

Main subjects

Specialization subjects



Ms Earth Sciences Engineering Geological specialization							
sem.	course code	course	Institute	ECTS	lect.	pract.	assign
1	GEMAK712MA	Numerical and Optimization Methods	Institute of Mathematics	2	1	1	g
1	MFGFT7100011	Engineering physics	Institute of Geophysics and Geoinformatics	4	2	1	k
1	MFFTT710001	Physical geology	Institute of Mineralogy and Geology	4	2	1	k
1	MFFAT710005	Mineralogy and geochemistry	Institute of Mineralogy and Geology	4	2	1	k
1	MFGGT710002	Geodesy, spatial informatics	Institute of Geophysics and Geoinformatics	4	2	1	k
1	GEMAK713MA	Computer Sciences for Engineers	Institute of Mathematics	2	0	2	g
1	MFGFT7100021	Geophysical exploration methods I.	Institute of Geophysics and Geoinformatics	4	2	1	k
1	MFGFT7100031	Data and information processing	Institute of Geophysics and Geoinformatics	4	2	1	g
1	MFFAT720007	Graduate research seminar	Institute of Mineralogy and Geology	2	0	1	g
				30			
2	MFFAT720020	Structural geology	Institute of Mineralogy and Geology	4	1	2	k
2	MFFTT720021	Mineral deposits	Institute of Mineralogy and Geology	4	2	1	k
2	MFKHT720020	Engineering geology and hydrogeology	Institute of Environmental Management	4	2	1	k
2	MFFAT720025	Analytical technics in mineralogy and petrology	Institute of Mineralogy and Geology	2	1	1	g
2	MFFTT720028	Historical geology	Institute of Mineralogy and Geology	4	2	1	k
2	MFFAT720029	Hydrocarbon geology	Institute of Mineralogy and Geology	2	2	0	k
2	MFFTT720029	Geological mapping	Institute of Mineralogy and Geology	4	1	2	g
2	MFFAT720030	Sedimentology	Institute of Mineralogy and Geology	2	1	1	g
2	MFFAT720031	Geochemical prospecting methods	Institute of Mineralogy and Geology	4	1	2	g
				30			
3	MFFAT730026	Geological interpretation and prospecting	Institute of Mineralogy and Geology	4	2	1	k
3	MFGFT730025	Geophysical interpretation and prospecting	Institute of Geophysics and Geoinformatics	4	2	2	k
3	GTVVE7002MA	Quality management	Institute of Management Science	2	2	0	g
3	MFFTT730027	Legal and economic studies for mining and geology	Institute of Mineralogy and Geology	2	2	0	k
3	MFFTT730030	Non-metallic industrial minerals	Institute of Mineralogy and Geology	4	2	2	k
3	MFFAT730032	Applied environmental geology	Institute of Mineralogy and Geology	4	2	2	k
3		Elective course I.		4	2	2	k
3		Elective course II.		2	2	0	k

Main subjects

Specialization subjects



**Ms Earth Sciences Engineering
Geological specialization**

sem.	course code	course	Institute	ECTS	lect.	pract.	assign
3	MFFTT730009	Diploma thesis consultation 1.		6	0	0	b
				32			
4	GTVVE7041MA	Strategic Management	Institute of Management Science	2	2	0	k
4	MFKHT741010	Safety techniques and labor safety	Institute of Environmental Management	2	2	0	k
4	MFFTT740010	Diploma thesis consultation 2.		24	0	0	b
				28			

Required number of credits	120
Number of semesters	4
Field practice	4 weeks (160 working hours)
Leader of the specialisation	Institute of Mineralogy and Geology
Subjects of the final examination	Geology Geological and geophysical interpretation and prospecting Mineral deposits

The overall result of the final examination (ZV)	$ZV = \frac{(A1 + A2 + A3) + D}{4}$ <p>where</p> <p>D = the result of the thesis defense</p> <p>A1 = the result of oral examination (<i>Geology</i>)</p> <p>A2 = the result of oral examination (<i>Geological and geophysical interpretation and prospecting</i>)</p> <p>A3 = the result of oral examination (<i>Mineral deposits</i>)</p>
--	---

Main subjects

Specialization subjects



Ms Earth Sciences Engineering Geophysical specialization							
sem.	course code	course	Institute	ECTS	lect.	pract.	assign
1	GEMAK712MA	Numerical and Optimization Methods	Institute of Mathematics	2	1	1	g
1	MFGFT7100011	Engineering physics	Institute of Geophysics and Geoinformatics	4	2	1	k
1	MFFTT710001	Physical geology	Institute of Mineralogy and Geology	4	2	1	k
1	MFFAT710005	Mineralogy and geochemistry	Institute of Mineralogy and Geology	4	2	1	k
1	MFGGT710002	Geodesy, spatial informatics	Institute of Geophysics and Geoinformatics	4	2	1	k
1	GEMAK713MA	Computer Sciences for Engineers	Department of Applied Mathematics	2	0	2	g
1	MFGFT7100021	Geophysical exploration methods I.	Institute of Geophysics and Geoinformatics	4	2	1	k
1	MFGFT7100031	Data and information processing	Institute of Geophysics and Geoinformatics	4	2	1	g
1	MFFAT720007	Graduate research seminar	Institute of Mineralogy and Geology	2	0	1	g
				30			
2	MFFAT720020	Structural geology	Institute of Mineralogy and Geology	4	1	2	k
2	MFFTT720021	Mineral deposits	Institute of Mineralogy and Geology	4	2	1	k
2	MFKHT720020	Engineering geology and hydrogeology	Institute of Environmental Management	4	2	1	k
2	MFFAT720025	Analytical technics in mineralogy and petrology	Institute of Mineralogy and Geology	2	1	1	g
2	MFGFT720012	Geophysical measurements	Institute of Geophysics and Geoinformatics	4	2	1	k
2	MFGFT720013	Engineering and environmental geophysics	Institute of Geophysics and Geoinformatics	4	2	1	g
2	MFGFT720014	Geophysical inversion	Institute of Geophysics and Geoinformatics	2	1	1	k
2	MFGFT720011	Engineering Physics II.	Institute of Geophysics and Geoinformatics	2	1	1	g
2	MFGFT720015	Geophysical exploration methods II.	Institute of Geophysics and Geoinformatics	4	2	1	k
				30			
3	MFFAT730026	Geological interpretation and prospecting	Institute of Mineralogy and Geology	4	2	1	k
3	MFGFT730025	Geophysical interpretation and prospecting	Institute of Geophysics and Geoinformatics	4	2	2	k
3	GTVVE7002MA	Quality management	Institute of Management Science	2	2	0	g
3	MFFTT730027	Legal and economic studies for mining and geology	Institute of Mineralogy and Geology	2	2	0	k
3	MFGFT730026	Geophysical data processing	Institute of Geophysics and Geoinformatics	4	2	2	k
3	MFGFT730017	Geostatistics	Institute of Geophysics and Geoinformatics	4	2	2	k
3		Elective course I.		4	2	2	k
3		Elective course II.		2	2	0	k
	MFGFT730028	Diploma thesis consultation 1.		6	0	0	b

Main subjects

Specialization subjects



Ms Earth Sciences Engineering Geophysical specialization							
sem.	course code	course	Institute	ECTS	lect.	pract.	assign
				32			
4	GTVVE7041MA	Strategic Management	Institute of Management Science	2	2	0	k
4	MFKHT741010	Safety techniques and labor safety	Institute of Environmental Management	2	2	0	k
4	MFGFT740010	Diploma thesis consultation 2.		24	0	0	b
				28			

Required number of credits	120
Number of semesters	4
Field practice	4 weeks (160 working hours)
Leader of the specialisation	Institute of Geophysics and Geoinformatics
Záróvizsga-tárgyak	Geophysics Geological and geophysical interpretation and prospecting Elective subject (one topic from the elective subjects)

The overall result of the final examination (ZV)	$ZV = \frac{(A1 + A2 + A3) + D}{4}$ where D = the result of the thesis defense A1 = the result of oral examination (<i>Geophysics</i>) A2 = the result of oral examination (<i>Geological and geophysical interpretation and prospecting</i>) A3 = the result of oral examination (<i>Elective subject</i>)
--	---