tuesday 23 Nov 2010

Next Generation Network Roadmap in Thailand & Overview of Chulalongkorn University’s Network Research Group

Presented by
Dr. Chaodit Aswakul
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