



# Higher education in geology in Hungary

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# Geology as a profession in Hungary

- Official body of geologists: Hungarian Geological Society (established in 1848)
- Number of members: 1000
- Number of practising geologists: 500
- Geologic academic degree is sufficient to practise geology, no need to pass a professional test

# Programs in geology before 2006

- Five-year programs started for the last in 2005
- At Eötvös Loránd University:
  - Certificated geologists (~15 /year)
- At University of Miskolc:
  - Certificated Engineering Geologists (~8/year)

# The Bologna Process

- Implemented in Hungary in 2006
- Geology-related programs at 4 universities
- Bachelor programs: 6 or 7 semesters
- Master programs: 4 semesters
- The programs are validated and accredited by the Ministry of Education and Culture

# BSc programs in geology

- **BSc in Earth Sciences (6 semesters)**



Eötvös Loránd University – Budapest



University of Szeged



University of Debrecen

- **BSc in Earth Science and Engineering (7 semesters)**



University of Miskolc

# BSc in Earth Sciences at Eötvös University

- **Specializations from the 3rd semester:**
  - astronomy
  - cartography and GIS
  - meteorology
  - geography
  - geophysics
  - geology

# BSc in Earth Sciences at University of Szeged

- **Specializations from the 3rd semester:**
  - applied earth sciences
  - geology

# BSc in Earth Sciences at University of Debrecen

- **Specializations from the 3rd semester:**
  - meteorology
  - geography
  - geology



# BSc in Earth Sciences and Engineering at University of Miskolc

- **Specializations from the 5th semester:**
  - mining and geotechnical engineering
  - processing engineering
  - oil and gas engineering
  - earth sciences

# MSc programs in geology

- **MSc in Earth Sciences (4 semesters)**



University of Szeged



University of Debrecen

- **MSc in Geology (4 semesters)**



Eötvös Loránd University – Budapest

- **MSc in Earth Science and Engineering (4 semesters)**



University of Miskolc

- **MSc in Hydrogeology and Engineering (4 semesters)**



University of Miskolc

# Freshmen and graduates in Earth Sciences at national level

- Freshmen in the bachelor programs: ~300
- Graduates in the bachelor programs: ~200
- Number of bachelor graduates in geology-related specializations: ~50
- Freshmen in the master programs: ~30

# Learning outcomes

- ***In the BSc in Earth Science programs:***  
basic knowledge and skills in the area of geology, paleontology and applied geology to explore the mineral resources, fossil fuels and groundwater, mostly solving practical problems

# Learning outcomes

- ***In the BSc in Earth Science and Engineering program:***

basic knowledge and skills in the area of geology, engineering geology and engineering geophysics to explore and reveal the mineral resources, fossil fuels and groundwater, mostly solving practical problems

# Learning outcomes

- ***In the Earth Science and Geology MSc programs:***

theoretical and practical knowledge of examination and exploration methods for planning and implementation of exploration programs for mineral resources, fossil fuels and groundwater

# Learning outcomes

- ***In the Geo-Engineering and Hydrogeology programs:***

theoretical and practical knowledge of examination and exploration methods for planning and implementation of exploration programs for mineral resources and fossil fuels, solving engineering geological problems, exploration, exploitation and management of groundwater

# Employment of geologists

- Number of graduates in the former geology-related study programs: 30/year
- Number of graduates at BSc level: 50/year
- From this 20/year enters the labour market, 30 the MSc programs
- Expected number of graduates at MSc level: 30/year
- About 90 % of the graduates can find a job in profession





**Thank you for your attention!**