

**CURRICULUM**

of Educational Program on enrollment for 2022-2023 academic year

Educational program 6B07206- "Industrial engineering"  
Group of Educational programs B069 - "Production of materials (glass, paper, plastic, wood)"

Form of study: full-time

Duration of study: 4 years

Academic degree: Bachelor of Engineering and Technology

Discipline code	Name of disciplines	Cycle	Total amount in credits	Total hours	classroom volume of lek/lab/pr	SIS (including TSIS) in hours	Form of control	Allocation of face-to-face training based on courses and semester						
								I course		II course		III course		IV course
								1 semester	2 semester	3 semester	4 semester	5 semester	6 semester	7 semester
<b>CYCLE OF GENERAL EDUCATION DISCIPLINES (GED)</b>														
<b>M-1. Module of language training</b>														
LNG 108	English language	GED, RC	10	300	0/0/6	210	E	5	5					
LNG 104	Kazakh (Russian) language	GED, RC	10	300	0/0/6	210	E	5	5					
<b>M-2. Module of physical training</b>														
KFK 101-104	Physical Culture	GED, RC	8	240	0/0/8	120	Difecredit	2	2	2	2			
<b>M-3. Module of information technology</b>														
CSE 677	Information and communication technologies (in English)	GED, RC	5	150	2/1/0	105	E				5			
<b>M-4. Module of socio-cultural development</b>														
HUM 100	Modern History of Kazakhstan	GED, RC	5	150	1/0/2	105	SE		5					
HUM 132	Philosophy	GED, RC	5	150	1/0/2	105	E				5			
HUM 120	Socio-political knowledge module (sociology, politology)	GED, RC	3	90	1/0/1	60	E				3			
HUM 134	Socio-political knowledge module (culturology, psychology)		5	150	2/0/1	150	E				5			
<b>M-5. Module of anti-corruption culture, ecology and life safety base</b>														
HUM 133	Fundamentals of anti-corruption culture	GED, CCH	5	150	2/0/1	150	E				5			
MNG 488	Fundamentals of Entrepreneurship and Leadership													
CHE 656	Ecology and life safety													
<b>CYCLE OF BASIC DISCIPLINES (BD)</b>														
<b>M-6. Module of physical and mathematical training</b>														
MAT 101	Mathematics I	BD, UC	5	150	1/0/2	105	E	5						
PHY 111	Physics I	BD, UC	5	150	1/1/1	105	E	5						
MAT 102	Mathematics II	BD, UC	5	150	1/0/2	105	E		5					
PHY 112	Physics II	BD, UC	5	150	1/1/1	105	E		5					
<b>M-7. General technical training module</b>														
MSM132	Introduction to engineering design	BD, UC	5	150	1/2/0	105	E	5						
CHE815	General chemistry	BD, UC	4	120	1/1/1	75	E	4						
MSM409	Standardization, interchangeability and technical measurements	BD, UC	6	180	2/1/1	120	E			6				
GEN408	Resistance of materials	BD, UC	5	150	1/1/1	105	E				5			
MSM106	Probabilistic models in industrial engineering	BD, UC	5	150	1/1/1	105	E				5			
GEN412	Theoretical mechanics	BD, UC	5	150	2/0/1	105	E				5			
MSM133	Structural materials and heat treatment	BD, UC	5	150	1/2/0	105	E				5			
MSM410	Theory of mechanisms and machine parts	BD, UC	5	150	1/1/1	105	E					5		
ELC101	Electrical and Electronics engineering	BD, UC	5	150	1/1/1	105	E				5			
ISO164	Qualimetry	BD, UC	5	150	2/0/1	105	E					5		
MCH416	Forging and hot stamping technology	BD, UC	5	150	1/2/0	105	E					5		
MSM419	Economics of a machine-building enterprise	BD, UC	5	150	1/0/2	105	E					5		
MSM420	Heating and heating devices	BD, UC	4	120	1/0/2	75	E					4		
MSM414	Automated design of PMP processes	BD, UC	6	180	2/0/2	120	E						6	
3201	Elective	BD, CCH	5	150	1/0/2	105	E					5		
3202	Elective	BD, CCH	5	150	1/0/2	105	E						5	
3203	Elective	BD, CCH	5	150	2/0/1	105	E						5	
3204	Elective	BD, CCH	5	150	1/0/2	105	E						5	



AAP184	Educational practice	BD, UC	2							2									
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**CYCLE OF PROFILE DISCIPLINES (PD)**

**M-8. Module of production and technological preparation**

SAF111	Labor protection	PD, UC	5	150	1/0/2	105	E												5
MCH158	Cold stamping technology	PD, UC	5	150	1/1/1	105	E												5
MSM129	Technological processes of machine-building production	PD, UC	5	150	2/1/0	105	E											5	
MSM411	Computer-aided design systems of machine structures	PD, UC	4	120	1/2/0	75	E											4	
3301	Elective	PD, CCH	5	150	2/0/1	105	E											5	
3302	Elective	PD, CCH	4	120	2/1/0	75	E											4	
4303	Elective	PD, CCH	6	180	2/0/2	120	E												6
4304	Elective	PD, CCH	6	180	2/0/2	120	E												6
4305	Elective	PD, CCH	5	150	1/2/0	105	E												
4306	Elective	PD, CCH	5	150	2/0/1	105	E												
AAP143	Production Practice I	PD, UC	2															2	
AAP183	Production Practice II	PD, UC	3																3

**M-9. Management training module**

4307	Elective R&D	PD, CCH	5	150	2/1/0	105	Report												
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**M-10. Module of final attestation**

ECA003	Preparation and writing of a thesis (project)	FA	6																
ECA103	Defense of the thesis (project)	FA	6																

**M-11. Module of additional types of training**

AAP500	Military affairs	ATT	0																
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Total based on UNIVERSITY:

	31	29	28	32	29	31	33
	60	60	60				6

Number of credits for the entire period of study					
Cycle code	Cycles of disciplines	Credits			Total
		required component (RC)	university component (UC)	component of choice (CCH)	
GED	Cycle of general education disciplines	51		5	56
BD	Cycle of basic disciplines		92	20	112
PD	Cycle of profile disciplines		24	36	60
	<i>Total for theoretical training:</i>	<i>51</i>	<i>116</i>	<i>61</i>	<i>228</i>
FA	Final attestation	12			12
	<b>TOTAL:</b>	<b>63</b>	<b>116</b>	<b>61</b>	<b>240</b>

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № 30 or "28" 04 2022 y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol № 7 or "28" 04 2022 y.

Decision of the Academic Council of the Institute E&ME, Protocol № 5 or "20" 04 2022 y.

Vice-Rector for Academic Affairs [Signature] B. A. Zhahtikov

E&ME Institute Director [Signature] K. Yelemessov

ME,SC&M Department Head [Signature] M. Issametova

Representative of the Council for EP from Employers [Signature] I. Dyusebaev