

MSM150	Calculation and design of cutting tools	BD, CCH	5	5	3	150	1/0/2	105	E									5		
CSE831	Fundamentals of Artificial Intelligence																			
MSM149	Hydraulics and hydropneumatic drive	BD, CCH	5	5	3	150	1/0/2	105	E											
MNG563	Fundamentals of sustainable development and ESG projects in Kazakhstan						2/0/1													
AAP196	Training Practice	BD, UC	2	2	2															2

CYCLE OF PROFILE DISCIPLINES (PD)

M-8. Module of production and technological preparation

HYD482	Labor protection and industrial safety (by industry)	BD, UC	5	5	3	150	2/0/1	105	E											5	
MSM176	Technology of mechanical engineering	PD, UC	5	5	3	150	1/0/2	105	E												5
MSM129	Technological processes of machine-building production	PD, UC	5	5	3	150	2/1/0	105	E												5
MSM114	Statistical methods in industrial engineering	PD, UC	5	5	3	150	1/1/1	105	E												5
MSM430	Robotization of machine-building production	PD, UC	6	6	4	180	2/1/1	120	E												6
MSM426	Design of machining on CNC machines	PD, UC	5	5	3	150	1/0/2	105	E												5
MSM457	Organization and planning of machine-building production	PD, UC	6	6	4	180	2/0/2	120	E												6

Elective disciplines of the PD

MSM192	Renovation technologies in Mechanical Engineering	PD, CCH	5	5	3	150	1/0/2	105	E												5
MSM119	Additive manufacturing						2/0/1														
MSM159	Design and calculation of technological equipment	PD, CCH	5	5	3	150	1/0/2	105	E												5
MSM431	Progressive methods of surface treatment						1/2/0														
AAP408	Industrial practice I	PD, UC	3		3																3
AAP176	Industrial practice II	PD, UC	5		5																5

M-9. Management training module (Elective R&D)

MNG481	Theory and practice of project management	PD, CCH	5	5	3	150	2/0/1	105	E												5
MSM418	Capstone Project						1/2/0														

M-10. Module of final attestation

ECA109	Writing and defending a thesis (project)	FE	8	8	8																	8
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M-11. Module of additional types of training

AAP500	Military affairs	ATT	0																			
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Total based on UNIVERSITY:

31	29	32	28	30	30	32	28
60		60		60		60	

Number of credits for the entire period of study

Cycle code	Cycles of disciplines	Credits			
		required component (RC)	university component (UC)	component of choice (CCH)	Total
GED	Cycle of general education disciplines	51		5	56
BD	Cycle of basic disciplines		111	10	121
PD	Cycle of profile disciplines		40	15	55
	Total for theoretical training:	51	151	30	232
FA	Final attestation	8			8
	TOTAL:	59	151	30	240

Decision of the Academic Council of Kazntu named after K.Satpayev. Protocol № ___ or "___" ___ 20__ y.

Decision of the Educational and Methodological Council of Kazntu named after K.Satpayev. Protocol № ___ or "___" ___ 20__ y.

Decision of the Academic Council of the Institute E&ME. Protocol № ___ or "___" ___ 20__ y.

Board Member -Vice-Rector for Academic Affairs

E&ME Institute Director

ME Department Head

Specialty Council representative from employers

R.Uskenbaeva

K.Yelemessov

E.Nugman

I. Dyusebaev