



**FACULTY OF GEOLOGY AND EXPLORATION**

**CURRICULUM**

VACATIONAL FIELD	<b>5.8. EXPLORATION, MINING AND PROCESSING OF MINERALS</b>
COURSE OF STUDY	<b>APPLIED MINERALOGY</b>
EDUCATIONAL AND QUALIFICATION DEGREE	<b>MASTER</b>
PROFESIONAL QUALIFICATION	<b>ENGINEER – GEOLOGICAL EXPLORATION</b>
FORM OF STUDY	<b>PART-TIME</b>
DURATION OF STUDY	<b>1,5 YEARS</b>

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

HEAD OF DEPARTMENT "MINERALOGY AND PETROGRAPHY":

(Prof. Dr. S. Pristavova)

DEAN: .....

(Assoc. Prof. Dr. B. Valchev)

Sofia, 2021

**CURRICULUM**  
**EDUCATIONAL AND QUALIFICATION DEGREE: MASTER**  
**COURSE OF STUDY: APPLIED MINERALOGY IN ENGINEERING**  
**VOCATIONAL FIELD: 5.8. EXPLORATION, MINING AND PROCESSING OF MINERALS**

FORM OF STUDY: PART-TIME  
DURATION OF STUDY: 1,5 YEAR  
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	132109	Gemology	E	2	3		3		33	6	
		2	132110	Magmatism and Magmatic Processes	E	2	2		2		32	5	
		3	132111	Metamorphism and metamorphic processes	E	2	2		2		32	5	
		4	132111	Material Sciences and Technical Mineralogy	E	2	3		3		33	6	
		5	132146	Geoarcheology	E	2	2		2		32	5	
		6	132137	Gem testing and grading	CA	2	2		2		32	5	
	<b>Overall for the first semester</b>					<b>5+1</b>	<b>12</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>194</b>	<b>32</b>	
	Second	Second	7	132115	Topomineralogy	E	2	2		2		32	5
			8	132116	Geochemistry and mineralogy of the environment	E	2	3		3		33	6
			9	132117	Igneous, sedimentary and metamorphic complexes in Bulgaria	E	2	2		2		32	5
			10	132118	Technological and experimental mineralogy	E	2	2		2		32	5
			11	362147	Technology of cutting and evaluation of gem and deco	CA	2	3		3		33	6
					<i>Elective courses /one of the following/</i>	E	2	2		2		32	5
				132247	Crystal chemistry and structural analysis in mineralogy								
			132221	Rock alterations									
	242242		Technologies for the Processing of Industrial Minerals and Rocks										
	272260		Economics and Management of Mineral and Energy Resources										
<b>Overall for the second semester</b>					<b>5+1</b>	<b>12</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>194</b>	<b>32</b>		
Second	Third		112147	Pre-diploma practice							108	10	
		<b>Development and defence of the diploma paper</b>											15
<b>OVERALL FOR THE FULL COURSE OF STUDY</b>						<b>10+2</b>	<b>24</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>496</b>	<b>89</b>	

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: **496**  
Academic load: **390**  
lectures: **180**  
seminars:  
- seminars  
- laboratory seminars **210**  
- practical seminars **210**  
Extracurricular load (practical training): **108**  
Number of exams: **10**  
Items of continuous assessment: **2**