Graduate School of Science
Department of Applied Physics

Diploma Policy

1. To obtain a master's degree, Master of Science, students must attend courses in the master's program for a specific period. In this period, students are required to complete the degree requirements, which includes thesis research.

A graduating student will acquire the following abilities:

(1) The ability to solve issues related with fundamental and applied physics. Solution is given through logical and critical manner of reasoning based on the high level of technical knowledge and skills as well as cultural literacy.

(2) The ability to influence and guide society to show the relevance of fundamental and applied physics. A high level of cultural literacy and a strong sense of ethics will support to lead society in general.

(3) The ability to communicate with people based on international perspectives. This ability will help to deal with the issues related to one's field of specialization.

2. To obtain a doctor's degree, Doctor of Science, student must attend courses in the doctor's program for a specific period. In this period, students are required to complete the degree requirements, which includes the doctoral dissertation.

A graduating student will acquire the following abilities:

(1) The ability to solve issues related with fundamental and applied physics, and to create innovative outcomes to society in general. The issues are raised and analyzed independently based on the high level of technical knowledge and skills as an independent researcher. With the raised issue, one would be expected to lead and train researchers/technicians in the same professional fields

(2) The ability to influence and guide society to provide the fruits of fundamental and applied physics. Communication skills confluent with the strong sense of ethics will help to objectively account for science and technology to society in general. With leadership as a professional scientist, the ability should be used to realize a sustainable society, and/or to build innovative industries.

(3) The ability to communicate with people based on international perspective. This ability will help to deal with the global issues related to one's field of specialization.

Curriculum Policy

1. The curriculum for the master's program is organized as follows:

(1) The department offers the "fundamental courses", the "comprehensive courses", and the "advanced courses" specialized for each research field in order to provide professional expertise for the students.

(2) The department offers the liberal arts courses aimed to foster the basic knowledge necessary for those involved in research and development. The basic knowledge includes better communication skills, a

stronger sense of ethics, and a better understanding of international community. With this aim, the department offers a wide range of classes by experts from other organizations in order to develop perspectives based on interdisciplinary fields.

(3) The department offers research supervision for thesis research. The department provides opportunities to acquire the knowledge and experience to conduct the research. A student is expected to give a talk in academic conferences to acquire the ability of assessing and communicating their research. A student writes the thesis based on the study for two years under the guidance of the thesis supervisor.

2. To enhance research abilities acquired in master's program based on physics and its applications, the curriculum for the doctoral program is organized as follows:

(1) The department offers research supervision for thesis research. The department provides opportunities to give academic presentations in domestic or international conferences and to submit papers. Consequently, a student acquires precise communication skills in the expertise for global human resources in the future. A student writes the thesis based on the study for three years under the guidance of the thesis supervisor to acquire abilities of analysis, evaluation, and communication.

(2) The department offers the liberal arts courses aimed to foster deep knowledge and general abilities necessary for independent research and development. With this aim, the department offers a wide range of classes by experts from other organizations in order to develop perspectives based on interdisciplinary fields.

Admissions Policy

The department recognizes innovative academic fields in physics as applied physics. The department provides education and research opportunities in applied physics that meet social needs for innovations. With this aim, the department seeks

1. for the master's degree program, those who have acquired the basic academic ability and a wide range of liberal arts in their bachelor's degree program, those who aim to break new ground in the field of applied physics, and those who aim to become researchers, engineers or teachers,

2. for the doctoral program, based on the research skills acquired up to master's program, those who aspire to be a researcher with the ability to conduct creative research in fundamental and/or applied physics, those who aspire to contribute to the society through research, and those who are ready to be an active professional in any fields with an international perspective.

The following methods of admission are available:
The expected ability of candidates and the method of its evaluation in each admission type:

(Admission based on general entrance examination)
For the master's program, the university seeks those who have acquired a level of knowledge in physics and English skills that can be grown up to fundamental physics research and/or advanced applications. Candidates will be tested through a submitted document, their ability with foreign language(s), and an oral examination of scholarly aptitude. In the doctoral program, candidates will be tested through a submitted document, and an interview of their master's thesis.

(Admission based on recommendation)
For the master's program the university seeks those who aim to be independent researchers in physics. For this purpose, candidates must have the professional knowledge and logical reasoning in physics. Communication skills including English are also required. Candidates will be tested based on a submitted document as well as an interview.

(Special admission for working people, and students graduated from non-Japanese institutes)
The university seeks those who have acquired the basics of physics in their experience in research institutes, companies, or foreign universities. For the master's program, candidates will be tested through a submitted document, their ability with foreign language(s), and an oral examination of scholarly aptitude. For the doctoral program, candidates will be tested through a submitted document, and an oral examination of their master's thesis. Note that the special admission for working people is conducted only for the doctoral program.