



**UNIVERSITY OF MINING AND GEOLOGY "ST. IVAN RILSKI"
SOFIA**

FACULTY OF GEOLOGY AND EXPLORATION

CURRICULUM

VOCATIONAL FIELD:	5.8 EXPLORATION, MINING, AND PROCESSING OF MINERALS
COURSE OF STUDY	ECONOMY OF FOSSIL FUELS
EDUCATIONAL AND QUALIFICATION DEGREE	MASTER
PROFFESIONAL QUALIFICATION	ENGINEER – GEOLOGICAL EXPLORATION
FORM OF STUDY:	PART-TIME
<i>DURATION OF STUDY</i>	1.5 YEARS

Accepted on meeting of AC of UMG "St. Iv. Rilski".
Protocol №10/06.07.2021 г.

HEAD OF DEPARTMENT "GEOLOGY AND EXPLORATION OF
MINERAL RESOURCES":

(Assoc. Prof. Dr. K. Popov)

DEAN:

(Assoc. Prof. Dr. B. Valchev)

Sofia, 2021

CURRICULUM

EDUCATIONAL AND QUALIFICATION DEGREE: "MASTER"

COURSE OF STUDY: "ECONOMY OF FOSSIL FUELS", Vocational field: Petroleum Geology

VOCATIONAL FIELD: 5.8 EXPLORATION, MINING, AND PROCESSING OF MINERALS

FORM OF STUDY: PART-TIME

DURATION OF STUDY: 1.5 YEARS

Duration of each semester: 15 weeks

Year	Semester	№	Course unit code	Full name of the course units (course projects, practical training)	Form of control	Teaching hours (weekly)		Overall teaching hours by type of seminar			Overall academic load per semester	Credits acc. to ECTS	
						L	S	S	Lab	P			
First	First	1	112135	Organic Geochemistry	E	15	15		15		30	5	
		2	112119	Unconventional Hydrocarbon Resources	E	15	15		15		30	5	
		3	112136	Basin Analysis	E	23	22	22			45	7	
		4	112122	Reservoir Geology	E	15	15	15			30	5	
				<i>Elective course units</i>									
		5		Block 1 (1 of the following):		CA	15	15		15		30	5
			112250	1. Seismic Methods and Seismic Stratigraphy									
			142209	2. Well-logging									
			112223	3. Computer Technologies and Modelling in Petroleum Geology									
	6		Block 2 (1 of the following):		CA	15	15	15			30	5.0	
		162262	1. Drilling for Oil and Gas										
		162263	2. Oil and Gas Production, Transport and Storage										
		112260	3. Underground Energy Storage										
	Overall for the first semester					4+2	98	97	82	15		195	32
	Second	Second			Block "Legislative regulations"								
			7	272161	1. Regulatory and contractual relations in the exploration and extraction of fossil fuels		E	15	15	15		30	5
			8	272162	2. Energy policy, integration and energy security		E	15	15	15		30	5
					Block "Economy of fossil fuels"								
9			272240	1. Innovation and investment management		E	15	15	15		30	5	
10			272126	2. Economic assessment of fossil fuels		E	15	15	15		30	5	
				Block "Environmental protection and sustainable development"									
11			172157	1. Legal and organizational aspects of environmental protection		CA	15	15	15		30	5	
12			172174	2. Ecological risks and effective environmental management in the exploration and extraction of energy resources		CA	15	15	15		30	5	
Overall for the second semester					4+2	90	90	90		180	30		
Second	Third	13	112147	Pre-diploma practice			18 days (6 hours/day)				108	10	
		14	112158	Diploma design								15	
				Diploma defense									
OVERALL FOR THE FULL COURSE OF STUDY					8+4	188	187	172	15		483	87	

** Teaching hours and credits of optional course units, which are excluded from the total.

Abbreviations: E - examination; CA - continuous assessment; L - lectures; Lab - laboratory seminars; S - seminars; P - practical seminars.

Parameters of the Curriculum:

Overall teaching hours for the full course of study:	468
Academic load:	360
lectures:	180
seminars:	180
- seminars	120
- laboratory seminars	60
- practical seminars	
Extracurricular load (practical training):	108
Number of exams:	8
Items of continuous assessment:	4

CURRICULUM

EDUCATIONAL AND QUALIFICATION DEGREE: "MASTER"

COURSE OF STUDY: "ECONOMY OF FOSSIL FUELS", II vocational field: Coal Geology

VOCATIONAL FIELD: 5.8 EXPLORATION, MINING, AND PROCESSING OF MINERALS

FORM OF STUDY: PART-TIME

DURATION OF STUDY: 1.5 YEARS

Duration of each semester: 15 weeks

Year	Semester	№	Course unit code	Full name of the course units (course projects, practical training)	Form of control	Teaching hours (weekly)		Overall teaching hours by type of seminar			Overall academic load per semester	Credits acc. to ECTS	
						L	S	S	Lab	P			
First	First	1	112135	Organic Geochemistry	E	15	15		15		30	5	
		2	112127	Organic Petrology	E	15	15		15		30	5	
		3	122110	Facies and paleogeography analysis	E	15	15	15			30	5	
		4	112155	Geological and Industrial Assessment of Coal Fields	E	15	15	15			30	5	
		5	112156	Ecological and Geochemical Aspects in the Study of Coal		15	15		15		30	5	
				<i>Elective course units</i>									
		6		<i>Geophysics (1 of the following):</i>	CA	15	15		15		30	5	
			112250	1. Seismic Methods and Seismic Stratigraphy									
			142209	2. Drilling Geophysics									
	Overall for the first semester					4+2	90	90	30	60		180	30
	Second	Block "Legislative regulations"											
		7	272161	1. Regulatory and contractual relations in the exploration and extraction of fossil fuels	E	15	15	15			30	5	
		8	272162	2. Energy policy, integration and energy security	E	15	15	15			30	5	
		Block "Economy of fossil fuels"											
		9	272240	1. Innovation and investment management	E	15	15	15			30	5	
		10	272126	2. Economic assessment of fossil fuels	E	15	15	15			30	5	
		Block "Environmental protection and sustainable development"											
		11	172157	1. Legal and organizational aspects of environmental protection	CA	15	15	15			30	5	
12		172174	2. Ecological risks and effective environmental management in the exploration and extraction of energy resources	CA	15	15	15			30	5		
Overall for the second semester					4+2	90	90	90			180	30	
Second	Third	13	112147	Pre-diploma practice		18 days (6 hours/day)				108	10		
		14	112158	Diploma design							15		
				Diploma defense									
OVERALL FOR THE FULL COURSE OF STUDY					8+4	180	180	120	60		468	85	

** Teaching hours and credits of optional course units, which are excluded from the total.

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Parameters of the Curriculum:

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