



WORKING CURRICULUM
MAJOR CURRICULUM for 2019-2020 academic year admission
Educational program 6B07205 - "Mining engineering"
Group of Educational programs B071 - "Mining and extraction of minerals"

Full-time: study Study duration : 4 years Academic degree: bachelor of engineering and technology

Year of study	Code	Name of discipline	Cycle	Total Credits	total hours	lec/lab/pr/S/IS	pre-requisites	Code	Name of discipline	Cycle	Credits	total hours	lec/lab/pr/S/IS	pre-requisites	
1 semester (fall 2019)								2 semester (spring 2020)							
1	LNG 1051	Beginner (A1)	G	4	120	0/0/3	Diagnostic test	LNG 1052	Elementary English (A1)	G	4	120	0/0/3	LNG 1051	
	LNG 1052	Elementary English (A1)						LNG 1053	General English 1 (A2)					LNG 1052	
	LNG 1053	General English 1 (A2)						LNG 1054	General English 2 (A2)					LNG 1053	
	LNG 1054	General English 2 (A2)						LNG 1055	Academic English (B1)					LNG 1054	
	LNG 1055	Academic English (B1)						LNG1056	Business English (B2)					LNG 1055	
	LNG1056	Business English (B2)						LNG 1057	Professional English (B2+)					LNG1056	
	LNG1012	Kazakh/Russian (A2)	G	4	120	0/0/3	Diagnostic test	LNG1012.1	Academic Kazakh/Russian (B1)	G	4	120	0/0/3	LNG1012.1	
	LNG1012.1	Academic Kazakh/Russian (B1)						LNG1012.2	Business Kazakh/Russian (B2)					LNG1012.2	
	LNG1012.2	Business Kazakh/Russian (B2)						1106	Elective					LNG1012.2	
	MAT001	Algebra & Calculus Begin						MAT101	Mathematics I					MAT100	
	MAT101	Mathematics I						MAT102	Mathematics II					MAT101	
	PHY110	Physics Begin						PHY111	Physics I					PHY110	
PHY111	Physics I	PHY112	Physics II	PHY111											
HUM113	Contemporary History of Kazakhstan	G	5	150	1/0/2	no	MIN101	Bases of mining (Introduction to specialty)	P	5	150	1/0/2	no		
MAP160	Geodesy	B	5	150	1/2/0	no	GEO117	Fundamentals of Geology	B	5	150	2/0/1	no		
AAP122	Physical education I	G	4	60	0/0/2		AAP118	Physical education II	G	4	60	0/0/2			
in total:								in total:							
3 semester (fall 2020)								4 semester (spring 2021)							
2	LNG 1053	General English 1 (A2)	G	4	120	0/0/3	Diagnostic test	LNG 1052	General English 2 (A2)	G	4	120	0/0/3	LNG 1053	
	LNG 1054	General English 2 (A2)						LNG 1053	General English 1 (A2)					LNG 1054	
	LNG 1055	Academic English (B1)						LNG 1054	Academic English (B1)					LNG 1055	
	LNG1056	Business English (B2)						LNG 1055	Business English (B2)					LNG 1056	
	LNG 1057	Professional English (B2+)						LNG1056	Business English (B2)					LNG1056	
	LNG1056	Business English (B2)						LNG1057	Professional English (B2+)					LNG1056	
	MAT102	Mathematics II	B	5	150	1/0/2	Diagnostic test	MAT101	Mathematics III	B	5	150	1/0/2	MAT102	
	MAT103	Mathematics III						MAT102	Mathematics II					MAT103	
	CSE174	Information & Communication Technologies						MAT106	Ordinary Differentiation Equations MatLab					MAT103	
	PHY112	Physics II						HUM124	Philosophy					no	
	2208	Elective						MIN166	Classification of mining enterprises					MIN101	
	MIN180	Physics of rock mass						CHE192	Chemistry					MIN101	
MIN146	Shattering process	B	5	150	1/1/1	MIN101	2214	Elective	B	5	150	2/1/0			
in total:								in total:							
5 semester (fall 2021)								6 semester (spring 2022)							
3	MIN505	Borehole uranium production	B	5	150	1/0/2	MAT103	MIN458	Technology of underground mining operations	B	5	150	1/0/2	MIN101	
	MAT532	Mathematical processing of surveying and geodetic measurements						MAT105	Processing and processing of minerals					P	5
	HUM126	Social & Political Knowledge	G	8	240	4/0/0	no	MIN444	Datamine Workbook	B	5	150	1/0/2		
	MIN453	Open-cast mining technology	B	5	150	1/0/2	MIN101	3221	Elective	B	5	150	2/0/1		
	3217	Elective	B	5	150	2/0/1		3304	Elective	P	5	150	2/0/1		
	3218	Elective	B	5	150	2/0/1		3305	Elective	P	5	150	2/0/1		
	3302	Elective	P	5	150	2/0/1		3306	Elective	P	5	150	2/0/1		
	in total:								in total:						
7 semester (fall 2022)								8 semester (spring 2023)							
4	MIN481	Aerology of concussions	P	5	150	2/1/0		4310	Elective	P	5	150	2/0/1		
	4222	Elective	B	5	150	2/0/1		4311	Elective	P	5	150	2/0/1		
	4308	Elective	P	5	150	2/0/1		ECA003	Preparation & writing of thesis (project)	FA	6				
	4309	Elective	P	5	150	2/0/1		ECA103	Thesis (project) defence	FA	6				
in total:								in total:							

Year of study	Code	Name of discipline	Cycle	Credits
Additional types of training				
Mandatory types of training with a P/NP rating				
1	AAP101	Training Practice	B	2
2	AAP109	Industrial internship I	B	4
3	AAP103	Industrial internship II	P	8
Additional types of training				
1	AAP107	Sports Club sectional	G	0
2-3	AAP500	Military training	B	0

Number of credits for the entire period of study				
Cycles of disciplines	Credits			
	comp	ul-	lecti	total
The cycle of general educational disciplines (G)	55	9		64
The cycle of basic disciplines (B)	91	25		116
The cycle of profiling disciplines (P)	23	40		63
Total of theoretical study :	169	74		243
Final attestation (FA)	12	0		12
total	12	0		12
Classroom volume in theoretical training credits	181	74		255

The decision of the Academic Council of KazNRTU named after K.I.Satpayev. Protocol № 3 from 25.06.2021

Decision of of Geology, Oil and Mining institute Protocol № 5 from 12.12.2020

Vice-rector for academic affairs **B.A.Zhautykov**
 Director of Geology, Oil and Mining institute **A.Kh.Sydykov**
 Head of department "Mining" **S.K. Moldabayev**
 Representative of Specialty council **N.S. Buktukov**