Graduate School of Science and Technology Department of Civil Engineering

Diploma Policy

1. The master's program in the Department of Civil Engineering aims to train researchers and professionals with a high level of expertise in civil engineering, ethics view, and an international perspective. Successful candidates will have attended courses for a specified period and have acquired the necessary credits in the Department of Civil Engineering. Those who have passed a final examination on their master's degree thesis will receive a master's degree (Master of Engineering).

A graduating student will acquire the following abilities:

- (1) Advanced expertise in civil engineering and related disciplines.
- (2) Research skills in civil engineering and related disciplines.
- (3) A wide range of culturally-based ethics and international perspectives that are not confined to a specific area of expertise or country / region.
- (4) The ability to think logically and critically based on (1) to (3), and to discover, analyze and solve problems.
- 2. The doctoral program aims to train researchers who have excellent creativity in research and development, have an international perspective, and play a central role in research and educational institutions. A doctoral degree (Doctor of Engineering) is accredited and awarded to those who have attended courses in the program for a specified period, who have acquired the necessary credits for the Department of Civil Engineering, and who had their doctoral dissertation recognized as having reached the standard required, passed a consequent examination, and an examination of general academic ability.

A graduating student will acquire the following ability:

- (1) A highly sophisticated level of expertise in civil engineering and related fields.
- (2) The ability to conduct independent research activities as a researcher in civil engineering and related fields.
- (3) A wide range of culturally-based ethics and international perspectives that are not confined to a specific area of expertise or country / region.
- (4) The ability to think flexibly, logically and critically based on (1) to (3), and to discover, analyze and solve problems.

Curriculum Policy

- 1. In the master's program, the curriculum is based on courses in the liberal arts, basic academic ability and expertise in research gained in undergraduate study; and organized so as to realize the purpose set for the Department of Civil Engineering, through Specialist Courses, Courses in the liberal arts, and Research Guidance for science and engineering majors.
- (1) In order to acquire more advanced specialist knowledge, seminar-style lectures are conducted in a focused and effective manner.
- (2) Courses in the liberal arts not only foster the purpose of attaining of a broad academic knowledge of the field of study, but also support, the attainment of better communication skills, a deeper understanding of ethics, and a greater sense of global literacies.
- (3) Research Guidance helps the acquisition of the knowledge and experience necessary to conduct research through understanding of the literature and discussions with supervisors. Moreover, research guidance helps students to develop such skills as the ability to communicate research and to solve problems, which aims to foster researchers, or similar advanced professionals, with an international perspective both at home and abroad.

- 2. The doctoral program is based on the advanced ability to expand on the knowledge about research and development that was acquired up to master's program level. The curriculum is organized on the premise of the importance of research guidance and Courses in the liberal arts; and, thereby, achieving the purpose set for the Department of Civil Engineering.
- (1) Research Guidance helps students acquire the knowledge and experience necessary to conduct research through understanding of the literature and discussions with supervisors. Moreover, it helps students to develop such skills as: the ability to communicate research and to solve problems, which aims to foster the ability of researchers, or similar advanced professionals, to become independent and active in the field, with an international perspective, both at home and abroad.
- (2) Courses in the liberal arts support the high degree of academic knowledge and practical ability necessary for students to carry out research and development as independent researchers, or highly skilled professionals.

Admissions Policy

Under the educational research philosophy of the university, which is based on the meritocratic tradition; the university seeks, through a range of selection methods, those who match the following criteria:

- 1. The master's degree program is based on the basic academic ability and wide range of liberal arts acquired in the bachelor's degree program. The aim is to acquire the necessary skills for those with the intent to discover and solve problems through research in their specialist field. The master's degree program seeks those who are willing to work in collaboration with a diverse range of people.
- 2. The doctoral program is based on the expertise in research acquired up to master's program level. The doctoral program seeks those who are willing to independently conduct creative research.
- 3. The university seeks those who are motivated to work with an international perspective in society, based on professional knowledge and education.

Evaluation methods for the types of abilities required for the admissions policy in differing entrance examinations:

(General entrance examination)

The university seeks those who have the professional knowledge, English ability, thinking skills and communication skills commensurate with the characteristics of the major; and those who have the determination to conduct independent research. In the master's program, students will be selected through an examination of documents submitted, written examinations and qualifications / results of certified tests, and through interview. In the doctoral program, students will be selected through an examination of documents submitted, written examination of the selected through an examination of documents submitted, written examination of the selected through an examination of documents submitted, written examination of their master's thesis.

(Special selection for working people, foreign student entrance examination)

The university seeks those who have acquired experience in research institutes or companies, have a positive attitude toward learning, and/or have skills acquired abroad. In the master's program, candidates will be selected through an examination of documents submitted, written examinations, qualifications / results of certified tests, and interview. In the doctoral program, candidates will be selected through an examination of documents submitted, written examination of their master's thesis.