



FACULTY OF GEOLOGY AND EXPLORATION

C U R R I C U L U M

<u>VOCATIONAL FIELD:</u>	4.4. EARTH SCIENCES
<u>COURSE OF STUDY:</u>	APPLIED GEOPHYSICS
<u>EDUCATIONAL AND QUALIFICATION DEGREE:</u>	MASTER
<u>VOCATIONAL QUALIFICATION:</u>	ENGINEER AND GEOPHYSICIST
<u>FORM OF STUDY:</u>	PART-TIME
<u>DURATION OF STUDY:</u>	1 YEAR

Adopted at a session of the Academic Council of the University of Mining and Geology "St. Ivan Rilski"

Minutes № 10 / 06th July 2021

HEAD OF DEPARTMENT "APPLIED GEOPHYSICS":

(Prof. St. Dimovski, D.Sc.)

DEAN:

(Assoc. Prof. Dr. B. Valchev)

CURRICULUM
EDUCATIONAL AND QUALIFICATION DEGREE: MASTER
COURSE OF STUDY: APPLIED GEOPHYSICS
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Year	Semester	№	Course unit code	Full name of the course units (course projects, practical training)	Form of control	Overall teaching hours		Overall teaching hours by type of seminar			Overall academic load per semester	Credits acc. to ECTS		
						L	S	S	Lab	P				
First	First	1	142131	Methods of Solving Ill-Conditioned Problems in Geophysics	E	23	23	8	15		46	7		
		2	142132	Engineering Geophysics	E	23	23		15	8	46	7		
		3	142102	Pre-Processing and Graphical Presentation of Geophysical Data	CA	15	23		23		38	5		
		4	142133	Statistical Methods of Analysis, Processing, and Interpreting of Geophysical Data	E	15	23		23		38	6		
		5	142234	<i>Elective course unit</i>		E	15	23	23			38	5	
				- Applied Mathematics										
				- Radiowave Methods and Equipment in Geophysics										
		5	142235	- Physical Field Theory										
	222300			Foreign Language – <i>Optional course unit</i>										
		372300	Physical Education and Sports – <i>Optional course unit</i>											
	Overall for the first semester												4+1	91
	Second	Second	6	142137	Exploration Geophysics	E	23	23		15	8	46	7	
			7	142140	Earth Magnetism and Geoelectrical Fields	E	23	23		15	8	46	7	
			8	142141	Gravimetry	E	15	23		15	8	38	5	
			9	142242	<i>Elective course unit</i>		CA	15	23		23		38	5
					- Analysis and Automatic Processing of Geophysical Signals									
10			142243	- Numerical Processing of Images		E	15	23	8	15		38	6	
				142244	- Seismology and Fundamentals of Seismic Zonation									
					142245									- Geothermics
222300	Foreign Language – <i>Optional course unit</i>													
	372300	Physical Education and Sports – <i>Optional course unit</i>												
Overall for the second semester						4+1	91	115	8	83	24			
Overall for the first year					8+2	182	230	39	159	32	412	60		
Development and defence of the diploma paper												15		
OVERALL FOR THE FULL COURSE OF STUDY					8+2	182	230	39	159	32	412	75		

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:	412
Academic load:	412
Lectures:	182
Seminars:	230
- seminars	39
- laboratory seminars	159
- practical seminars	32
Number of exams:	8
Items of continuous assessment	2