

Graduate School of Natural Science and Technology, Five-year Doctor' Course: Diploma Policy

The doctor's degrees are awarded to students who have acquired the skills to become independent researchers who can play an active role internationally. In other words, the doctor's degree will be awarded to those who have mastered the most advanced academic knowledge in the specialized field of earth and planetary materials science, who have knowledge and skills in related fields, who have acquired the ability to independently identify and solve problems related to the specialized field, and who can summarize the results of their own research into a doctoral dissertation that is rich in academic creativity.

Graduate School of Natural Science and Technology Five-year Doctor' Course: Course Curriculum Policy

Five-year Doctor's Course of the Graduate School of Natural Science and Technology has established the Division of Earth and Planetary Materials Science in order to develop human resources as described in the Diploma Policy. We provide a degree program that fosters logical problem-solving skills and the ability to respond flexibly and appropriately to a wide variety of issues, cultivates an international perspective and rich creativity as an independent researcher. We give systematic and sequential education according to the fields of specialization.

【Acquisition of leading-edge academic knowledge in specialized field related to the earth and planetary material science】

In this division, students learn and study the most advanced knowledge and techniques in specialized fields through systematic and consistent specialized education from the time of admission. In addition, in order to broaden own academic base by gaining a broad view of human society and acquiring a wide range of academic knowledge on earth and planetary material science, students can also take courses in earth science material fields other than their own specialty under the guidance of their supervisor.

【Acquisition of the ability to independently identify and solve problems related to the specialized field independently】

In order to recognize and solve problems faced by modern international society, science and technology, students will conduct scientific research in their specialized fields, which they have planned, and give presentation at domestic and/or international conferences and write (an) academic paper(s) to return the achievement results to society. Throughout these activities, this course aims to foster the ability to independently identify and solve problems related to their

specialized fields. In addition, students take the initiative in group discussions and other activities in the process of conducting the scientific research they have developed. In this way, students can enhance their ability to independently identify and solve problems, and deepen their research.

In this division, students take systematic courses under the guidance of their supervisor. Credit for each course is awarded based on examinations and the achievement level of assignments, which are evaluated strictly by the course instructor. In the second semester of the second year, students take an examination for degree eligibility consisting of an oral examination and an essay to confirm their level of academic achievement. Dissertations are reviewed by a degree examination committee appointed for each applicant to determine the originality and novelty of the research results from a global perspective, academic value, reliability of the data, and logic of the discussion. In addition, the final judgement is made by the final examination to confirm if the applicant has both research abilities to engage in research activities as an independent researcher and a wealth of academic knowledge as the basis for such ability. Furthermore, it is compulsory for supervisor and co-supervisor to formulate research guidance documents which is the guidance for students' research plan annually, so that mutual checks can be possible within the division.

In the Graduate School of Natural Science and Technology, in order to enhance and improve graduate school education, we are continuously working to improve our educational methods, such as the enhancement lesson plans and FD activities mainly by the Academic Affairs Committee.

Graduate School of Natural Science and Technology Five-year Doctor' Course: Admission Policy

We are looking for applicants from a wide range of individuals, both domestic and international, who have a strong interest in the material science of the solar system and planets, including the Earth, and who can devote themselves to become internationally active researchers in the future. Students are selected and accepted through an entrance examination that evaluates their basic academic skills and problem-setting and solving ability by an oral examination and document screening, according to the standards and importance set by the division.

What we are looking for

The five-year Doctor's Course, with the objective of "constructing a new paradigm for the sustainable evolution of human society (constructing a new paradigm as a fountainhead of knowledge) " , seeks applicants not only from Japan but also from overseas who have the potential and desire to become internationally independent researchers in the future.

Entrance Examination

(1) General Entrance Examination

A document screening and an oral examination are requested. In the document screening, multiple faculty members will check from various perspectives the applicant's expertise and career plans acquired by the time of application. In the oral examination, knowledge and understanding of specialized subjects are evaluated comprehensively and from multiple perspectives.

Table of the three components of academic ability

Entrance examination classification	Knowledge and skills		Ability to think, judge, and express oneself		Attitude to learn by taking initiative and working with diverse people	
General Entrance Examination	◎	Document Screening Oral Examination	☆	Oral Examination	○	Oral Examination

(Note) ◎, ○, ☆ denote factors of special importance, importance, and overall judgment, respectively.