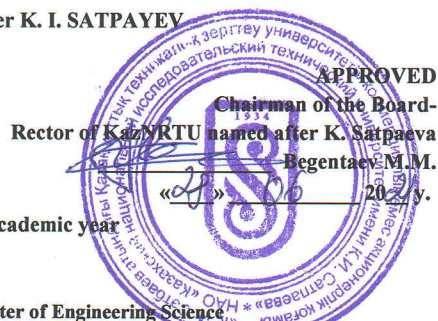


MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN  
KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY named after K. I. SATPAYEV



MODULAR EDUCATIONAL PROGRAM for admission for the 2019-2020 academic year

Educational program 7M07203 - "Mining Engineering "

Group of educational programs M116 - "Mining Engineering"

Academic degree: Master of Engineering Science

Form of study: daytime

Study duration: 2 years

Year of study	Discipline Code	Name of disciplines	semester	Cycle	Credits	Total hours	classroom volume lx / lab / pr	ISW (including ISWT) in hours	form of control	Competencies
<b>Basic training module</b>										
<b>University component</b>										
1	LNG205	Foreign language (professional)	1	BD IC	5	150	0/0/3	105	E	no
1	HUM201	History and philosophy of science	1	BD IC	4	90	1/0/1	60	E	no
1	HUM205	Higher education pedagogy	1	BD IC	4	90	1/0/1	60	E	no
1	HUM204	Psychology of management	1	BD IC	4	90	1/0/1	60	E	no
<b>Required Component / Component of choice</b>										
1	MIN250	Innovative methods of drilling and blasting	1	BD OC	5	150	2/0/1	105	E	MIN442
1	MIN278	Technology of integrated development of underground space								MIN101
1	MIN260	Geotechnological processes in the development of mineral deposits	2	BD OC	5	150	2/0/1	105	E	MIN101
1	MIN280	Process regulations and mining planning								MIN101
1	MIN259	Continuous Career Design Methodology	2	BD OC	5	150	2/0/1	105	E	MIN101
1	MIN271	Innovative methods of securing mining and underground structures								MIN101
<b>Profile training module</b>										
<b>Required Component / Component of choice</b>										
1	MAT232	Mathematical modeling of engineering problems (Python MatLab)	1	PD RC	5	90	1/0/1	60	E	MIN101
1	MIN268	Digital technology in mining SMART Mine	1	PD RC	5	150	1/0/2	105	E	MIN101
1	MIN281	The development of the construction of shafts								MIN448
1	MIN282	Mining fastenings in the construction of underground structures	2	PD OC	4	90	1/0/1	60	E	MIN448
1	MIN283	Subsoil Code and rights regimes in subsoil use								MIN101
1	MIN284	Resource Saving Integrated Mineral Resources	2	PD RC	4	90	1/0/1	60	E	MIN101
2	MIN253	Technology of construction of metropolitan								MIN448
2	MIN285	Modernization of the processes of horizontal and inclined mine workings	3	PD OC	5	150	2/0/1	105	E	MIN448
2	MIN273	Design of underground mines								MIN101
2	MIN211	Methodology of designing of underground construction	3	PD OC	5	150	2/0/1	105	E	MIN448
2	MIN286	Highly safe mining operations in deep quarries								MIN101
2	MIN287	Intensification of reclamation of lands disturbed by open-pit mining	3	PD OC	4	90	1/0/1	60	E	MIN101
2	MIN290	Technology of laying-of the developed space								MIN448
2	MIN289	Mining management	3	PD OC	4	90	1/0/1	60	E	MIN101
2	MIN296	Rational technologies for development of placer deposits								MIN101
2	MIN288	Mining Production Analytics	3	PD OC	4	90	1/0/1	60	E	MIN101
<b>Practice-oriented module</b>										
	AAP228	Pedagogical practice	1	BD IC	3				Report	
	AAP233	Research practice	4	PD OC	9				Report	
<b>Science-research module</b>										
	AAP226	Research work of a master's student	2	NIRM	7				Report	
	AAP226	Research work of a master's student	3	NIRM	8				Report	
	AAP226	Research work of a master's student	4	NIRM	9				Report	
<b>Final certification module</b>										
<b>Required component</b>										
	ECA203	Registration and defense of a master's thesis	4	IA	12				Defense of dissertations	

The number of credits for the entire period of study

Discipline cycles	Credits
Cycle of basic disciplines (BD IC, BD OC)	35
Cycle of majors (PD OC, PS OC)	49
<b>Total theoretical training:</b>	<b>84</b>
MSSR	24
Registration and defense of a master's thesis	12
<b>TOTAL:</b>	<b>120</b>

The decision of the Academic Council of KazNRTU named after K. Satpayev. Protocol № 3 of "25" 06 2021 y.

Decision of the Academic Council of the Institute . Protocol № 5 of "24" 12 2021 y.

Vice-Rector for Academic Affairs

Director of the Institute

Head of the Department

Representative of the Specialty Council from employers

B.A. Zhautikov

K.B. Rysbekov

S.K. Moldabaev

N.S. Buktukov