



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

FACULTY OF MINING TECHNOLOGY

CURRICULUM

VOCATIONAL FIELD:	5.8. EXPLORATION, MINING, AND PROCESSING OF MINERALS
COURSE OF STUDY:	BLASTING EQUIPMENT AND TECHNOLOGY
EDUCATIONAL AND QUALIFICATION DEGREE:	MASTER
PROFESSIONAL QUALIFICATION:	MINING ENGINEER IN BLASTING EQUIPMENT AND TECHNOLOGY
FORM OF STUDY:	PART-TIME
DURATION OF STUDY:	2 YEARS (four semesters)

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

Minutes № 10/6th July 2021

HEAD OF DEPARTMENT OF DEVELOPMENT OF MINERALS: _____
(Assoc. Prof. E. Aleksandrova, PhD)

DEAN: _____
(Prof. D.Sc. Valery Mitkov)

CURRICULUM

EDUCATIONAL AND QUALIFICATION DEGREE: MASTER

COURSE OF STUDY: BLASTING EQUIPMENT AND TECHNOLOGY

PROFESSIONAL QUALIFICATION: MINING ENGINEER IN BLASTING EQUIPMENT AND TECHNOLOGY

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DURATION OF EACH SEMESTER: 3 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	212154	Principles in the Theory of the Blasting Phenomenon and Blasting Agents	E	22	23	23			45	7
		2	212155	Norms and Regulations for Performing Blasting Operations	E	15	15	15			30	5
		3	212156	Control and Methods for the Testing of Blasting Materials	CA	15	15	15			30	5
		4	212157	Technology of Open Pit Mining of Minerals	E	15	15	15			30	6
		5	212158	Technologies of Underground Mining of Minerals	E	15	15	15			30	6
				<i>Optional:</i>								
			372300	Physical Education and Sports	CA*		15			15	28	1*
		Overall for the first semester				4+1	82	83	83	0	15	165
	Second	6	212159	Blasting Operations Safety	E	15	15	15			30	5
		7	212160	Design of Blasting Operations	E	15	15	15			30	5
		8	212161	Blasting Operation Technologies	E	15	15	15			30	5
		9	212162	Mechanisation in Blasting Operations	CA	15	15	15			30	5
		10	212163	Risk Assessment and Control in Blasting Operations	CA	15	15	15			30	5
		11	272147	Human Resource Management	E	22	8	8			30	6
				<i>Optional:</i>								
			372300	Physical Education and Sports	CA*		15			15	28	1*
	Overall for the second semester				4+2	97	83	83	0	15	180	31
	Overall for the first year				8+3	179	166	166	0	30	345	60
Second	Third	12	212164	Overground Blasting Operations	E	6	30	30			36	6
		13	212165	Underground Blasting Operations	E	6	30	30			36	6
		14	212166	Blasting Operations in Urban Conditions	E	6	30	30			36	6
		15	212167	Educational and research work	E	6	18	18			24	3
		16	232147	Fundamentals of Pyrotechnics. Production of Pyrotechnic Articles	E	18	18	18			36	6
				<i>Optional:</i>								
			372300	Physical Education and Sports	CA*		12			12	28	1*
		Overall for the third semester				5	42	126	126	0	12	168
	Fourth	17	212178	Pre-diploma practice, 10 days (60 academic hours)	CA						60	2
				Development and defence of a diploma thesis								15
				Overall for the fourth semester								17
		Overall for the second year				5+1	42	126	126	0	12	168
	OVERALL FOR THE FULL COURSE OF STUDY					13+4	221	292	292	0	42	513

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:	513 hours
Academic load:	513 hours
lectures:	221 hours
seminars:	292 hours
Extracurricular load (practical training):	60 hours
Number of exams:	13
Items of continuous assessment:	4