

KAZAKH NATIONAL RESEARCH TECHNICAL UNIVERSITY after K. SATBAYEV



MAJOR ELECTIVE DISCIPLINES educational program for the 2023-2024 academic year admission
 Educational program 6B07220 - "Machines and technologies for processing new materials"
 Group of Educational programs B069 - "Production of materials (glass, paper, plastic, wood)"

Full-time study

Study duration : 4 years

Academic degree: Bachelor of Engineering and Technology

Year of study	Code of elective	Code of discipline	Name of discipline	Semestr	Cycle	Credits	Total hours	lec/lab/pr	SIWT (including SIWT) in
General technical training module									
3	3201	MSM163	Theory of materials processing by pressure	6	BD CCH	5	150	1/0/2	105
		MSM164	Physical foundations of plastic deformation						
	3202	MSM167	Forging and stamping equipment	6	BD CCH	5	150	2/0/1	105
		MSM168	Pressing equipment						
	3203	MSM461	Design of forging and stamping equipment	6	BD CCH	5	150	2/1/0	105
		MSM462	Die tool design						
	3302	MSM415	Computer-aided design systems for pressure treatment of materials	6	PD CCH	4	120	1/2/0	75
		MSM454	Automation of material processing processes by pressure						
3305	MSM412	Composite materials processing technology	5	PD CCH	5	150	1/2/0	105	
	MSM128	Properties and processing of engineering materials					1/1/1		
Module of production and technological preparation									
4	4301	MCH159	Fundamentals of designing machines for pressure treatment	8	PD CCH	5	150	2/0/1	105
		MSM416	Welding equipment and tools						
	4303	MSM455	Organization and planning of forging and stamping production	7	PD CCH	6	180	2/0/2	120
		MSM421	Production design						
	4304	MSM453	Tool and mold design	7	PD CCH	6	180	2/0/2	120
		MSM413	Advanced materials processing technologies						
	4306	MCH149	CAM(Solidworks, Inventor)	8	PD CCH	5	150	1/2/0	105
		MSM119	Additive manufacturing					2/0/1	
Management training module									
4	4307	MNG481	Theory and practice of project management	8	PD CCH	5	150	2/0/1	105
		MSM418	Capstone Project					1/2/0	

Credits numbers of elective disciplines over the entire period of study	
Cycle of disciplines	Credits
Cycle of basic disciplines (B)	15
Cycle of special disciplines (S)	36
Overall:	51

Decision of the Academic Council of the Institute _E&ME_ , Protocol № 2 от " 11 " 10 20 23 г.

ME Department Head [Signature] E.Nugman

Specialty Council representative from employers [Signature] I. Dyusebaev