## MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K.I. SATPAYEV



WORKING CURRICULUM

Educational program -7M07203 - "Mining Engineering"

enrolment for 2021- 2022 academic year M116 - "Mining Engineering"

Term of study: 2 year Academic degree: Master of Engineering and Technology (profile dire

	Full-time study				Term of study: 2 year				mic degree.	ividster of Engineering and Technology		-	2 h	7 14 17	128 S	
year of study	Code	Name of course	Component	Credits	Total hours	lecture/ laboratory/ practice	SIS (including STIS), in hours	Prerequisites	Code	Name of course	Component	Credits	Total hour	lecture/ 🛬 laboratory/ practite 🚡	SIS (including STIS), in hour	Prerequisites
		1 semest	2 semester													
1	1 semester							T	AAP244	Pedagogical practice	BD IC	4				
	LNG210	reign language (professional)	BD IC	5	150	0/0/3	105		HUM210	History and philosophy of science	BD IC	4	120	1/0/1	90	
	HUM208	Management psychology	BD IC	3	120	1/0/1	90		HUM209	Higher school pedagogy	BD IC	4	120	1/0/1	90	
	MIN258	Innovative methods of drilling and blasting operations	BD OC	5	150	2/0/1	105		MIN260	Geotechnological processes in the development of mineral deposits	BD OC	5	150	2/0/1	105	
									MIN280	Process regulations and mining planning	BD OC					
	MIN299	Subsoil Code and rights regimes in subsoil use	PS IC	5	150	2/0/1	105		MIN297	Rational technology of vertical mining	BD OC	5	150	2/0/1	105	
									MIN271	Innovative methods of securing mining and underground structures	BD OC					
	MIN268	Digital technology in mining SMART Mine	PS IC	5	150	2/0/1	105	· ·	MIN259	Continuous Career Design Methodology	PS IC	5	150	2/0/1	105	
	MINZOO	Digital Collisions							MIN278	Technology of integrated development of underground space	BD OC	5	150	2/0/1	105	
	AAP242	Master's student scientific research, including an internship and a master's thesis.	MSSR	6					AAP242	Master's student scientific research, including an internship and a master's thesis	MSSR	6			9	
				29		+	+	+	1	In total:		38				
	In total: 29 3 semester										4 semester					_
2	MIN273	Design of underground mines	PS OC	5	150	2/0/1	105		AAP236	Research scientific training	PS	7				
	MIN211	Methodology for the construction of underground structures											-			-
	MIN253	Metro Underground Construction Technology	PS OC	5	150	2/0/1	105								-	-
	MIN285	Modernization of the processes of horizontal and inclined mine workings	1300			27071				Registration and defense of the master's thesis (RaDMT)				-	-	-
	MIN700	Highly safe mining operations in deep quarries	PS OC	5	150	2/0/1	105		ECA205		FA	12		-		-
	MIN701	Intensification of reclamation of lands disturbed by open-pit mining											-	-		+
	MIN295	Technology of laying-of the develped space	PS OC	5	150	2/0/1	105									
	MIN296	Rational technologies for development of placer deposits	15 50						AAP242	Master's student scientific research, including an internship and a master's thesis	s. MSSR	6	-		+	+
	MIN298	Resource Saving Integrated Mineral Resources	PS OC	S OC 5 150 2/0/1 1	150	2/0/1	105			In total:		25	-		+-	
	MIN294	Methods of coal mining in sections						in total:								
	A A P242	Master's student scientific research, including an	MSSR	6												

Decision of the Academic Board of KazNRTU named after K.I.Satpayev, Protocol No.  $\frac{3}{2}$  of "  $\frac{25}{2021}$ ".

Decision of the Academic Board of the Institute of Geology, Oil and mining Protocol No. 5 of "24 12 2020

Vice-rector for academic affairs

B.A. Zhautikov

Director of the Institute of Geology, Oil and mining

A.Kh. Syzdykov

Head of the Department "Mining"

S.K.Moldabayev

Chairman of the Specialty Council from employers.

N.S. Buktukov

 Number of credits for the whole period of study

 Cycles of disciplines
 Credits

 The cycle of general education
 0

 A cycle of basic disciplines ( BD IC, BD OC)
 35

 A cycle of principal subjects (PS IC, PS OC)
 52

 All on the theoretical classes:
 87

 MSSR
 24

 Registration and defense of the master's thesis (RaDMT)
 12