

Graduate School of Advanced Engineering

Department of Applied Electronics

Diploma Policy

1. The master's program aims to “foster graduating students with a wide range of knowledge and creative abilities, who can contribute to the field of engineering from a broad perspective and promote education and research. With electronics as its core, the program links fields such as information processing, computer systems, measurement control, and electronic devices”. Successful candidates will have attended courses for a specified period and have acquired the necessary credits. Those who have passed a final examination on their master's degree thesis, or a final examination on the outcome of a specific piece of research, will receive a master's degree (Master of Engineering).

A graduating student will acquire the following abilities:

- (1) The advanced expertise and diverse range of abilities necessary to carry out work relating to fields in the Department of Applied Electronics.
 - (2) The ability to conduct creative research activities requiring a wide range of specialist knowledge of fields related to the Department of Applied Electronics.
 - (3) The advanced level of expertise and ability to discover, analyze and solve problems.
 - (4) The advanced level of expertise in conducting research, and knowledge of liberal arts necessary, to become an active member of the international research community.
 - (5) The advanced level of expertise in research and the liberal arts; and the ability to independently evaluate science and technology from the viewpoint of the interdependence of human beings, society and the global environment.
2. The doctoral program aims to “foster graduating students with a wide range of knowledge and creative abilities, who can contribute to the field of engineering from a broad perspective and promote education and research. With electronics as its core, the program links fields such as information processing, computer systems, measurement control, and electronic devices.” A doctoral degree (Doctor of Engineering) is accredited and awarded to those who have attended courses for a specified period, who have acquired the necessary credits, had their doctoral dissertation recognized as having reached the standard required, passed a consequent examination, and an examination of general academic ability.
 - (1) A highly sophisticated expertise required to engage in highly specialist work according to the department of applied electronics.
 - (2) The ability to carry out and lead independent research and development in the specialist fields of the Department of Applied Electronics.
 - (3) The advanced level of expertise to research, discover, analyze and solve issues based on flexible thinking.
 - (4) A highly sophisticated level of knowledge of the field based on a cutting-edge level of expertise in research; and an international perspective, gained through the study of the liberal arts.

Curriculum Policy

1. The master's program aims to “foster graduating students with a wide range of knowledge and creative abilities, who can contribute to the field of engineering from a broad perspective and promote education and research. With electronics as its core, the program links fields such as information processing, computer systems, measurement control, and electronic devices”. The curriculum is both based on the advanced knowledge gained during their bachelor's degree; and organized around Research Guidance and Courses in the liberal arts.
 - (1) Advanced expertise and diverse range of abilities necessary to carry out work relating to the field of electronics is carried out in specialist lectures, specialist courses and experiments in the Department of

Applied Electronics 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 students acquire the knowledge and experience necessary to conduct research through understanding the domestic and international literature; and discussions with supervisors. Students will acquire the diverse expertise and research skills to analyze, evaluate and communicate research; necessary for the workplace. Thereby, helping students become members of not only the domestic but also the international research community.

2. The doctoral program aims to “foster graduating students with a wide range of knowledge and creative abilities, who can contribute to the field of engineering from a broad perspective and promote education and research. With electronics as its core, the program links fields such as information processing, computer systems, measurement control, and electronic devices”. The curriculum is both based on the advanced knowledge gained during a master’s degree; and organized around research guidance and courses in the liberal arts.

(1) Research Guidance helps students acquire the knowledge and experience necessary to conduct research through understanding the domestic and international literature; and discussions with supervisors. Students will acquire the advanced expertise and research skills to analyze, evaluate and communicate research; necessary for the workplace. Thereby, helping students become members of not only the domestic but also the international research community.

(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

With the aim to “foster graduating students with a wide range of knowledge and creative abilities, who can contribute to the field of engineering from a broad perspective and promote education and research. With electronics as its core, the program links fields such as information processing, computer systems, measurement control, and electronic devices”:

1. The master's degree program is based on the knowledge of mathematics, electronics and the 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, solve problems and then go beyond the boundaries of research in the field of the Department of Applied Electronics. The master’s degree program seeks those who are willing to become researchers or highly skilled professionals who can work or conduct research 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 the specialist knowledge they have gained in the Department of Applied Electronics 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, students will be selected through an examination of documents submitted, written examinations and qualifications / results of officially recognized

qualification and through 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.

(Recommendation entrance examination)

In the master's program the university seeks those who have the professional knowledge, English ability, thinking skills, communication skills beyond the scope of the major, and those who have the determination to conduct independent research. Candidates will be selected by an examination of documents submitted, essay and interview.

(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 and qualifications / results of officially recognized qualification 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 / research plans.