

## Summary of Self-Analysis Report

Co-operational Graduate Education Program for the Development of Global Human  
Resources in Energy and Environmental Science and Technology

**Kyushu University**

### 1. Participating universities and academic departments in the project

Japanese University	Kyushu University (KU)
Chinese University	Shanghai Jiao Tong University (SJTU)
Korean University	Pusan National University (PNU)

### 2. Outline and progress of the project

#### 1) Project outline

Science and technology related with interlocking energy and environmental issues, Energy and Environmental Science and Technology (EEST), is the discipline that is indispensable to realize a low energy-consumption society in an environmentally adaptive way.

The purpose of the here-proposed project under the collaboration among Pusan National University, Shanghai Jiao Tong University and Kyushu University, is to develop a quality-assured graduate educational system for nurturing next-generation talents who have (i) highly specialized expertise and research development skill based on the expertise, (ii) understanding of current energy and environmental issues and progressive investigation skill, (iii) globally-competent English language skill, (iv) professional ethics required for researchers and engineers in the globalized era as well as understanding of different cultures/races/societies.

The proposed cooperative education program of Master course, in which official language is English, consists of specialized education curriculum, EEST curriculum, and research for Master's thesis, for all of which joint credit/degree conferral system with quality assurance are developed and introduced. Based on students' achievements, a certificate of the completion of the EEST program is jointly issued and a double degree is conferred.

Considering legal system and curriculum/diploma policy of each university, the consortium will establish and propose the demonstrative educational system with openness, progressiveness and

universality in the science and engineering field.

## 2) Progress of the project (until the end of March 2013)

①2012, March Kick-off meeting was held as a formal startup with signing ceremony for the Memorandum of Understanding (MOU) among three universities on KU-PNU-SJTU Consortium under CAMPUS Asia program. Kyushu University held Spring Seminar after the signing ceremony, inviting 20 students and 14 faculty members from two partner universities on March 12-13, 2012.

②2012, March Local and International PDCA committees were established to consult implementation, operation and management of CAMPU-Asia EEST program and the 1<sup>st</sup> International PDCA meeting was held to discuss how to realize the program and the program title and logo were adopted among three universities as [Energy-Environmental Science and Technology, Advanced School of International Alliance, abbreviation: **EEST ASIA**]. Domestic PDCA committee meeting was held regularly through a whole year and International one was held a few times a year including online or TV conference to discuss and solve the issues.

③2012, April CAMPUS-Asia office in KU has officially opened with three teaching staff and three supporting staff to operate CAMPUS-Asia EEST program in KU.

④2012, April~July, November~2013, February Special English training course to improve English skill for EEST Asia course students has been provided. Lessons for listening, speaking and writing have been made by native English teachers and an e-learning system, ALC TOEIC2000 for TOEIC exercises, is introduced. Achievement of English skills of students will be analyzed and reviewed by periodical TOEIC tests.

⑤2012, August The Agreement on Student Exchange among three universities was entered into force on August 20, 2012. Based on this agreement, three universities have prepared international collaborative education programs including summer school, students exchange and Autumn Seminar.

⑥2012, August The 1<sup>st</sup> summer school was hosted by PNU for 10 days in the mid-August. Total of 42 students (21 from KU, 10 from SJTU and 11 from PNU) attended three study courses including exercises and scientific tours instructed by professors from three universities. After marking or evaluation for three courses, all students were awarded three credits together with the Certificate of the completion.

⑦2012, September~2103, February

Reciprocal student exchange took place. The three universities had a reciprocal arrangement whereby they exchanged three students each. During their staying as the exchange students at a host university, all students studied according to the curriculum in English prepared by each university separately. Simultaneously, they were supervised by one or two professor(s) of a host university to make laboratry work such as experimental studies and theses. Their academic achievement was approved by awarding credits and Certificate for the completion of the curriculum course in each university.

⑧2012, November Establishment of EEST international course which consists of both DD course and non-DD course from FY 2013 was approved in KU.

⑨2012, September~2103, February A supporting system for exchange students was implemented effectively through their staying at host university.  
CAMPUS-Asia office and Domestic PDCA committee are always taking care of the exchange students and remote care and advice were made by using TV communication system occasionally. In addition, teachers of home universities occasionally visited host universities to watch their students.

⑩2013, February Framework Agreement aiming for Double Degree among three universities entered into force on February 18, 2013, and EEST course in KU with new curriculums for DD and non DD courses will be realized from April 1. At the same time, General overview was carried out at the international PDCA committee meeting and its review was shared among the universities for the improvement.

⑪2013, February In FUKUOKA-BUSAN FORUM, which is one of the most important international enterprises between local governments of Fukuoka and Pusan, CAMPUS-Asia EEST program was introduced and succeeded in getting full support from the Forum.

⑫2013, February Autumn seminar called CSS EEST 14 was jointly organized with CAMPUS-Asia EEST program and Interdisciplinary Graduate School of Engineering Sciences, KU. 55 KU students, 38 PNU students and 22 SJTU students attended including 12 EEST course students.

⑬2013, February The external review by evaluation committee for international education and research programs in KU was conducted. CAMPU-Asia EEST program was highly evaluated and some suggestion for improvement of the program was given.

⑭All activities are posted on web sites below

HP (<http://www.tj.kyushu-u.ac.jp/campus-asia/>) , and face book

( <http://www.facebook.com/kucampus.asia>) which are also used for communications with the students studying in a host university.

⑮Recruitment of EEST-Asia course students both for DD and non DD course in KU has started.

Based on MOU for DD, admission of DD course students from SJTU was approved and they will enroll in KU from April 1, 2013.

⑯A summary report of all activities from the adoption on December, 2011 to the end of FY2012 was issued and distributed to the related sections/partners including MEXT, NIAD, and others.