Program Geomatics for Mineral Resource Management (field of Study Mining and Geology)

II level studies (MSc program) fully taught in English, 4- semesters (120 ECTS) - starting in mid-February 2020, ending in January 2022. This is a joint – double degree program offered by TU Bergakademie Freiberg (Germany) and Wroclaw University of Science and Technology.

The program is meant for bachelors in mining and geology as well as BSc-s in geodesy and cartography or related engineering disciplines.

The first semester will be taught at Wroclaw University of Science and Technology, while in the second and third semesters the students will follow the curriculum courses at TU Bergakademie Freiberg. Erasmus Plus mobility grants will support the students during their stay in Germany.

Students registered at Wroclaw University of Science and Technology, after the two-semesters mobility period - in the fourth semester will write the master thesis in Wroclaw under the supervision of two professors representing both universities. After defending the thesis they will receive the diplomas of both partner universities.

More information on this master program can be found at,

https://study-geomatics.eu/#why-geomatics

https://www.youtube.com/watch?v=r_eZ8JgR-VE

Graduate profile

Geomatics is an interdisciplinary field of research that combines aspects of surveying, sensor technology with data processing, geoinformatics and geomodelling. The main focus of Geomatics lies on the regulation and control of the interplay between resource extraction and its environmental impact. Having excellently trained experts in the field of Geomatics is nowadays more important than ever. The reason for that is the continuously rising global demand for raw materials, which leads to the extraction of mineral resources in areas of the geosphere that are more difficult to access. Simultaneously, the highest levels of safety, as well as environmental and social regulations need to be fulfilled, and the optimal use of natural resources by maximizing recovery is desired. This requires engineers to be able to develop new innovative solutions, making the best use of most modern technology to acquire, manage and analyze geodata.

The graduate will also gain managerial skills, will be trained in project management, decision making, risk mitigation, will know the legal and economic environment of the mining industry. In addition to the standard courses taught by staff from both partner universities and industry experts, massive open online courses (MOOC's) are offered for the students. The MOOC's consist of a series of web-videos, which cover the content of an individual course.

Employment options - worldwide

Thus graduate of this master program will be prepared to work in an international and multicultural environment in mining and exploration companies, technical supervision authorities, public administration offices, research and development institutions, everywhere advanced and state of the art interdisciplinary knowledge spanning mining and geology, computer aided design, geomatics