Faculty of Mining, Geology and Civil Engineering, Tuzla
Faculty of Mining, Geology and Civil Engineering

5 departments:
- Mining
- Geology
- Civil Engineering
- Petroleum Engineering
- Safety and Health Administration

1300 students
Faculty of Mining, Geology and Civil Engineering was established as the Faculty of Mining in 1960.

With the establishment of the Department of Geology in 1973, the Faculty of Mining was renamed the Faculty of Mining and Geology.
At the end of 1976 was founded the University of Tuzla. The Faculty becomes a member of the University of Tuzla. Until then, the Faculty was a member of the University of Sarajevo.

With the establishment of the Department of Civil Engineering in 1998 The Faculty of Mining and Geology was renamed the Faculty of Mining, Geology and Civil Engineering.
Department of Petroleum Engineering was established in 2000, and Department of Safety and Health Administration in 2004, so that today a scientific and educational activities of Faculty is organized in five departments: Mining, Geology, Civil Engineering, Petroleum Engineering and Safety and Health Administration.
Education and research activities are organized into 15 departments (scientific fields):

- Underground Mining
- Surface Mining
- Mineral Processing, Transportation in Mining and Materials
- Geo-Environmental Engineering
- Petroleum Engineering
Education and research activities are organized into 15 departments (scientific fields):

- Applied Geophysics
- Geology
- Mineralogy and Petrology
- Geological Engineering
- Safety and Health Administration
Education and research activities are organized into 15 departments (scientific fields):

- Mechanics, Geomechanics and Geotechnical Engineering
- Survey, Engineering graphics, and Numerical Modelling
- Hydrogeology and Hydraulic Engineering
- Structures
- Building engineering, Transportation engineering and Construction Management
• 2900 students graduated
• completed 300 master's thesis
• completed 115 doctoral thesis

Three teachers were selected to regular members of the Academy of Sciences and Arts of Bosnia and Herzegovina:
- Professor Ivan Soklic, Geology
- Professor Mehmed Ramovic, Geology
- Professor Enver Mandzic, Mining
### Academic Staff Employed

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Since 2008 the faculty began with undergraduate studies (240ECTS) conformed to the Bologna Declaration and in 2012 will start graduate (60ECTS) and postgraduate (doctoral) (180ECTS) university studies.
Number of students in the last five years

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Science and Research

LAB 2 – Laboratory for Mineral Processing and Material Testing

Partly equipped laboratories
Science and Research

LAB 3 – Laboratory for Natural Hazard and Geoenvironmental Research

Newly equipped laboratories
Science and Research

Partly equipped laboratories

Mechanics, Geomechanics and Geotechnical Engineering

Projects

Geotechnical elaborates, projects and reports:

- FOUNDATION ENGINEERING
- LANDSLIDES
- SLOPE STABILITY ANALYSIS
- RETAINING STRUCTURES
- UNDERGROUND STRUCTURES
- MINING SUBSIDENCE

- LABORATORY SOIL AND ROCK TESTING
- GEOTECHNICAL FIELD TESTING

Research

2. Geotechnical field research - testing

1. Geotechnical field observation

2. Geotechnical in situ testing

4. Geotechnical boreholes - investigation
LAB 4 – Laboratory for Geomechanics

1. Classification testing of soil and rock
2. Shear strength soil testing
3. Deformability of soil
4. Strength of rock
5. Deformability of rock
Science and Research

LAB 6 – Laboratory for Optical Research of Mineral and Rocks

Newly equipped laboratories
Science and Research

Newly equipped laboratories

LAB 7 – Laboratory for Mining Survey and Geodesy
Science and Research

LAB 8 – Laboratory for Engineering Graphics and Numerical Modelling

Partly equipped laboratories
Science and Research

LAB 10 – Laboratory for Applied Geophysics, Seismic Survey and Non-destructive Testing of Structures

Newly equipped laboratories
Science and Research

Labs in the preparation

LAB 5 – Laboratory for Testing of Noise

LAB 9 – Laboratory for Anchor Testing

LAB 11 – Laboratory for Paleontology

LAB12 – Laboratory for Hydrogeology and Hydraulic
Science and Research

Implemented Scientific projects and Expertise

Educational and intervention center for aerology, natural hazards, safety and ecology in the mining (WUS-CEP) program

Tempus Phare Joint European Project Nr. AC-JEP-14377-1999: The curriculum and education in the field of soil ecology
Science and Research

Implemented Scientific projects and Expertise

DAAD Project - Protecting the environment

Study of Regional Solutions for Small States Quality Assurance of Higher Education: Bosnia and Herzegovina, UNESCO, Department for Higher Education Paris;
Science and Research

Implemented Scientific projects and Expertise

Strengthening Higher Education in Bosnia and Herzegovina, The European Commission, Council of Europe

Feasibility Study on The Middle Bosnia and Tuzla Coal Mines for the Federation of Bosnia And Herzegovina;
Science and Research

Actual Scientific projects and Expertise

NATO SfP 983305 „Development of a Monitoring System to Counter-manage the Risks of Subsidence Deformation on the Population of Tuzla“ 2009-2012

NATO SfP 983828 „Seismic upgrading of Bridges in South-East Europe by Innovative Technologies“ 2009-2013
Science and Research

Future Scientific projects and Expertise

- Researchs in the fields:
  Durability of structures
  Non-destructive evaluation of structures
  Soil-structure interaction
  Monitoring, analyses and mitigation measures of landslides
  Geotechnical parameters of hard soil-soft rock
  Determination of gold content in Lasva River
Science and Research

- Researchs in the fields:
  - Optimization of noise level production processes in the function of the application of ergonomic working and living environment in surface mining
  - Hydrogeological research of Spreca Faults
  - Water Management
  - Fluid Tracing Studies
  - Environmental Impact of Abandoned Mines

Future Scientific projects and Expertise
Science and Research

Future Scientific projects and Expertise

- Researchs in the fields:
  - Major accidents in industry and mining, prevention, and the ability to respond
  - Geoenvironmental Risk Management (ISO 31000:2009)
  - Rural development environment affected by mining works
  - Research of geothermal resources
  - Optimization of coal production in terms of using waste
Future Scientific projects and Expertise

- Researchs in the fields:
  
  Research the possibility of production of materials from non-metallic minerals
  Application of Finite element method in the analysis of anisotropic rocks
  Numerical modeling of composite panels (masonry structures)
Software

ADINA, GGU (Landslides), Sofistik, Tower, MAP INFO

Made at The Faculty:
REAME 2011
BISHOP
(Fortran, elastic and plastic analysis)
Education, Science and Research

International Cooperation

- University of Kassel
- Akademia Górnictzo-Hutnicza, AGH, Krakow
- Polytehnika Krakow
- Technical University of Wroclaw
- Mining Institute Moscow
- Faculty of Mining, Miskolc, Hungary
- Mining Institute USA
- Mining Academy Freiburg, Germany
- University Bologna, Italy
Education, Science and Research

International Cooperation

- Faculty of Technical Sciences, Novi Sad
- Faculty of Mining Geology, Belgrade
- Faculty of Mining, Geology and Petroleum Engineering Zagreb
- Institute IGH Zagreb
- RWTH Aachen, Germany
- University Kaiserslautern, Germany
- Institute IZIIS Skopje
- Faculty of Civil Engineering, Tirana
- Faculty of Civil Engineering, Osijek
Education, Science and Research

International Cooperation

- Faculty of Civil Engineering, Sarajevo
- Faculty of Mining Prijedor
- Faculty of Technical Sciences Bihac
- Faculty of Criminal justice and Security, Sarajevo
- Ural State Mining University, Russia
- Moscow State Mining University, Russia
- Technical Faculty "Mihajlo Pupin" Zrenjanin
FIRST CYCLE (Bachelor studies)

- Study programs:
  - Borehole Mining
  - Geology
  - Civil Engineering
  - Mining
  - Safety Engineering

SECOND CYCLE (Master studies)

- Study programs:
  - Mining (with orientations)
  - Geology
  - Civil Engineering (with orientations)
  - Borehole Mining
  - Safety Engineering

THIRD CYCLE – DOCTORAL STUDIES (in the preparation) 2016
Scientific fields - Faculty of Mining, geology and civil engineering in Tuzla are:
- Underground mining of mineral resources
- Surface mining of mineral resources
- Mineral processing, transport and export of mining and materials
- Geoenvironmental engineering
- Well engineering
- Geology
- Mineralogy and petrology
- Geological engineering
- Security and assistance
- Mechanics of geomechanics and geotechnical engineering
- Geospatial information, engineering graphics and numerical modeling
- Hydrogeology and water engineering
- Building construction
- Building engineering, roads and construction management
- Applied Geophysics

2016