Faculty of Earth Science
and Engineering

Student Manual

2019/20

MSc Programmes

Earth Science Engineering
Environmental Engineering
Hydrogeological Engineering
Petroleum Engineering
Petroleum Geoengineering

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Greetings from the dean

The earth sciences play a major role in satisfying the ever-growing demand of the global population for mineral raw materials, energy and water, and in dealing with environmental problems. Due to this, the Faculty of Earth Science and Engineering at the University of Miskolc has optimistic plans for its future in both academic and research activities. This optimism has its foundation in the historical past and professional traditions that the Faculty possesses. The Faculty, whose history goes back to 1735, can be considered one of the world's oldest institutions in the area of higher education in mining and earth sciences.

The Faculty has had to redesign itself several times in its history of nearly 300 years due to changing circumstances. The Faculty of Earth Science and Engineering is currently facing important changes in its possibilities for financing. We would like to keep our prominent place among the Central European institutions of mining and engineering earth sciences, and thus we are broadening the range of programs offered in English and increasing our participation in various international research projects.

Research grants won in recent years have resulted in the further strengthening of the Center of Excellence of Sustainable Resource Management, which cooperates with the Faculty to cover many of its research topics (in the areas of mineral raw materials, energy sources, exploration and utilization of groundwater, geological research, environmental protection, waste management, and the processing of geoinformation). As a result of these developments and investments, an integrated system of laboratories notable even by international standards now assists in high-level research activities and practice-oriented teaching.

These are reasons why coming to the University of Miskolc and joining the Faculty of Earth Science and Engineering to study or carry out research is worthwhile. We look forward to welcoming a growing number of international students as they join students from Hungary on the Miskolc campus, which offers lecture halls, laboratories, a central library, student dormitories, a cafeteria, shopping and sports facilities within the surroundings of a beautiful park. The student traditions of Selmec combine with these other factors to create unforgettable experiences for all those who study and work here.

Prof. Péter Szűcs
dean

The history of the Faculty

The Faculty of Earth Science and Engineering's history and operation has roots that lead back to 1735, when the first mining school (Bergschule) was established in Selmecbánya (known as Schemnitz at the time, and now Banská Stiavnica). With this an imperial institution for training leading technical and legal experts in mining and metallurgy took form in the territory of the Hungarian Kingdom. Its first teacher was Sámuel Mikoviny, the greatest engineer and polyhistor of his time.

On October 22, 1762, Maria Theresa decreed the advancement of the institution to the status of an academy. IIn 1763 the Department of Mineralogical, Chemical and Metallurgical Studies was formed under the leadership of Nikolaus Joseph Jacquin. The structure and operation of the Mining Academy (Academia Montanistica, Bergakademie) was approved by Maria Theresa herself. The three-year course was taught in German.

After 1770 the Selmec academy became one of the European centers of mining and metallurgical sciences. Numerous experts and young people wishing to study sought out the academy from other nations, and spent various periods of time at the institution, attending lectures and working in the laboratories. In 1808 a forestry school was formed in Selmecbánya, led by Heinrich David Wilckens, which merged with the Mining Academy in 1846, leading to the new name of Mining and Forestry Academy (K. K. Berg- und Forstakademie).

Due to the ethnic oppositions arising among the students in 1848-1849 some students from Austria, Bohemia and Moravia left Selmec. Institutions were founded in Leoben for the native German-speaking students and in Príbram for the others; these institutions were later promoted to academies. With the Austro-Hungarian Compromise in 1867 the academy became a Hungarian state institution called the Hungarian Royal Academy of Mining and Forestry (Magyar Királyi Bányászati és Erdészeti Akadémia). Hungarian was gradually introduced as the language of instruction between 1868 and 1872.

Up to 1872 the 'mining' course - in the professional language of the time this covered mining, metallurgy and minting equally - was uniform, but in that year it was divided into four branches: mining, ferrous metallurgy, non-ferrous metallurgy, and machinery and civil engineering. Training in forestry included two branches: general forestry and forest engineering. From 1904 the academy operated under the name of the College of Mining and Forestry (Bányászati és Erdészeti Főiskola).

In 1919, after Selmecbánya became part of the newly formed Czechoslovakia, the College moved its equipment, staff and students to Sopron, led by the rector, the mining Professor Géza Réz. In 1922 the name became the College of Mining Engineering and Forest Engineering (Bányamérnöki és Erdőmérnöki Főiskola).

The college lost its independence in 1934, joining the newly organized national József Nádor University of Engineering and Economics as its Faculty of Mining, Metallurgical and Forestry Engineering, with 27 departments. In 1949 a new faculty of mechanical engineering was founded in Miskolc, together with the Mining and Metallurgy faculties in Sopron, to establish the Technical University for Heavy Industry (Nehézipari Műszaki Egyetem). Until 1959 the first two years were taught in Miskolc, while the upper years received their training in Sopron. Due to the changing needs in mining, the unified mining course was divided in 1948 into programs of mining, fluids mining, mine exploration (geology/geophysics) engineering, and later mine equipment engineering, while a survey engineering program also existed for a short time.

With the ongoing technical and economic changes and yielding to professional and academic friction in the faculty, a revised curriculum was established in 1992, with new programs in environmental engineering, process engineering, and hydrogeology. Reflecting the transformation in its areas of teaching and research, the name of the faculty became the Faculty of Earth Science and Engineering (Műszaki Földtudományi Kar) from January 1, 2000.

Administrative units of the Faculty

Dean's Office:

A/4 bld. 136-137. tel: (46) 565-051
Web page: http://mfk.uni-miskolc.hu

Dean:
Dr. Péter SZŰCS, Professor, Doctor of Hungarian Academy of Sciences
Deputy Deans:
Dr. Ákos DEBRECZENI, Associate Professor, financial affairs
Dr. Ferenc MÁDAI, Associate Professor, education affairs
Dr. Gábor MUCSI, Associate Professor, scientific affairs

Éva HUDÁK – office headmaster
Emília GASZNER – education affairs (A/1 bld. 221)
Ágnes MILE – scientific and international affairs
Andrea KOLESZÁR – general administration

Institute of Mining and Geotechnical Engineering

A/4 bld. 2nd floor
Web page: http://bgi.uni-miskolc.hu

Director of Institute: Dr. József MOLNÁR, Associate Professor
Administration: Helén HAJTÓS
Departments:
Department of Mining and Geotechnical Engineering,
Head of Dep't.: Dr. Ákos DEBRECZENI, Associate Professor
Department of Geotechnical Equipment,
Head of Dep't.: Dr. Gábor LADÁNYI, Associate Professor

Staff:
Dr. Ákos DEBRECZENI - Associate Professor
Dr. Ferenc KOVÁCS - Professor Emeritus
Dr. József MOLNÁR - Associate Professor
Dr. Gábor LADÁNYI - Associate Professor
Dr. Zoltán István VIRÁG - Associate Professor
Dr. Zsolt SOMOSVÁRI – Professor Emeritus
Dr. Géza BOHUS – Honorary Professor
Dr. László BENKE – retired senior research fellow
Dr. Tamás HAVELDA – visiting lecturer
Richárd TOMPA – assistant lecturer
Alfréd TÓTH – technical assistant

Institute of Mineralogy and Geology

A/3 bld. 3rd floor
Web page: http://geology.uni-miskolc.hu

Director of Institute: Dr. Ferenc MÁDAI, Associate Professor
Administration: Katalin Szász-Kovács

Departments:
Department of Mineralogy and Petrography,
Head of Department: Dr. Norbert ZAJZON, Associate Professor

Department of Geology and Mineral Resources,
Head of Department: Dr. Norbert NÉMETH, Associate Professor

staff:
Dr. Sándor SZAKÁLL - Professor
Dr. Ferenc MÁDAI - Associate Professor
Dr. Viktor MÁDAI - Associate Professor
Dr. Norbert ZAJZON - Associate Professor
Dr. Ferenc KRISTÁLY – Senior research fellow
Dr. György LESS – Professor
Dr. János FÖLDESSY – Professor Emeritus
Dr. Éva HARTAI – Honorary Professor
Dr. Norbert NÉMETH - Associate Professor
Dr. Felicitász VELLEDITS – Associate Professor
Ferenc MÓRICZ – Assistant lecturer
Richárd PAPP – PhD student
Medet JUNUSSOV – PhD student
Máté LESKÓ – Assistant research fellow

Institute of Geophysics and Geoinformatics

A/2 bld. 2nd floor
Web page: http://geophysics-geoinformatics.uni-miskolc.hu

Director of Institute: Dr. Endre TURAI, Associate Professor
Administration: Sándorné KISFALUSI
Departments:
Department of Geophysics,
Head of Dep't.: Dr. Endre TURAI, Associate Professor
Department of Geodesy and Mine Surveying,
Head of Dep't.: Dr. István HAVASI, Associate Professor

Staff:
Dr. Mihály DOBRÓKA – Professor Emeritus
Dr. Endre TURAI - Associate Professor
Dr. Norbert Péter SZABÓ –Professor
Dr. Péter Tamás VASS – Associate Professor
Dr. Tamás FANCSIK – Associate Professor
Dr. Gábor PETHŐ – Private Professor
Dr. Ákos GYULAI - Professor Emeritus
Dr. Tamás ORMOS – Private Professor
Dr. István HAVASI - Associate Professor
Dr. Gábor BARTHA - Professor Emeritus
Marcell SZILVÁSI – Assistant lecturer
Mijic NIKOLINA – PhD student
Anett KISS - Assistant lecturer
Endre NÁDASI – Assistant lecturer
Roland KILIK – Technical assistant
Armand ABORDÁN – PhD student
Nuamah Daniel Oduro Boatey – PhD student

Institute of Petroleum and Natural Gas Engineering

A/2 bld. ground floor and base floor
Web page: http://www.kfgi.uni-miskolc.hu

Director of Institute: Dr. Zoltán TURZÓ, Associate Professor
Administration: Éva Szarka-Galvács
Departments:
Department of Petroleum Engineering,

Head of Dep't.: Dr. Zoltán TURZÓ, Associate Professor
Department of Natural Gas Engineering,
Head of Dep't.: Dr. István SZUNYOG, Associate Professor
Research Institute of Applied Earth Sciences in partnership with the Institute,
Head of Dep't.: Dr. Anita JOBBIK, Senior Research Felllow

Staff:
Dr. Zoltán TURZÓ - Associate Professor
Dr. Imre FEDERER – honorary associate Professor
Dr. Tibor SZABÓ - Associate Professor
Dr. Gábor TAKÁCS – Professor Emeritus
Dr. Elemér BOBOK - Professor Emeritus
Dr. István SZUNYOG - Associate Professor
Dr. Marianna VADÁSZI – Associate Prefessor
Beáta HORÁNSZKY – Assistant research fellow
Dr. László TIHANYI - Professor Emeritus
Dr. Anikó Nóra TÓTH – Honorary Associate Professor
Dr. Gabriella FEDERER-KOVÁCS – Senior lecturer
Dániel BÁNKI - Assistant lecturer
László KIS – Assistant lecturer
Zsuzsanna SZOLYÁK – PhD student
Ádám Viktor PÁSZTOR – PhD student
Marianna MAJOR - laborant

Institute of Geography and Geoinformatics

A/4 bld. 3rd floor
Web page: http://foldrajz.uni-miskolc.hu

Director of Institute: Dr. Károly KOCSIS, Professor
Administration: Éva GYOPÁR-OROSZ
Departments:
Department of Physical Geography and Environmental Sciences,
Head of Dept.: Dr. Endre DOBOS, Associate Professor
Department of Human Geography,
Head of Dept.: Dr. Beáta SISKÁNÉ SZILASI, Associate Professor

Staff:
Dr. Endre DOBOS - Associate Professor
Dr. Attila HEVESI - Prof. Emeritus
Dr. András HEGEDŰS – Associate Professor
Dr. János VÁGÓ – Associate Professor
Dr. Károly KOCSIS KÁROLY – Professor
Dr. Beáta SISKÁNÉ SZILASI - Associate Professor
Dr. Tibor ELEKES - Associate Professor
Dr. Lajos SZALONTAI – Associate Professor
Dr. Gergely Imre Jakab – Senior research fellow
Péter VADNAI – Assistant research fellow
Károly KOVÁCS – Assistant research fellow
Lajos GÁL-SZABÓ – Assistant research fellow
Daniel KIBIRIGE – PhD student
Péter PECSMÁNY – PhD student

Institute of Environmental Management

A/4 bld. Base floor
Web page: http://kgi.uni-miskolc.hu
Director of Institute: Dr. Tamás MADARÁSZ, Associate Professor
Administration: Ádámné CSANÁLOSI
Departments:
Department of Hydrogeology and Engineering Geology,

Head of Dept.: Dr. Péter SZŰCS, Professor
Department of Environmental Engineering,
Head of Dept.: Dr. Tamás MADARÁSZ, Associate Professor

Staff:
Dr. Péter SZŰCS - Professor
Dr. László LÉNÁRT – Honorary Professor
Dr. Balázs KOVÁCS – Honorary Associate Professor
Dr. Imre SZABÓ - Professor Emeritus
Dr. Tamás MADARÁSZ – Associate Professor
Dr. Balázs ZÁKÁNYI - Associate Professor
Dr. Andrea TÓTH KOLENCSIKNÉ – Senior lecturer
Dr. Viktória MIKITA – Senior lecturer
Dr. Márton TÓTH – Senior lecturer
Dr. Enikő DARABOS – Senior lecturer
Tamás KÁNTOR – Assistant lecturer
István SZÉKELY – Assistant research fellow
Csaba ILYÉS - Assistant research fellow
Zsombor FEKETE - Assistant research fellow
Rita Miklós – PhD student
Gábor Nyíri – PhD student

Institute of Raw Material Preparation and Environmental Processing

A/4 bld. 2nd floor
Web page: http://ejt.uni-miskolc.hu

Director of Institute: Dr. Sándor NAGY, Associate Professor
Administration: Laura LOSONCZI
Departments:
Department of Mechanical Processing,
Head of Dep't.: Dr. József FAITLI, Associate Professor
Department of Bioprocessing and Reaction Techniques,
Head of Dep't.: Dr. Ljudmilla BOKÁNYI, Associate Professor

Staff:
Dr. Barnabás CSŐKE – Professor Emeritus
Dr. József FAITLI - Associate Professor
Dr. Ljudmilla BOKÁNYI – Associate Professor
Dr. József BŐHM – honorary Professor
Dr. János TAKÁCS - honorary Associate Professor
Dr. Imre GOMBKÖTŐ – honorary Associate Professor
Dr. Gábor MUCSI - Associate Professor
Dr. Sándor NAGY – Associate Professor
Dr. Lajos NAGY - Honorary Associate Professor
Dr. Géza FARKAS - Honorary Associate Professor
Dr. Ádám RÁCZ – Associate Professor
Valéria MÁDAI-ÜVEGES – Assistant lecturer
Katalin BOHÁCS – Assistant research fellow
Roland SZABÓ – Assistant research fellow
Nóra Halyag-Papp - Assistant research fellow
Roland Róber ROMENDA – PhD Student

Academic Calendar for the 2019/20/1 semester

For international students starting in September 2019.

2 – 6 September 2019.	Registration week
5 September 2019. 10-12 AM	Orientation meeting
5 September 2019. 2-4 PM	Registration of international students
6 September 2019. 10:30 AM	Opening ceremony of the Academic year
9 September – 13 December 2019.	Education period (14 weeks)
18 September 2019. (WE)	University Sports Day (no education)
27 September 2019. (FA)	European Researcher's Night
23 October 2019. (WE)	Holiday (no education)
1 November 2019. (FA)	Holiday (no education)
2 – 16 December 2019.	Exam registration period
9 – 13 December 2019. (MO - FA)	Pre-exam session
16 – 20 December 2019.; 2 January – 1 February 2020.	Exam session (6 weeks)
23 December 2019. - 1 January 2020.	Christmas holiday (university buildings are closed except dormitories)

Offices for student administration

Stipendium Hungaricum Office
A/4 bld. Second floor, Room 111
Facutly administrator: **Anett Dudás**
hkanett@uni-miskolc.hu

Dean's Office
Faculty administrator: **Emília Gaszner**
mfkto@uni-miskolc.hu
A/1 bld. 2Nd floor, room 221.

- Neptun administration
- management of applications (course registration issues, exam registration issues, issue of certification of attendance)

Students Union (HÖK)
International affairs referee: **Viktor Kótai**
kotai.viktoruni@gmail.com

Procedures and rules

The procedures and rules regarding the education, teaching and examinations are registered in the Requirements for Students (volume III. of the Organizational and Operational Regulations of the University of Miskolc). The Requirements for Students contains a general part which is applicable to all students of the University. Implementing Regulations (IR) include specific rules for the MFK Programmes.

Requirements for Students is available at http://stipendium.uni-miskolc.hu/rules_and_requirements .

Implementing Regulations are available at http://mfk.uni-miskolc.hu/wp/en/?page_id=730

Application forms used at the Faculty can be downloaded from .http://mfk.uni-miskolc.hu/wp/en/?page_id=730

ELECTRONIC ADMINISTRATION

At the University of Miskolci, the dominant part of the student administration is completed through the NEPTUN student information system. It allows you to complete the registration for a semester, courses and exams as well as to submit applications and manage financal duties.

The NEPTUN 3R site of the university is available through the central homepage (www.uni-miskolc.hu), or directly at the https://neptun31.uni-miskolc.hu/hallgato/Login.aspx?timeout= address. A detailed user guide can be reached from that homepage.

Grades of exams and practical marks are also recorded in the neptun. Main rules for exams are as follows:

The student may take the exam only after registration validated in the NEPTUN system.

Identity of the student shall be approved at the start of the exam by showing a valid document of identification containing a picture (identity card, student card, passport, etc.).

When giving an assessment of an oral examination, the examiner will put into the examination record sheet the grade and will sign the examination record sheet, and in case the student requests so, the examiner also puts the grade into the printout of completed records supplied by the student together with his/her signature. On the basis of the examination records sheet, the examiner shall enter the examination grade in the Neptun system on the day of the examination. The examination record sheets shall be kept in the department/institute for five years.

In the case of written examinations, the examiner shall mark the exam and write the grade on the examination paper as well as the examination record sheet, which is to be printed out from the Neptun system beforehand, and shall sign both. On the basis of the examination record sheet, the examiner shall enter the grade in the Neptun system within two days at the latest. Examination papers shall be kept in the given department/institute for one year.

Students may file an objection regarding wrong assessment data appearing in the Neptun system within fourteen days, as a term of preclusion, following the end of the examination period. For decision making regarding the objection, the document of primary relevance and orientation will be the examination record sheet signed by the examiner, which is kept by the department /institute administration as opposed to the data in the Neptun system. In case the assessment in the examination record sheet and the completion sheet or the registration course book are different from each other, those in the registration course book or the completion sheet shall be considered valid.

In the case of end-of-term grades (practical marks), the course leader makes a written record of the grades on a print-out of the student list from the Neptun system, which he/she will duly sign to certify, and then on the basis, of this he/she will enter the grade in the Neptun system. The paper-based record shall be kept by the departmental/institute administration for five years.

Earth Sciences Engineering masters program

- Programme title: **Earth Sciences Engineering masters program (MSc)**
- Degree awarded: **Earth Sciences Engineer**

- minor specialisations:
  - Geological Engineering module,
  - Geophysical Engineering module,
  - Geoinformatics Engineering module.
- Number of semesters:4; number of contact hours: 1380; required number of credits to be completed: 120
- Field practice: Minimum 4 weeks internship at a mining company, research institute or competent authority.

PROGRAMME OVERVIEW

General courses (Basic subjects form natural sciences – NS; Economic and human subjects – EH; Basic professional subjects – PS)

semester	course	group	Course code	Lect.	Prac.	ECTS	assignment	lecturer
1	Numerical and Optimization Methods	NS	GEMAK712MA	1	1	2	P	Dr. Mészáros Józsefné
1	Engineering physics	NS	MFGFT7100011	2	1	4	E	Dr. Dobróka Mihály
1	Physical geology	NS	MFFTT710001	2	1	4	E	Dr. Hartai Éva
1	Mineralogy and geochemistry	NS	MFFAT710005	2	1	4	E	Dr. Zajzon Norbert
1	Geodesy, spatial informatics	NS	MFGGT710002	2	1	4	E	Dr. Bartha Gábor
1	Computer Sciences for Engineers	NS	GEMAK713MA	0	2	2	P	Dr. Mészáros Józsefné
1	Geophysical exploration methods I.	PS	MFGFT7100021	2	1	4	E	Dr. Szabó Norbert Péter
1	Data and information processing	PS	MFGFT7100031	2	1	4	P	Dr. Dobróka Mihály
1	Graduate research seminar	EH	MFFAT710006	0	1	2	P	Dr. Mádai Ferenc
2	Structural geology	PS	MFFAT720020	1	2	4	E	Dr. Németh Norbert
2	Mineral deposits	PS	MFFTT720021	2	1	4	E	Dr. Zajzon Norbert
2	Engineering geology and hydrogeology	PS	MFKHT720020	2	1	4	E	Dr. Szűcs Péter
2	Analytical technics in mineralogy and petrology	PS	MFFAT720025	1	1	2	P	Dr. Zajzon Norbert
3	Geological interpretation and prospecting	PS	MFFAT730026	2	2	4	E	Dr. Földessy János
3	Geophysical interpretation and prospecting	PS	MFGFT730025	2	2	4	E	Dr. Takács Ernő
3	Quality management	EH	GTVVE7002MA	2	0	2	P	Dr. Berényi László
3	Legal and economic studies for mining and geology	EH	MFFTT730027	2	0	2	E	Dr. Mádai Ferenc
3	Diploma thesis consultation 1.		MFGFT730028 MFFTT730009			6		

semester	course	group	Course code	Lect.	Prac.	ECTS	assignment	lecturer
4	Strategic Management	EH	GTVVE7041MA	2	0	2	E	Dr. Kunos István
4	Safety techniques and labor safety	EH	MFKOT740010	2	0	2	E	Dr. Szabó Tibor
4	Diploma thesis consultation 2.		MFGFT740010 MFFTT740010			24		
Geophysical engineering module (Specific professional subjects – SPS)								
2	Geophysical measurements	SPS	MFGFT720012	2	1	4	E	Dr. Vass Péter
2	Engineering and environmental geophysics	SPS	MFGFT720013	2	1	4	P	Dr. Szabó Norbert Péter
2	Geophysical inversion	SPS	MFGFT720014	2	2	4	E	Dr. Dobróka Mihály
2	Geophysical exploration methods II.	SPS	MFGFT720015	2	1	4	E	Dr. Vass Péter
3	Geophysical data processing	SPS	MFGFT730026	2	2	4	E	Dr. Turai Endre
3	Geostatistics	SPS	MFGFT730017	1	1	2	E	Dr. Szabó Norbert Péter
3	*Elective course I.*	*EL*		*2*	*2*	*4*	*E*	
	Geoelectric lectureship		MFGFT730031					Dr. Turai Endre
	Seismic college		MFGFT730029					Dr. Ormos Tamás
	Well-logging college		MFGFT730030					Dr. Szabó Norbert
3	*Elective course II.*	*EL*		*2*	*2*	*4*	*E*	
	Global environmental geophysics		MFGFT730027					Dr. Pethő Gábor
	Introduction to English geophysical literature		MFGFT730041					Dr. Szabó Norbert Péter
	Engineering programming		MFGFT6011V					Dr. Vass Péter
Geological engineering module (Specific professional subjects – SPS)								
2	Historical geology	SPS	MFFTT720028	2	1	4	E	Dr. Less György
2	Hydrocarbon geology	SPS	MFFAT720029	2	0	2	E	Dr. Velledits Felicitasz
2	Geological mapping	SPS	MFFTT720029	1	2	4	P	Dr. Less György
2	Sedimentology	SPS	MFFAT720030	1	1	2	P	Dr. Velledits Felicitasz
2	Geochemical prospecting methods	SPS	MFFAT720031	1	2	4	P	Dr. Mádai Ferenc
3	Non-metallic industrial minerals	SPS	MFFTT730030	2	2	4	E	Dr. Kristály Ferenc
3	Applied environmental geology	SPS	MFFAT730032	2	1	4	E	Dr. Mádai Viktor
3	*Elective course I.*	*EL*		*2*	*2*	*4*	*E*	
	Sedimentology of carbonate reservoirs		MFFAT730015	2	2	4	E	Dr. Velledits Felicitász
	X-ray diffraction applications for Petroleum Geology		MFFAT730042	2	1	4		Dr. Kristály Ferenc
3	*Elective course II.*	*EL*		*1*	*1*	*2*	*P*	
	Mineral rescurces of the Carpathians		MFFAT730031					Dr. Szakáll Sándor

semester	course	group	Course code	Lect.	Prac.	ECTS	assignment	lecturer
	Introduction to ore microscopy		MFFAT730043					Dr. Zajzon Norbert
	Engineering programming		MFGFT6011V					Dr. Vass Péter

Graduation requirements:

- Students must have completed all the core, specialization and elective course requirements.
- Students must have achieved a minimum of 180 credits.
- Students will have successfully completed the mandatory internship.
- Students will have submitted a Thesis Work.
- Students will have fulfilled all administrative and financial requirements towards the university.

Graduation comprises two parts: the defend of the Thesis Work and passing final exams.
The final exam is an oral exam, discussing the the following topics:

- on the Geological engineering module:
  - Geological and geophysical interpretation and prospecting (A1)
  - Geology (A2)
  - Mineral deposits (A3)
- on the Geophysical engineering module:
  - Geological and geophysical interpretation and prospecting (A1)
  - Geophysics (A2)
  - One topic from the elective subjects (A3)

The overall result of the final examination (ZV) is calculated as:

$$ZV=(A1+A2+A3+3\times D) / 6$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1, A2 and A3 = grades of the three exams.
- Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 the lowest grade). The lowest passing grade is 2.

MSc in Environmental Engineering

Programme title: **Environmental Engineering master program (MSc)**
Degree awarded: **Environmental Engineer**
Number of semesters: 4; number of contact hours: 1081 / 1065 depending on specialisation;
Specialisations: Remediation and environmental geotechnics; Waste management
Required number of credits to be completed: 120
Field practice: Minimum 4 weeks internship at a company, research institute or competent authority.

Programme overview

Basic courses in natural sciences – NS; Economic and human courses – EH; Basic professional courses – PC

Sem.	course	type	Course code	lect	pract	ECTS	Assign	Course leader	Required base
1	Analytical chemistry	NS	AKKEM6010M	2	2	4	E	Dr. Gábor Muránszki	
1	Environmental geology	NS	MFFTT710008	2	1	4	E	Dr. Viktor Mádai	
1	Basics of environmental processing	NS	MFEET710005	1	1	2	P	Dr. József Faitli	
1	Ecology and nature protection	NS	MFKHT710009	1	2	3	P	Dr. Teofil Fülöp	
1	Soil and water chemistry	NS	AKKEM6009M	1	2	4	E	Dr. János Lakatos	
1	Computer science for engineers	NS	GEMAK713M	0	2	2	P	Dr. Józsefné Mészáros	
1	Numerical methods and optimization	NS	GEMAK712M	1	1	2	E	Dr. Józsefné Mészáros	
1	Chemical technologies in environmental protection	DP	MFEET730016	1	1	2	P	Dr. Ljudmilla Bokányi	
1	Basics of waste management	PC	MFETT710010	2	1	3	E	Dr. Gábor Mucsi	
2	Applied physical chemistry	NS	AKKEM6008M	2	1	3	E	Dr. Béla Viskolcz	
2	Environmental economics	EH	GTERG204MKMA	2	0	2	E	Dr. Tekla Sebestyénné Szép	
2	Waste disposal, landfill operation and reclamation	PC	MFKHT720040	2	1	4	E	Dr. Tamás Madarász	
2	Environmental and engineering geophysics	PC	MFGFT720018	2	2	4	E	Dr. Norbert Péter Szabó	
2	Water quality protection	PC	MFKHT720023	1	1	3	E	Dr. Péter Szűcs	
3	Environmental and waste manegement law	EH	AJAMU04MF1N	2	0	2	E	Dr. Ede János Szilágyi	
3	Methods of environmental assessment	EH	MFKHT730013	0	2	2	P	Dr. Balázs Zákányi	
3	Quality management	EH	GTVVE7002MA	2	0	2	E	Dr. László Berényi	
3	Waste incineration and air quality protection	PS	MAKETT730018	2	1	4	E	Dr. András Kállay	
3	Water and waste water treatment	PC	MFEET730001A	1	1	2	E	Dr. Sándor Nagy	
3	Thesis work 1		MFKHT730045 MFEET730045	0	0	6	R		
4	Occupational health and safety	EH	MFKHT740025	2	0	2	E	Dr. Zákányiné Dr Renáta Mészáros	
4	*Elective course 2*	*EL*		*2*	*1*	*3*	*P*		
4	Thesis work 2		MFKHT740035 MFEET740035	0	0	24	R		

Remediation and environmental geotechnics specialisation (Differentiated professional unit - DP)									
1	Hydrogeology	DP	MFKHT710017	2	2	5	E	Dr. Péter Szűcs	
2	Groundwater flow and contaminant transport modelling	DP	MFKHT7200061	2	2	5	E	Dr. Balázs Kovács	
2	Geotechnical engineering	DP	MFKHT720025	2	1	4	E	Dr. Tamás Madarász	
2	Contaminated site remediation	DP	MFKHT720030	2	1	4	E	Dr. Tamás Madarász	
3	Environmental geotechnics	DP	MFKHT730030	1	1	2	E	Dr. Andrea Tóth Kolencsikné	
3	Environmental geochemistry	DP	MFFAT730009	2	0	2	E	Dr. Sándor Szakáll	
3	Environmental risk assessment and remediation	DP	MFKHT730026	2	0	3	E	Dr. Tamás Madarász	
3	Geographic information system	DP	MFKFT730012	2	1	3	E	Dr. János Vágó	
3	*Elective course 1*	*EL*		*2*	*1*	*3*	*E*		
	Recycling of Metalic and Rubber Wastes		MFKHT73005					Dr. Nagy Sándor	
	Recycling of Plastic and Paper Wastes		MFEET730019					Dr. Gombkötő Imre	
	Surfer for Windows hands-on training		MFKHT73005					Dr. Mikita Viktória	

Waste management specialisation (Differentiated professional unit - DP)									
1	Handling of processing and biodegradable wastes	DP	MFEET710006	2	1	3	E	Dr. Ljudmilla Bokányi	
2	Mechanical, - and biological treatment of municipal solid waste	DP	MFEET720015	1	2	4	E	Dr. Ljudmilla Bokányi	
2	Sampling and qualification of waste	DP	MFEET720016	1	1	2	P	Dr. József Faitli	
2	Treatment and processing of construction, industrial- and glass wastes	DP	MFEET720017	1	1	3	E	Dr. Gábor Mucsi	
2	Design fundamentals of waste preparation technological processes	DP	MFEET720018	2	2	5	E	Dr. József Faitli	
3	Recycling of metallic and rubber wastes	DP	MFEET730018	0	2	3	P	Dr. Sándor Nagy	
3	Recycling of plastic and paper wastes	DP	MFEET730019	0	2	3	P	Dr. Imre Gombkötő	
3	Waste processing machines and their operation	DP	MFEET730020	2	2	5	E	Dr. Ádám Rácz	
3	*Elective course 1*	*EL*		*2*	*1*	*3*	*E*		
	Environmental Risk assessmnet and remediation		MFKHT730026					Dr. Madarász Tamás	
	Geographic Information System		MFKFT730012					Dr. Vágó János	
	Surfer for Windows hands-on training		MFKHT73005					Dr. Mikita Viktória	

Graduation requirements:

Students must have completed all the core, specialization and elective course requirements.
Students must have achieved a minimum of 120 credits.
Students will have successfully completed the mandatory internship.
Students will have submitted a Thesis Work.
Students will have fulfilled all administrative and financial requirements towards the university.

Graduation comprises two parts: the defend of the Thesis Work and passing final exams.

The final exam is an oral exam, discussing the following topics:

On the '***Remediation and environmental geotechnics***' specialisation:

Topic 1	Waste management, waste incineration
Topic 2	Remediation of contamination (Water chemistry, Soil treatment, Remediation, Risk assessment)

On the '***Waste management***' specialisation:

Topic 1	Waste management, waste incineration
Topic 2	Environmental processing: Process engineering, Design of waste processing technologies

The overall result of the final examination (ZV) is calculated on the '***Waste management'*** as:

$$ZV = \frac{\frac{A1 + A2}{2} + D}{2}$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1, A2 = grades of exams.
- **Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 the lowest grade). The lowest passing grade is 2.**

The overall result of the final examination (ZV) is calculated on the '***Remediation and environmental geotechnics***' as:

$$ZV = \frac{\frac{A1 + A2}{2} + D}{2}$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1, A2 = grades of exams.
- **Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 the lowest grade). The lowest passing grade is 2.**

MSc in Hydrogeology engineering program

- Programme title: Hydrogeology **Engineering masters program (MSc)**
- Degree awarded: Hydrogeologist **Engineer**
- Number of semesters: 4; number of contact hours: 1305; required number of credits to be completed: 120
- Field practice: Minimum 4 weeks internship at a mining company, research institute or competent authority.

PROGRAMME OVERVIEW

General courses (Basic subject from natural sciences – NS; Economical and human subjects – EH; Basic Subjects in hydrogeology – H; Special subjects in hydrogeology and diploma work – DW)

Sem.	Subject		Neptun code	L	P	Cr	assignment	lecturer	pre-requirement
1	Computer sciences for engineers	NS	GEMAK713MA	0	2	2	P	Dr. Mészáros Józsefné	no
1	Numerical methods and optimization	NS	GEMAK712MA	1	1	2	P	Dr. Mészáros Józsefné	no
1	Environmental geology	NS	MFFTT710008	2	1	4	E	Dr. Mádai Viktor	no
1	Geodesy, spatial informatics	NS	MFGGT710002	2	1	4	E	Dr. Bartha Gábor	no
1	Mineralogy and geochemistry	NS	MFFAT710005	2	1	4	E	Dr. Zajzon Norbert	no
1	Soil mechanics	NS	MFKHT710008	2	1	4	E	Dr. Madarász Tamás	no
1	Gradual research seminar	EH	MFFAT710006	0	2	2	P	Dr. Mádai Ferenc	no
1	Fluid mechanics	H	MFKGT710005	2	1	3	E	Dr. Tóth Anikó Nóra	no
1	Hydrogeology	H	MFKHT710017	2	2	5	E	Dr. Szűcs Péter	no
						30			
2	Groundwater prospecting, water resources management	H	MFKHT720021	2	1	4	E	Kolencsikné Dr. Tóth Andrea	no
2	Applied and engineering hydrology	H	MFKHT720022	1	1	2	P	Dr. Szőllősi-Nagy András	no
2	Water quality protection	H	MFKHT720023	1	1	3	E	Dr. Szűcs Péter	no
2	Geophysics of exploration for water	H	MFGFT720024	2	2	5	E	Dr. Vass Péter	no
2	Geotechnical engineering	H	MFKHT720025	2	1	4	E	Dr. Madarász Tamás	no
2	Water chemistry	H	AKKEM6005	1	1	2	E	Dr. Lakatos János	no
2	Hydrogeology of Hungary	H	MFKHT720026	2	0	2	E	Dr. Darabos Enikő	no
2	Waterworks, water supply	DW	MFKHT720027	1	1	3	E	Dr. Madarász Tamás	no
2	GW flow and contaminant transport modeling	DW	MFKHT720028	2	2	5	E	Dr. Kovács Balázs	MFKHT710017
						30			
3	Quality management	HS	GTVVE7002MA	2	0	2	E	Dr. Berényi László	no
3	Legal and economic studies with reg. to mining and geol.	HS	MFFTT730027	2	0	2	E	Dr. Mádai Ferenc	no
3	Geotermics	DW	MFKGT730021	1	1	2	E	Dr. Tóth Anikó Nóra	no
3	Watermining	DW	MFKHT740021	2	0	3	E	Dr. Lénárt László	no
3	Hydrogeological interpretation	DW	MFKHT730024	1	1	2	P	Dr. Madarász Tamás	MFKHT710017
3	Drilling, deep drilling	DW	MFKOT730029	1	1	2	P	Dr. Szabó Tibor	
3	Water and waste water purification	DW	MFEET730028	1	1	2	P	Dr. Nagy Sándor	no
3	Environmental risk assessment and remediation	DW	MFKHT730026	2	0	3	E	Dr. Madarász Tamás	no

Sem.	Subject		Neptun code	L	P	Cr	assignment	lecturer	pre-requirement
3	Environmental geotechnics	DW	MFKHT730030	1	1	2	E	Kolencsikné Dr. Tóth Andrea	MFKHT710008
3	Diploma work consultation	DW	MFKHT730033	0	0	6	R		
3	*Optional subject group (1)*	DW		2	1	3	E		no
	Surfer for Windows hands-on training	DW	*MFKHT73005*					Dr. Mikita Viktória	no
3	*Optional subject group (2)*	DW		1	2	3	P		no
	Well-field and groundwater resources protection	DW	MFKHT730032					Dr. Perger László	no
	Remote sensing	DW	MFFTT730032					Dr. Németh Norbert	no
						32			
4	Safety techniques, labour safety	EH	MFKOT740010	2	0	2	E	Dr. Szabó Tibor	no
4	Strategic management	EH	GTVVE7041MA	2	0	2	E	Dr. Balaton Károly	GTVVE7002MA
4	Diplom work consultation II.	DW	MFKHT740022	0	0	24	R		
						28			

Graduation requirements:

- Students must have completed all the core, specialization and elective course requirements.
- Students must have achieved a minimum of 120 credits.
- Students will have successfully completed the mandatory internship.
- Students will have submitted a Thesis Work.
- Students will have fulfilled all administrative and financial requirements towards the university.

Graduation comprises two parts: the defend of the Thesis Work and passing final exams.

The final exam is an oral exam, discussing the the following topics:

- Hidrogeology and Watermining subjects (A1)
- Groundwater prospecting, water resources management and Geotechnical engineering subjects (A2)

The overall result of the final examination (ZV) is calculated as:

$$ZV = \frac{\frac{A1 + A2}{2} + D}{2}$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1 and A2 = grades of the two exams.
- Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 the lowest grade). The lowest passing grade is 2.

MSc in Petroleum Engineering program

- Programme title: **MSc in Petroleum Engineering**
- Degree awarded: Petroleum Engineer
- Number of semesters: 4; number of contact hours: 1051; required number of credits to be completed: 120
- Field practice: Minimum 4 weeks internship at a mining company, research institute or competent authority.

Programme overview
(BASIC COURSES IN NATURAL SCIENCES – NS; ECONOMIC AND HUMAN COURSES – EH; DRILLING TECHNOLOGY COURSES – DT; PETROLEUM PRODUCTION COURSES – PP; RESERVOIR MECHANICS COURSES – RM; PETROLEUM TRANSPORTATION COURSES -PT; ELECTIVE COURSES - EL)

Sem.	course	type	Course code	lect	pract	ECTS	Assign	Course leader	Required base
1	Numerical methods and optimization	NS	GEMAK712MA	1	1	2	P	Dr. Mészáros Józsefné	no
1	Applied geology	NS	MFFTT710003	2	1	3	E	Dr. Velledits Felicitász	no
1	Computer applications II.	NS	MFKOT720021	0	3	3	P	Dr. Turzó Zoltán	no
1	Applied geophysics	NS	MFFGT7100051	2	1	3	E	Dr. Pethő Gábor	no
1	Oilfield chemistry	NS	MFKOT720011	2	1	3	E	Dr. Lakatos István	MFKOT710004
1	Geothermal energy	NS	MFKGT740011	2	0	3	P	Dr. Tóth Anikó	no
1	Petroleum economics	EH	MFKOT720012	2	0	2	E	Dr. Komlósi Zsolt	no
1	HSE in petroleum engineering	EH	MFKOT71011	2	0	3	E	Dr. Szabó Tibor	no
1	*Compulsory electives I.*	*EL*		*2*	*0*	*2*	*E*		*no*
	Gas Processing		MFKOT77003					Dr. Turzó Zoltán	
	Well tests		MFKOT77002					Dr. Turzó Zoltán	
	Basic concepts of Geology		MFFFT250					Dr. Hartai Éva	
1	*Compulsory electives II.*	*EL*		*2*	*0*	*2*	*E*		*no*
	Hydrogeology		MFKHT730017					Dr. Szűcs Péter	
	Geothermal well drilling		MFKOT730025					Dr. Federer Imre	
	Gas Processing		MFKOT77003					Dr. Turzó Zoltán	
1	*Free electives*	*EL*		*2*	*0*	*2*	*E*		
	Well tests		MFKOT77002					Dr. Turzó Zoltán	
	Basic concepts of Geology		MFFFT250					Dr. Hartai Éva	
						28			
2	Computer applications I.	NS	MFKOT10019	0	3	3	P	Dr. Turzó Zoltán	no
2	Graduate research seminar	EH	MFFAT720006	0	1	2	P	Dr. Mádai Ferenc	no
2	Drilling engineering I.	DT	MFKOT720022	2	2	6	E	Dr. Szabó Tibor	MFKOT710002
2	Well control lab.	DT	MFKOT730014	0	3	3	P	Dr. Szabó Tibor	no
2	Production engineering fundamentals	PP	MFKOT720025	2	2	6	E	Dr. Takács Gábor	no
2	Artificial lifting I.	PP	MFKOT720017	3	0	3	E	Dr. Takács Gábor	MFKOT710005
2	Reservoir engineering fundamentals	RM	MFKOT720024	2	2	6	E	Dr. Kovácsné Dr. Féderer Gabriella	no
2	Fluid mechanics	PT	MFKGT710005	3	0	3	K	Dr. Tóth Anikó	no
						32			
3	Drilling engineering II.	DT	MFKOT730033	2	2	5	E	Dr. Szabó Tibor	MFKOT710002
3	Artificial lifting II.	PP	MFKOT730031	2	2	6	E	Dr. Takács Gábor	MFKOT720017
3	Flow in porous media	RM	MFKOT730035	0	3	3	P	Dr. Turzó Zoltán	MFKOT710004

3	Material balance	RM	MFKOT730026	2	1	3	E	Dr. Kovácsné Dr. Féderer Gabriella	MFKOT710004
3	Transport of hydrocarbons	PT	MFKOT730036	2	0	2	P	Dr. Turzó Zoltán	no
3	Thesis work I.		MFKOT730030	0	13	13	R		
						32			
4	Well completion design	DT	MFKOT720014	2	1	3	E	Dr. Szabó Tibor	MFKOT710002
4	NODAL analysis applications	PP	MFKOT730016	0	2	2	P	Dr. Turzó Zoltán	MFKOT720010
4	Reservoir management simulation lab.	RM	MFKOT730015	0	3	3	P	Dr. Turzó Zoltán	MFKOT710004
4	EOR methods	RM	MFKOT740013	2	1	3	E	Dr. Turzó Zoltán	MFKOT710004
4	Thesis work 2.		MFKOT7400021	0	17	17	R		MFKOT730020
						28			

Graduation requirements:

- Students must have completed all the core, elective course requirements.
- Students must have achieved a minimum of 120 credits.
- Students will have successfully completed the mandatory internship.
- Students will have submitted a Thesis Work.
- Students will have fulfilled all administrative and financial requirements towards the university.

Graduation comprises two parts: the defend of the Thesis Work and passing final exams.
The final exam is an oral exam, discussing the following topics:
Drilling engineering and well completion; Reservoir mechanics; Petroleum production technology

The overall result of the final examination (ZV) is calculated as:

$$, ZV = \frac{\frac{A1 + A2 + A3}{3} + D}{2}$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1 = grade of final exam on Drilling engineering and well completion topics,
- A2 = grade of final exam on Reservoir mechanics topics,
- A3 = grade of final exam on Petroleum production topics.

Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 (the lowest grade). The lowest passing grade is 2

MSc in Petroleum Geoengineering program

- Programme title: Petroleum Geoengineering masters course (MSc)
- Degree awarded: Petroleum Geoengineer
- Number of semesters: 4; number of contact hours: 1148; required number of credits to be completed: 120
- Field practice: Minimum 4 weeks internship at a mining company, research institute or competent authority.

PROGRAMME OVERVIEW

Basic courses in natural sciences – NS; Economic and human courses – EH; Basic professional courses – BP, Differentiated professional courses - DP)

semester	course	type	Course code	lect.	prac.	ECTS	Assign	Course leader
1	Structural geology	NS	MFFTT710004	1	2	3	p.m.	Dr. Németh Norbert
1	Stratigraphy	NS	MFFTT710005	2	1	3	exam	Dr. Less György
1	Sedimentology of carbonate reservoirs	NS	MFFTT710006	1	1	2	exam	Dr. Velledits Felicitász Margit
1	Introduction to applied geophysics	NS	MFGFT7100052	2	1	3	exam	Dr. Vass Péter
1	Introduction to petrophysics	NS	MFGFT710006	2	1	3	exam	Dr. Szabó Norbert Péter
1	Applied petrology	NS	MFFAT710008	2	1	3	exam	Dr. Mádai Ferenc
1	Oilfield hydrogeology	BP	MFKHT730014	2	1	3	exam	Dr. Szűcs Péter
1	Geostatistics	BP	MFGFT710007	2	1	3	exam	Dr. Szabó Norbert Péter
1	Drilling engineering, HSE	BP	MFKOT710010	2	2	4	p.m.	Dr. Szabó Tibor
	Elective course 1.	EH		0	2	2	p.m.	
1	Introduction to geophysical scientific literature		MFGFT710008					Dr. Szabó Norbert Péter
1	Graduate research seminar		MFFAT720007					Dr. Mádai Ferenc
						29		
2	Basin modeling	BP	MFFAT720011	2	2	4	p.m.	Dr. Mádai Viktor
2	Exploration seismic techniques and interpretation	BP	MFGFT720016	2	2	4	exam	Dr. Fancsik Tamás
2	Petrophysics-Well log interpretation	BP	MFGFT720019	2	2	4	exam	Dr. Vass Péter
2	Exploration geochemistry of hydrocarbons	BP	MFFAT720012	2	1	3	exam	Hámorné Dr. Vidó Mária
2	Geothermal systems and transport modeling	DP	MFKGT720016	2	1	3	exam	Dr. Tóth Anikó Nóra
2	Oilfield Chemistry	BP	MFKOT720011	2	1	3	exam	Dr. Lakatos István János
2	Analysis of petroleum systems, prospect evaluation	DP	MFFAT730003	0	2	2	p.m.	Kiss Károly
2	Core analysis	DP	MFFAT720015	0	3	3	p.m.	Dr. Velledits Felicitász Margit
2	Sedimentology of clastic reservoirs	DP	MFFTT720005	2	1	3	exam	Dr. Juhász Györgyi

semester	course	type	Course code	lect.	prac.	ECTS	Assign	Course leader
						29		
3	Estimation of resources/reserves	DP	MFFAT720014	1	1	2	p.m.	Kiss Károly
3	Reservoir geology and modelling	DP	MFFAT730002	2	1	3	exam	Dr. Mádai Viktor
3	In-field seismic techniques and interpretation	DP	MFGFT730012	1	3	4	p.m.	Dr. Gombár László
3	Petroleum economics	DP	MFKOT730022	2	0	2	p.m.	Dr. Komlósi Zsolt
3	Wellsite geology	BP	MFFTT710007	1	2	3	p.m.	Balogh József
3	Planning, implementing and managing E&P projects	DP	MFFAT730005	1	1	2	p.m.	Dr. Mádai Ferenc
3	Reservoir and production engineering	DP	MFKOT730023	3	1	4	exam	Dr. Turzó Zoltán
3	Project work	DP	MFFAT730006	0	8	8	p.m.	Dr. Less György
	Elective course 1.	DP		1	1	4	p.m.	
3	X-ray diffraction applications for petroleum geology		MFFAT730008					Dr. Kristály Ferenc
3	Basic data processing methods for oilfield geophysics and petrophysics		MFGFT730013					Dr. Turai Endre
3	Computer-aided well log analysis		MFGFT73012					Dr. Vass Péter
						32		
4	Thesis work I.	DP	MFGFT740003			18		
4	Thesis work 2	DP	MFFTT740002			12		
						30		

Graduation requirements:

- Students must have completed all the core, specialization and elective course requirements.
- Students must have achieved a minimum of 180 credits.
- Students will have successfully completed the mandatory internship.
- Students will have submitted a Thesis Work.
- Students will have fulfilled all administrative and financial requirements towards the university.

Graduation comprises two parts: the defend of the Thesis Work and passing final exams.
The final exam is an oral exam, discussing the the following topics:

- Integration of geophysical and geological methods in exploration
- Implementation of exploration projects
- Integration of geosciences and engineering

The overall result of the final examination (ZV) is calculated as:

$$ZV = \frac{\frac{A1 + A2 + A3}{3} + D}{2}$$

where:

- D = the final grade of the Thesis work, defined by the examination board,
- A1, A2 and A3 = grades of the three exams.
- Grades are integer numbers and given on a scale from 5 (the highest grade) to 1 the lowest grade). The lowest passing grade is 2.

Students' Union (HÖK) information

Dear Freshman Students!

First of all let me welcome you in the name of the Students' Union of the University of Miskolc, Faculty of Earth Science and Engineering, and let me congratulate you for your successful admission!

These couple of lines were made for your sakes, to help you get a brighter picture about the operating organizations in the University of Miskolc.

Advocacy is provided by the Students' Union of the University of Miskolc (ME-HÖK). The Students' Union as a part of the University's council provides students their subjective rights. Everyone who is studying in the University of Miskolc is part of the Students' Union. Thanks to that, this organization is trying to protect every student's collective and personal rights. Their role is to contact the leaders of the University, HÖK and HÖOK.

Students of the Faculty of Earth Science and Engineering choose certain people from each year and department to represent them in:

- Faculty Council,
- Committee of Studies,
- Disciplinary Committee,
- controls the scholarship cases,
- proposes ideas about the curriculum,
- Admissions Committee,
- reviews the teachers.

One of the Students' Union committee is the Students Scholarship Committee (DÖB). This committee is in control of the social supports, single supports and emphasized scholarships.
Another committee is the Committee of the Dormitories (KB). Affairs that affect the University itself each faculty gets to send 3 person and each faculty's Students' Union presidents decides about the case.
Their job is:

- They choose the president of the Students' Union,
- control student's advocacy,
- take part in the University Council,
- take part in cultural and sport activities,
- take part in national and international studies.

Best of luck to your studies!

With best regards:

Alfréd Tóth
MFK-HÖK president

Student Research Group on Natural Resources Exploration and Utilization

You got talent!

The Student Research Group on Natural Resources Exploration and Utilization is waiting You!
The Student Research Group collects the most talent BSc and MSc students of the Faculty. Our members receive efficient support from industrial and academic mentors, do activities according to an individual training plan, in the same time join an active community. The Research Group organizes or promotes several professional events such as field trips, company visits, workshops, conferences, lectures of Hungarian or foreign industry professionals and researchers.
Members of the Research Group have priority to join research activity at our departments. The most important advantage of the Research Group is to be a member of an active, mindful community, what is the powerful engine of any scientific activity.

Dear young friend! If you feel extra capacity, please join our community and blossom your talent! We are waiting for your application by sending your short CV to the below e-mail address.
Research Group programs in this semester start with a three-days field trip in early October.

Sincerely

János Földessy
Professor Emeritus
President of the Student Research Group
foldfj@uni-miskolc.hu

Location of important places