Educational purpose

We foster graduates with the skills and outlook required to become future global leaders, and a strong capacity to discover and solve problems. Students develop a comprehensive understanding of biological phenomena of various organisms including humans, the evolution of the earth and dynamics of the environment, and methods of conservation and sustainable use of biological resources.

College of Geoscience

Bachelor of Science

Educational purpose

We foster personnel who vigorously play active parts from an international standpoint in fields pertaining to society. Such personnel are required to have comprehensive knowledge and ways of thinking concerning the Earth's evolution from its birth to the present time, and various phenomena and processes occurring in the atmosphere, hydrosphere, and lithosphere

Desired students

Personnel with strong interest in and a spirit of inquiry into the global environment and evolution who can voluntarily and proactively engage in problem solution and analyze phenomena from a broad viewpoint are desired.

Measures to ensure and improve the quality of education

Enhanced teaching systems

We provide appropriate course-taking and career guidance at the time when students start their college life and promote to the next level studies. In addition, we improve the syllabus description to better support students in their studies.

Small-class system

Specialized language courses, seminars, and exercise-oriented courses are provided in small class sizes. Each student is given one-on-one attention by a faculty member, who provides detailed and kind instruction.

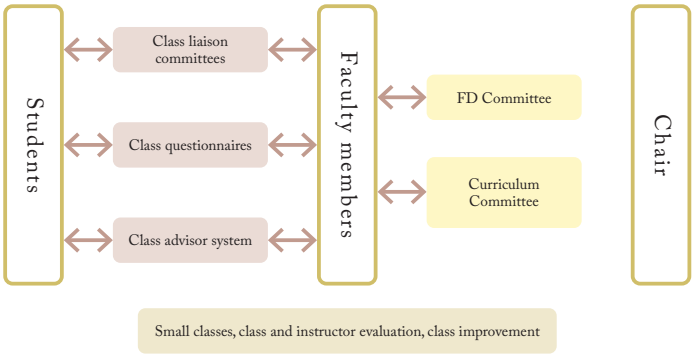
Assurance of research and teaching abilities of faculty

We assign faculty members with highly specialized abilities by conducting peer review by other faculty members to develop finely tuned education and research activities that meet the different needs of students. In addition, the university evaluates and verifies the education and research achievements of the faculty members from a variety of perspectives, using class evaluations by students and faculty evaluations of the University of Tsukuba. We are committed to continuously providing high-quality education.

Measures to improve classes

Faculty development activities are carried out systematically, and individual and groups of faculty members independently develop class contents and methods to improve classes.

Measures to ensure and improve the quality of education



Bachelor of Science

Diploma Policy

We grant diplomas for Bachelor of Science to persons who have acquired the knowledge and abilities (that is, Generic Competences) to become learned based on the educational purpose for undergraduate students of the University of Tsukuba and who have acquired the following specific competences that based on the educational purpose of our school and college.

- Students have gained extensive knowledge related to general natural science beyond specialized fields.
- Students have gained highly specialized knowledge and grasp diverse research methods related to earth science.
- Students have acquired abilities for analyzing scientific data and information in an appropriate method and guiding reasonable inferences.
- Students have acquired skills for using experiment devices and analytical devices indoors in light of points to note in the course of ensuing safety.
- Giving consideration to ensuring safety, protection of personal information, etc., students have acquired abilities for carrying out observation and data collection outdoors.
- Students have acquired abilities for planning and carrying out research and investigation and for accurately organizing and making presentations of outcomes of the same in the form of graduation theses, reports, etc.

Curriculum Policy

We organize and implement curricula based on the following policies for programs that allow students to acquire learning outcomes related to Bachelor of Science.

General policy

In the College of Geoscience, we offer two major courses in Geoenvironmental Sciences for handling the current global environment and in Earth Evolution Science for handling global history. In major courses, students learn Human Geography, Regional Geography, Atmospheric Sciences, Hydrological Sciences, Geomorphology, and Analysis of Environmental Dynamics. (The above subjects are major courses in Geoenvironmental Sciences.) Students also learn Historical Geology – Paleontologybiology, Stratigraphy, Geodynamics, Petrology, Mineralogy, and Resource Geoscience. (The above subjects are major courses in Earth Evolution Science.)

Course sequence policy

During the first year, students obtain basic knowledge related to overall studies including humanities and social science studies with a central focus on natural science. Students also acquire basic abilities necessary after the second year through study in the Introductory Subjects for geoscience. During the second year, students learn Major Subjects intended for an introduction to geoscience as well as mathematics, physics, chemistry, English, etc. necessary for geoscience and improve their ability to use computers and laboratory equipment for calculations, organization of materials, and presentations. Moreover, students take specialized English so as to acquire reading and communication abilities in English. During the third year, courses are divided into major courses and students mainly learn Major Subjects. By taking Major Subjects comprising lectures, seminars, laboratory experiments, and outdoor experiments, students deepen their specialized knowledge. Moreover, through onsite observation, measurement, and

material collection, we provide many outdoor experiments observing various assignments in the field and students acquire abilities for outdoor investigation and indoor operations. Moreover, in addition to major courses, student can choose minors including major courses in the Interdisciplinary Program in Life and Environmental Sciences (a course for foreign students). During the fourth year, students mainly work on their graduation theses. While discussing matters with the faculty members and graduate school students, students proceed to investigations and experiments. In this way, students enhance abilities for research planning, performing, and overall controlling as well as accurately conveying research outcomes to a third party.

Implementation policy

In order to urge students' subjective learning, we prepare textbooks by the faculty members in charge in the college and make use of e-learning systems. We offer internship subjects as a part of collaboration with industrial circles and local communities as well as career path education. Moreover, we arrange supporting environments for learning, such as laboratories and computers, independently by our college and jointly with schools and associated colleges. Furthermore, in order to promote internationalization, we offer small-size specialized language classes and international outdoor experiments and recommend that students take English lectures in major courses in the Interdisciplinary Program in Life and Environmental Sciences.

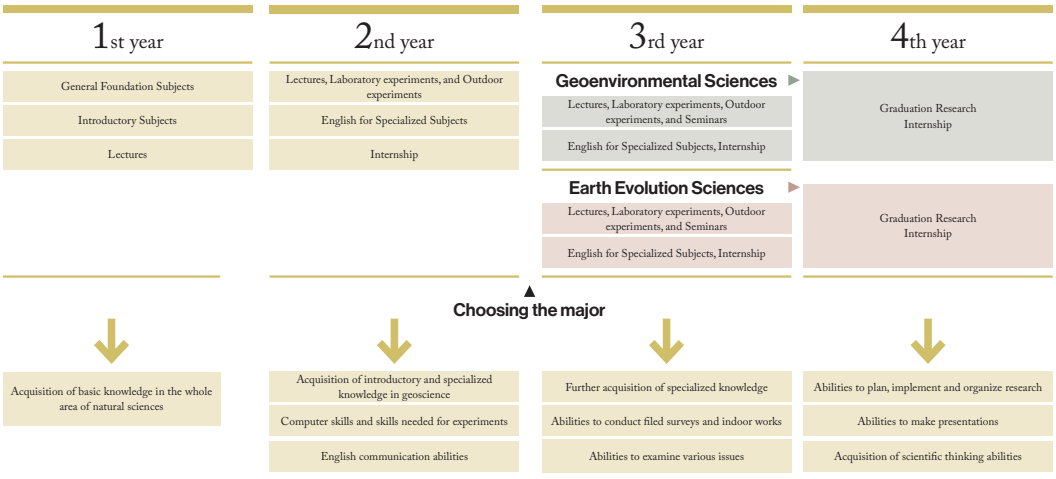
Policy for evaluation of learning outcomes

We impose examinations (written and oral) and reports on students based on the category of classes (e.g., lectures, seminars, experiments, and graduation theses) and evaluate grades according to the extent of goal achievements.

Characteristics

Field experiments, the special features of the College of Geoscience, are conducted in collaboration/cooperation with the university's affiliated research centers and training facilities, where large waterways and heat and water balance observation plots are installed to support the achievement of research and educational goals. By cooperating in activities for the Geology and Geography Olympics and the establishment of

Structure of curriculum and competencies to be developed



Bachelor of Science

geoparks, we provide the students with opportunities to have contact with society through the studies of geoscience.