

Applied Geology

Generated: 17. 2. 2026

Faculty	Faculty of Mining and Geology
Type of study	Doctoral
Language of instruction	English
Code of the programme	P0532D330040
Title of the programme	Applied Geology
Regular period of the study	4 years
Coordinating department	Department of Geological Engineering
Coordinator	prof. Ing. Petr Skupien, Ph.D.

About study programme

Doctoral degree programmes are aimed at scientific research and independent creative activity in the field of research, development and technology. The studies are oriented towards preparation for independent creative scientific work within the chosen branch and a standard level of knowledge is proved during the doctoral state examination. Ability to attain original scientific findings and develop them further is proved by the defence of the completed doctoral thesis. VŠB-TUO awards its graduates of doctoral degree programmes the academic degree of “Doktor” (i.e. “Doctor”), abbreviated as “Ph.D.”, used after the name.

Professions

- Deposit geologist
- Hydrogeologist
- Geophysicist
- Geologist specialist
- Engineering geologist
- Manager in mining and geology
- Specialist in science, research and development
- Drilling engineer
- Geologist for nature and landscape protection

Graduate's employment

A graduate of the field of study for the doctoral degree “Applied Geology” is able to connect scientific methods of work with the latest practical knowledge in the area of applied geology. He/she is able to occupy positions in research and scientific institutions and organisations solving difficult problems in the areas of applied geological disciplines and also in the state administration.

Study aims

The study for the doctoral degree in the field “Applied Geology” ensures the preparation of researchers in the area of geological sciences and is highly technology- and application-oriented. Emphasis is put on obtaining the common theoretical base in connection with the area of Earth sciences. This study creates preconditions for familiarising with applied geological disciplines, especially with applied mineralogy and petrography, hydrogeology, deposit geology, engineering geology, drilling technologies and geophysics. Great emphasis is laid on the area of geological information science, planning and evaluation of results of geological operations, economics and management in exploration and industrial geology and problems of environmental protection.

Graduate's knowledge

A graduate of the field of study for the doctoral degree “ Applied Geology ” is able to connect scientific methods of work with the latest practical knowledge in the area of applied geology. He/she is able to occupy positions in research and scientific institutions and organisations solving difficult problems in the areas of applied geological disciplines and also in the state administration.

Graduate's skills

A graduate propose and use procedures of original research to enriching the knowledge of the field. He/she is able to develop theories, concepts and methods of the field, gain a new knowledge and forward it to others.

Graduate's general competence

A graduate obtains new knowledge in the field by the study and their own creative work. He/she presents the results of their work to the scientific community.