



PROGRAM PROFILE

The steady growth of world population calls for economic and ecological utilization of all georesources. These include drinking water, mineral resources, hydrocarbon reservoirs and geothermal reservoirs. They also encompass reservoir rocks for resources and waste products as well as safe construction grounds for infrastructural projects such as highrise buildings, traffic structures above and below the surface or water reservoirs. In order to plan and realize such projects, geological subterranean properties must be assessed and technical criteria explored and scientifically modeled. **Geotechnological underground** models form the basis of planning and construction.

Natural Science and Engineering

Subject specific, underground assessment and its scientific modeling are based on well-founded geoscientific knowledge, measuring methods and data evaluation as well as on familiarization with each engineering project. This includes working within the boundaries of technological regulations.

After three terms the course focus shifts from natural sciences and basic engineering to Geotechnology, which is divided into five fields of study: **Applied Geophysics, Applied Mineralogy, Engineering Geology, Hydrogeology** and **Exploration Geology**. Besides theoretic studies, students have the opportunity to enhance their practical skills in numerous hands-on projects in the laboratory as well as on site.

Integrated Program

Students will choose a specialization in the sixth term by choosing a module and the topic of their bachelor thesis. The course schedule focuses on the **integrated application** of the specific scientific methods favored in each field.

APPLICANTS

Our degree course is tailored towards anyone who would like to combine **applied natural sciences with technology**. The course schedule concentrates on scientific subjects including mathematics, physics and chemistry as well as on fields of engineering such as mechanics. As many of our geo-technical projects are carried out partly or entirely abroad, students must bring with them a readiness to travel and an interest in communication and languages.

CAREER PROSPECTS

Career opportunities are market dependent – most jobs being predominantly **industry** based. In the past our **graduates' technical strengths** have proved to be a welcome asset – mainly in **consulting** but also in the productive industries such as the **water, resource and subterranean engineering sector**. A growing need for geothermic energy and underground waste and toxin disposal are increasing the demand for geotechnologists.

PROGRAM STRUCTURE

Our bachelor degree course in Geotechnology spans **six terms**, including the bachelor thesis. The program is divided into modules. Overall 180 ECTS credits must be attained in accordance with the European Credit Transfer System. 64 credits are awarded for basic **geoscientific and geotechnological skills**, 46 credits go to modules in basic natural science and 8 credits to engineering modules. A further 36 credits go to mandatory elective modules and 14 credits are assigned to elective modules.

APPLICATION

The bachelor program Geotechnology starts in the **winter term, with 40 students joining each year**. Standard application requirements include a baccalaureate or similar qualification. Sound knowledge of German is also necessary and must be documented.

The **application deadline for the coming winter term is July 15th**. Admission applications are accepted from the beginning of June. All relevant forms and verifications can

be sent by email or by post to the admissions office at the TU Berlin. For further details please visit our program website: www.geo.tu-berlin.de.

CONTACT US

Bachelor program Geotechnology

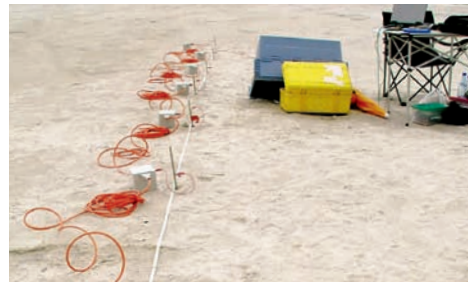
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General Student Enquiries

www.studienberatung.tu-berlin.de

School of Planning | Building | Environment

www.planen-bauen-umwelt.tu-berlin.de



1ST TERM	2ND TERM	3RD TERM	4TH TERM	5TH TERM	6TH TERM
Foundations of Geosciences I	Lithology I	Basic Geotechnology - Engineering Geology - Hydrogeology - Exploration Geology - Geophysics	Foundations of Geosciences II	Integrated Geotechnologies - Engineering Geology - Hydrogeology - Exploration Geology - Geophysics	Specialization in Geotechnology Two Subjects: - Engineering Geology - Hydrogeology - Exploration Geology - Geophysics
Organic Chemistry	Physics Lab	Geo-data and GIS			
	BASIC NATURAL SCIENCE		Field Practicum	Lithology II	Interdisciplinary Field Practicum
Mathematics / Physics / Chemistry	Mathematics / Physics	Mathematics	Mechanics	Mandatory Elective Module: Basic Engineering	
	MANDATORY ELECTIVES: INTERDISCIPLINARY COURSE		ELECTIVES TU BERLIN		BACHELOR THESIS
29 CREDIT POINTS	31 CREDIT POINTS	30 CREDIT POINTS	28 CREDIT POINTS	32 CREDIT POINTS	30 CREDIT POINTS