

## **Graduate School of Science and Technology**

### **Department of Global Fire Science and Technology**

#### **Diploma Policy**

1. The master's program in the Department of Global Fire Science and Technology aims to train researchers, technicians and designers with a high level of expertise and knowledge of ethics. It also aims to create researchers, technicians, or designers, who are highly professional and hold an international perspective. Successful candidates will have attended courses for a specified period and have acquired the necessary credits in the Department of Global Fire Science and Technology. Those who have passed a final examination on their master's degree thesis will receive a master's degree in Engineering.

A graduating student will acquire the following abilities:

- (1) Advanced expertise relating to the specialist fields of the Department of Global Fire Science and Technology.
  - (2) The expertise to conduct research in fields related to the Department of Global Fire Science and Technology.
  - (3) The ability to think logically and critically based on the high level of expertise, Research skills and insight acquired in the Department of Global Fire Science and Technology; and to discover, analyze and solve problems.
  - (4) The ability to be active with an international perspective based on the high level of specialist knowledge, research skills and knowledge of liberal arts acquired in the Department of Global Fire Science and Technology.
2. The doctoral program in the Department of Global Fire Science and Technology 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 in 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 Global Fire Science and Technology, 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 abilities:

- (1) A highly sophisticated level of expertise according to the specialist fields according to the Department of Global Fire Science and Technology.
- (2) The ability to conduct research activities independently as a researcher in the specialist fields of the Department of Global Fire Science and Technology.
- (3) The ability to discover, analyze and solve issues based on flexible thinking, deep insight and the highly sophisticated level of expertise and ability to conduct research acquired in the Department of Global Fire Science and Technology.
- (4) The ability to be active with an international perspective in fields requiring specialization based on the highly sophisticated level of expertise and research skills acquired in the Department of Global Fire Science and Technology.

#### **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 fire science and technology major. In addition to the former, the curriculum is organized to provide the ability to think from a broad perspective; and foster the ability to conduct research and development that requires a high degree of expertise.
  - (1) In order to acquire more advanced specialist knowledge in the field of fire science and technology; special lectures, experiments and seminars are taught 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; to problem-solve; and to foster researchers in the field of fire science technology, technicians, or designers, or similar advanced professionals, with an international perspective.

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 in the field of fire science and technology; not only through research guidance but also courses in the liberal arts. In addition, the doctoral program develops graduates with the ability to conduct high level, creative research in fields related to fire science and technology.

(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; to problem-solve; and to foster the ability of researchers, technicians, or designers in the field of fire science and technology. Moreover, to become independent and active in the field - and hold an international perspective - both at home and abroad.

(2) Courses in the liberal arts are available which 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 the specialist field of fire science and technology. The master's degree program seeks those who are willing to become technicians, working 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 use their specialist knowledge for the betterment of society from an international perspective.

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, 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, an oral examination of their master's thesis and, if necessary, a written examination.

(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, working people will be selected through an examination of documents submitted and an oral examination. Foreign students will be selected through an examination of documents submitted, written examinations and interview. In the doctoral

program, students will be selected through an examination of documents submitted, written examinations, and an oral examination of their master's thesis / research plans.