

Graduate School of Science and Technology Department of Information Sciences

Diploma Policy

1. There are three courses of study in the master's program: mathematics and informatics; information data science; and computer science. The Department of Information Sciences aims to train researchers or highly skilled professionals with an advanced level of expertise, knowledge of ethics and the ability to contribute to society. It also aims to create researchers who are highly professional and hold an international perspective.

A graduating student will acquire the following abilities:

- (1) Advanced expertise and research skills relating to the specialist field of information sciences.
 - (2) The ability to think logically and critically based on the high level of expertise, research skills and insight acquired in the Department of Information Sciences; to discover, analyze and solve problems; and to foster an international perspective.
 - (3) Based on the high level of expertise, the ability to proactively respond to in a diversifying and information-oriented 21st century society; and to solve problems in information society.
2. The doctoral program aims to train researchers with knowledge of ethics and the ability to contribute to society in their field of specialization who have excellent creativity in research and development; and play a central role in research and educational institutions. A doctoral degree (Doctor of Science) 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 major to which they belong, had their doctoral dissertations 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 expertise relating to the specialist field of information sciences.
- (2) The ability to organize the research fields of the information science major as original research papers and to conduct research activities independently as a researcher.
- (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, with an international perspective, acquired in the Department of Information Sciences.
- (4) An advanced expertise and the ability to proactively respond to changes in a diversifying and information-oriented 21st century society, as a scientist, researcher or technical expert.

Curriculum Policy

1. The master's curriculum is based on courses in the liberal arts, basic academic ability and expertise in research gained in undergraduate study. It is also organized on the premise of adding new knowledge to the academic field through research guidance and graduate courses in the liberal arts. To achieve the aims of the curriculum, the program is divided into the three courses: mathematics and informatics; applied mathematics and informatics; and computer science.
 - (1) In order to acquire more advanced specialist knowledge; special lectures are taught in a focused and effective manner.
 - (2) 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, or similar advanced professionals, with an international perspective both at home and abroad.
 - (3) 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.

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. In addition, the curriculum is organized on the premise of adding new knowledge to the academic field not only through research guidance and courses in the liberal arts, but also the three courses: mathematics and informatics; applied mathematics and informatics; and computer science. The curriculum in the Department of Information Sciences is organized so as to instill the advanced skills necessary to conduct creative and independent research through a combination of science and engineering.
 - (1) 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, or similar advanced professionals, with an international perspective both at home and abroad.
 - (2) Courses in the liberal arts support the high degree of academic knowledge, ethics and practical ability necessary for students to carry out research and development as independent researchers, or highly skilled professionals.

Admissions Policy

The educational research philosophy of the university is based on the meritocratic tradition.

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; and does so through a range of selection methods.

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 and written examinations. Candidates are further chosen on the basis of an oral 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 examinations, and an oral examination of their master's thesis.