

Archived

# Diplomirani inženir geotehnologije in rudarstva (un)/diplomirana inženirka geotehnologije in rudarstva (un)

## **Selected qualifications**

Name of qualification

Diplomirani inženir geotehnologije in rudarstva (un)/diplomirana inženirka geotehnologije in rudarstva (un)

**Translated title (no legal status)** 

Academic bachelor's degree in geotechnology and mining

Type of qualification

Diploma prve stopnje (UN)

**Category of qualification** 

Izobrazba

**Type of education** 

Academic bachelor's education

**Duration** 

3 years

**Credits** 

180 credits

### **Admission requirements**

- Matura or
- · vocational matura; or
- school-leaving examination (prior to 1 June 1995) under any four-year secondary school programme.

**ISCED** field

Field

Tehnika, proizvodne tehnologije in gradbeništvo

**ISCED** subfield

subfield rudarstvo in drugo pridobivanje rudnin

**Qualification level** 

SQF 7 EQF 6 First level

### **Learning outcomes**

The qualification holder will be able to:

(general competences)

- work in planning companies, the state administration, research laboratories, institutes in the field of geotechnology and mining, etc.,
- apply basic knowledge of mathematics, physics and chemistry in engineering problems,
- carry out experiments and analyse and interpret data,
- demonstrate mastery of theoretical and practical knowledge within their professional field,
- identify, formulate and resolve engineering problems,
- apply the techniques, skills and modern engineering tools needed in practice,
- carry out high-quality expert analysis within the field of geotechnology and mining,
- undertake individual work and planning work in the field of geotechnology and mining,
- demonstrate understanding of ethical and professional responsibility,
- recognise the need for lifelong learning and participate in it,
- express themselves with authority and communicate in a foreign language;
- apply knowledge acquired in the broader context of geotechnology and mining,
- participate in projects in the field of geotechnology and mining,
- select, describe and interpret various natural phenomena within the field of mining and geotechnology,

### (subject-specific competences)

- demonstrate mastery of basic technical knowledge in the field of mining and geotechnology, supplemented by selected knowledge from the fields of science, engineering, management and ICT,
- demonstrate understanding of technical topics, including their theoretical background, and the application of methods (e.g. in mining: the Velenje digging method; in geotechnology: the new Austrian method of building tunnels),
- integrate scientific knowledge with knowledge from other engineering disciplines,
- undertake autonomous work in applied projects in mining and geotechnology,
- demonstrate understanding of geological conditions in the planning and construction of structures,
- demonstrate understanding of geomecahnical measurements in the planning and construction of

structures,

- organise the optimal use of machinery in the planning and construction of structures,
- demonstrate understanding of the operations of an enterprise with regard to income and construction costs of structures, the extraction of mineral raw materials, etc.,
- apply theoretical knowledge to the resolution and assessment of environmental protection problems,
- apply theoretical knowledge to the planning of developments while minimising harmful impacts on the environment and people,
- identify problems, carry out theoretical analysis, seek solutions and take appropriate action,
- pursue learning in their own professional field and adapt to related fields,
- participate in development work and transfer research and development achievements into practice,
- demonstrate understanding of the interdependence of science and technology,
- communicate with co-workers and experts from related disciplines, thus enabling active cooperation
  on joint work, including in the field of projects based on the integration of technical laws and
  experience within the field of geotechnology and mining,
- demonstrate professional, ethical and environmental responsibility,
- use modern programming tools.

### **Assessment and completion**

Students' knowledge is assessed by means of practical exercises and seminar papers, and also via products, projects, performances, services, etc. and by examinations. Examination performance is graded as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10).

### **Progression**

Students may progress to the next year if by the end of the academic year they have completed all requirements defined by the study programme for progression to the next year.

### **Transitions**

Second-cycle master's study programmes (SQF level 8)

### **Condition for obtaining certificate**

In order to complete the programme, students must complete all course units prescribed by the study programme.

# **Awarding body**

University of Ljubljana, Faculty of Natural Sciences and Engineering

URL

http://www.ntf.uni-lj.si/en/