

**ASEAN University Network
Southeast Asia Engineering Education Development Network**

AUN/SEED-Net

**Implementation Guidelines
for
Doctoral Degree Sandwich Program**

For the Japanese Fiscal Year 2012

AUN/SEED-Net Project

As of November 15, 2011

1. Introduction

The AUN/SEED-Net Project with support from Japan International Cooperation Agency (JICA) has been established to help development of “high quality” human resources in engineering fields in each ASEAN country which will lead to the self-reliance and sustainable industrial development for the Region. In order to reach this goal, AUN/SEED-Net provides scholarships for highly qualified applicants from Member Institutions to pursue ***doctoral degrees with international standard*** in the following nine fields at respective Host Institutions as follows:

- Chemical Engineering at De La Salle University (DLSU)
- Civil Engineering at Chulalongkorn University (CU)
- Electrical and Electronics Engineering at Chulalongkorn University (CU)
- Environmental Engineering at University of Philippines-Diliman (UP)
- Geological Engineering at Gadjah Mada University (UGM)
- Information and Communication Technology at King Mongkut’s Institute of Technology, Ladkrabang (KMITL)
- Manufacturing Engineering at University of Malaya (UM)
- Materials Engineering at Universiti Sains Malaysia (USM)
- Mechanical and Aeronautical Engineering at Institute of Technology Bandung (ITB).

In order for AUN/SEED-Net students to produce ***doctoral dissertations with international standard***, a part of their thesis research is expected to be published in an international refereed journal, with the completion of the doctoral degree study within three years. The AUN/SEED-Net Project thus employs a joint thesis research supervision scheme under the “Sandwich Program” as follows.

First, well-qualified advisors of the Host Institutions, who convey research activities and have good research publication record in international refereed journal(s), are assigned to students along with co-advisors of high calibre from Japanese Supporting Universities headed by Field Coordinating University (as shown in Attachment 1).

Second, students are assigned a research topic chosen from a collection of interrelated and progressively conducted thesis research topics, termed as research themes (or research umbrellas) of Collaborative Research Program. Students would receive thesis research supervision support at a Japanese Supporting University under the supervision of a Japanese co-advisor under **Short-Term Study in Japan Program**.

During the three years of scholarships, students are eligible to make Short-Term Study in Japan once or twice for a total duration of eight (8) months maximum on condition that one of the two times must be less than one month. The number of study and duration of each time will be specified upon commencement of their doctoral study based on the consultation between their advisors and Japanese co-advisors.

Besides, according to **AUN/SEED-Net Students’ Mobility scheme** which is promoted to enable students to benefit educationally and culturally from the experience of learning at other Member Institution(s), Ph.D. Sandwich students may be supported to take a course or conduct research at other Member Institution(s) for a short period. Students are advised to consult with their advisors and Host Institution on the necessity, possibility and procedures of their mobility.

2. Objectives

- (1) To increase the number of high quality doctoral degree holders in engineering at Member Institutions which would be necessary to contribute to a sustainable industrial development of ASEAN countries.
- (2) To strengthen doctoral degree programs at Host Institutions so that the production of high quality doctoral degree holders in engineering needed for the region is materialized within the region in collaboration with Member Institutions and Japanese Supporting Universities.
- (3) To strengthen human networking among teaching staff of Member Institutions and Japanese Supporting Universities.
- (4) To have a part of the doctoral dissertation of AUN/SEED-Net's sandwich students published in international refereed journals.

3. Eligibility of Applicants

- (a) Applicants must hold a master's degree in a relevant engineering field, or to be awarded the master's degree before starting the doctoral degree program.
- (b) Applicants should be ranked within top 10% of the class, or have the grade point average of 3.0 or higher from the grade point system of 4.0 in their undergraduate study.
- (c) Applicants must be young faculty staff of Member Institutions, or graduating students/ graduates of Master's Degree Program of the AUN/SEED-Net Project, or graduating students/ graduates of Member Institutions, who are strongly motivated to pursue a professional career as faculty staff at Member Institutions.
- (d) Applicants should be under the age of 35 at the time of application and capable of carrying out independent research.
- (e) Applicants who have already received another equivalent major award, scholarship or a salary to undertake a proposed course are not eligible for scholarships.

4. Selection of Host Institution(s)

- (a) Each Host Institutions is assigned to host one or two Engineering fields. Applicants must choose to apply to the Host Institution(s) that offer(s) their proposed field of study. (Please see list of Host Institutions and their host fields in Attachment 1, and visit our website at http://www.seed-net.org/application_form.html for application forms.)
- (b) Each Host Institution has drawn up research umbrellas or themes under Collaborative Research Program. It is advised that all applicants should be well aware of research areas that each Host Institution can offer to AUN/SEED-Net students before selecting Host Institution(s), by carefully studying Collaborative Research umbrellas and choose their tentative thesis research topics accordingly.
(For details on Collaborative Research umbrellas of each field, please visit our website at http://www.seed-net.org/research_umbrella.php.)
- (c) In addition, possible research areas of study will also be expanded to cover five interdisciplinary areas, namely Biotechnology, Disaster Mitigation, Global Environment, Natural Resources/Materials, and New/Renewable Energy. In case an applicant proposes a research topic under these research areas, one is still expected to choose one of the Host Institutions, depending on the focus of the research topic (e.g., if the topic is Mechanical Engineering related renewable energy, applicants should choose ITB, if the topic is

Manufacturing Engineering related Disaster Mitigation, applicants should choose UM. If the topic is Electrical and Electronic Engineering related biotechnology, then the applicants should choose CU)

Applicants are encouraged to apply to only one Host Institution. However, if applicants wish to apply to 2 Host Institutions, priority should be taken seriously. AUN/SEED-Net will proceed only one Host institution at one time.

- (d) Applicants cannot apply to any institution within their own country.
- (e) Applicants should be aware that some Host Institutions strictly require their applicants to obtain a TOEFL and/or GRE score as an admission requirement. (Please contact each Host Institution for more details.)

5. Target Number of Scholarships

Twenty-seven (27) scholarships for the Japanese Fiscal Year 2012 will be supported (approximately three (3) scholarships anticipated for each host field at Host Institutions in Indonesia, Malaysia, the Philippines, and Thailand

6. Coverage of Scholarships

The scholarships cover tuition fees, living expenses, health insurance, visa fee and airport tax, and a round-trip air ticket, in accordance with the AUN/SEED-Net Project regulations, both at the Host country and during the study in Japan. There may be partial support(s) from concerned Host and Sending Institution.

7. Commencement and Duration of Scholarships

The commencement of scholarship should be within the Japanese Fiscal Year 2012; that is, awarded students should commence their study within April 2012 – March 2013.

The duration of the scholarship is strictly three years, counting from the day of arrival at a Host Institution. Students who need more than three years to acquire a degree will be expected to self-finance during period of extension.

Note: The AUN/SEED-Net Project, in consultation with the Host Institution, will terminate the award of any student who fails to maintain satisfactory progress at the Host Institution.

8. Application and Screening Procedure

It is advisable for applicants to study and follow the application procedure below. (Please see Attachment 2 for a flow chart of the procedure.)

- (1) Applicants submit one set of AUN/SEED-Net's Application Form (for scholarship) and two sets of Host Institution's Application Form (for university admission), along with other required documents to the contact person at Member Institutions (as Sending Institutions) to which the applicants belong. The list of names of contact persons at Member Institutions (or Sending Institutions) is given in Attachment 3.
- (2) The contact person of each Sending Institution sends a collection of Application Forms to AUN/SEED-Net, with an endorsement letter from the Dean or designated person endorsing

the applications. Please note that sending application directly to AUN/SEED-Net without an endorsement letter will not be accepted. (Sending Institutions may submit the collection of application forms more than once within the deadline.)

(In case of applicants studying overseas, Application Forms as well as other required documents can be submitted directly to the AUN/SEED-Net, provided that the applicants request the contact person of their respective Sending Institution to submit an endorsement letter to AUN/SEED-Net.)

- (3) AUN/SEED-Net will check all required documents and request missing documents from applicants through Sending Institution, if necessary.
- (4) AUN/SEED-Net conducts preliminary screening of applicants' eligibility. Then, the collection of eligible Applications for the admission is forwarded to respective Host Institutions for admission screening. (Please note that only the application of the 1st-priority Host Institution will be forwarded. The application of the 2nd-priority Host Institution will be forwarded only if/when the application of the 1st priority is rejected, and if the time and quota still allow to do so.)
- (5) Host Institutions screen applicants for admission and **identify potential advisor(s) and a Japanese co-advisor (Professors or Assoc. Professor)**, as well as a theme of Collaborative Research, for each admitted student in close consultation with Japanese Supporting University, then informs the result to AUN/SEED-Net, together with written consent from Japanese co-advisors.
- (6) AUN/SEED-Net informs the result to respective Sending Institutions.

Note: At the time of admission and scholarship screening, Host Institutions and AUN/SEED-Net may contact Sending Institutions and/or applicants for missing documents or further information.

- (7) Sending Institutions inform their successful applicants to confirm their acceptance of scholarships via Reply Form and submit missing documents, if any, to AUN/SEED-Net. Contractual matters between Host Institutions and AUN/SEED-Net begins.

9. Submission Deadline of the Application Form

Applications for the Doctoral Degree Sandwich Program should be submitted, in printed forms, to the AUN/SEED-Net Project by **January 31, 2012.**

10. Scholarship Allocation

The scholarships, in principle, should be distributed across fields and across Sending Institutions.

Application to be submitted to:

AUN/SEED-Net Project
(Doctoral Degree Sandwich Program)
Faculty of Engineering Building 2, Room 109-110
Chulalongkorn University
Bangkok 10330, THAILAND