

# Department of Earth Sciences

## Contact Information

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## Introduction

The Department of Earth Sciences was first established in 1984 and has been growing steadily ever since. The primary mission of the department is to nurture students capable of doing independent research and applications for their future academic or professional careers. Currently there are 22 full-time faculty members, covering five major research areas in Earth Sciences, including Astronomy (4, with expertise in radio and extragalactic astronomy, planetary science), Atmospheric Sciences (6, specializing in climate modeling and mesoscale meteorology), Geology (5, tectonics, petrology and paleontology), Geophysics (3, seismology and repeating earthquakes), Oceanography (4, physical and chemical oceanography, and science education). Our program has currently enrolled 160 undergraduate students, ~70 graduate students and ~25 PhD students. To further internationalization, we now offer courses taught completely in English and have recruited several English-speaking non-

Chinese faculty members. In addition, we expect to hire another faculty member in the next year or two. We are also at the forefront of research, publishing many referenced SCI and SSCI journal papers each year.



## Instructional Objectives

- **Undergraduate Program:** To nurture students with knowledge and ability in all fields of earth sciences: astronomy, atmospheric sciences, geology, geophysics and oceanography.
- **Graduate Program:** To foster students in becoming excellent researchers and experts in earth sciences.

For both graduate and undergraduate levels, the goal is also to cultivate high school teachers with a complete knowledge of earth sciences.

## Degree Requirements

- **Undergraduate Program:** We offer various courses in earth sciences from fundamental to advanced. In addition to compulsory courses, students are encouraged to take their own course combinations either horizontally across all the research fields of earth sciences or through a hierarchy of courses in a particular field.
- **Graduate Program:** Our graduate program aims to provide further study in a particular research field, enhance internationalization in academics, and strengthen integration with other fields in earth sciences to help our graduate students gain more competencies to face future challenges.

### Undergraduate Program

General compulsory credits	Departmental compulsory credits	Departmental elective credits	Free elective credits	Minimum credits for graduation
28	40	35	25	128

### Graduate Program

Degree	Compulsory credits	Core Elective Courses	Elective Courses	Minimum credits for graduation
M.S	4	0	21	25
Ph.D	4	6	12	22

## Feature of the Curriculum

All the courses are designated as introduction courses, advanced courses, or application courses in astronomy, atmospheric sciences, geology, geophysics and oceanography. There are field trips provided in some courses in order to give students on-site experience. Also, we encourage undergraduate students to join research projects early on to better reinforce their research abilities. In addition, we offer a full English curriculum for international students who wish to obtain a master's or/and doctoral degree from the Department of Earth Sciences.

## Career Prospects

- **Pursuing higher education:** Graduates can continue on in a master's or/and doctoral program either in our department or other earth sciences related institutes in domestic or overseas universities.
- **Entering workforce:** Most graduates take earth sciences related jobs in governmental sectors, academic institutes, research organizations or private enterprises. For students who have a teaching certificate, they can also be a teacher in high school.

