

Activities of Accreditation of Engineering Education in Korea

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1. Agricultural Engineering Education in Korea

There are 11 universities, including 10 national and private, which offer agricultural engineering and its related programs. Those programs are under the command of agricultural college in general and introduce new curriculum. However, the graduate students enrolled in the graduate schools are greatly decreasing every year. Faculty members working at local universities are suffered from the lack of research powers. This may be due to specific feature of the agricultural engineering fields. Three related organizations merged to an organization, Korean Agricultural and Rural Infrastructure Corporation (KARICO) in 2000, and therefore the degree holders have difficulty to find jobs in the reduced organization.

2. Accreditation Board of Engineering Education of Korea (ABEEK)

There is an organization which operates accreditation system for engineering education in Korea. It is called Accreditation Board of Engineering Education of Korea (ABEEK). Further information on the ABEEK can be obtained from the following website (Table 1).

Table 1. Information on ABEEK

Name	Accreditation Board of Engineering Education of Korea(ABEEK)
Location	Seoul, Korea
Home page	http://abeek.or.kr/ (English version available)

The ABEEK launched on August 31, 1999. It has established set of policies, processes and standards for engineering education accreditation. It has contributed on development of engineering education of Korea by promoting research and program on improvement and development of engineering.

Accreditation takes place based on each major field (engineering program as a unit) with engineering fields as its subjects. Accreditation is focused on the educational aspects of the undergraduate studies. Accreditation is only given to those universities who apply for it. Substance of the program contents is evaluated rather than the educational objective shown on the surface. The objective is to accredit whether the program satisfies the minimum standards and to provide council, while excluding grading or ranking of programs. The ABEEK has an ethnic code of evaluator; undisclosed principles, the obligation of material protection, the rules for fair deeds, the exclusion of interests, and the obligation of accreditation settlement.

There are 16 applicable engineering programs in Korea including Agricultural Engineering and Engineering Programs of Similar Name (AEEP). Those who graduate from ABEEK accredited programs are objectively certified to be able to perform practical business affairs at

professional level. They must earn more than 36 credits on mathematics, basic sciences, computer sciences, etc., 16 credits in liberal arts, and 54 credits in professional subjects. The minimum requirement to graduate from the university is 140 credits in general. The ABEEK uses current standard of accreditation but will adopt Korean type standard of accreditation since 2006. The ABEEK plans to apply for joining Washington Accord as provisional membership in 2005 and regular membership in 2007.

3. Agricultural Engineering or Engineering Programs of Similar Name (AEEP)

The Agricultural Engineering or Engineering Programs of Similar Name (AEEP) was officially enrolled in the ABEEK, 2004. The Korean Society of Agricultural Engineers (KSAE) acts as a host society in the AEEP, which consists of two fields: Agricultural Engineering and Agricultural Machinery fields. The AEEP has compulsory courses such as mathematics, physics, chemistry, biology, agronomy-related subject in basic courses, and engineering mathematics, fluid mechanics, material mechanics in basic engineering courses. Moreover, the agricultural engineering field is composed of three subdivisions, which have compulsory courses (Table 2).

Table 2. Subdivision of agricultural engineering field

Subdivision	Compulsory course
Agricultural water and environmental engineering	Irrigation and drainage Regional environmental engineering
Rural development	Agricultural land engineering, Rural planning
Agricultural structure and environment	Agricultural structure and environment Agricultural engineering design

The related departments of AEEP have to set up two subdivisions at least to approve the AEEP accreditation from the ABEEK. The member departments of the KSAE plan to obtain the AEEP accreditation from ABEEK in 2005 or 2006.