-	-	-	-	Form of control							number of credits		Total number of acad.hours						1st year		2nd Year		3rd Year		4th Year		Responsible academic department	
																			1st semester	2nd semester	3rd semester	4th semester	5th semester	6th semester	7th semester	8th semester		
To consider in the plan	Index	Name	Box/part	Examination	Credit	Graded test	Term project	Course work	Review work	Calculated graphic work	Expert	Fact	Expert	According to plan	Auditorium hours	AUD.	Solo work	Review work	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	Code	Name
Box 1.Discipline (modules)																												
Mandatory part																												
+	B1.O. 01	**Socio-humanitarian module**	**B1.O**	**135**	**2266**	**1**					21	**21**	**756**	**756**	**335.4**	**240**	**303**	**117.6**	6	4	4		3	4				
+	B1.O.01.01	History	B1.O	1							4	4	144	144	48.8	30	53	42.2	4								71	History
+	B1.O.01.02	Philosophy	B1.O	3							4	4	144	144	48.8	30	53	42.2			4						72	Philosophy and cultural studies
+	B1.O.01.03	Economics	B1.O	5							3	3	108	108	48.8	30	26	33.2					3				64	Economic theory
+	B1.O.01.04	Jurisprudence	B1.O		6						2	2	72	72	32.6	30	39.4							2			75	Social sciences, pedagogy and law
+	B1.O.01.05	**Basics of socio-cultural communication**	**B1.O**		**22**	**1**					6	**6**	**216**	**216**	**111.8**	**90**	**104.2**		2	4								
+	B1.O.01.05.01	Sociology	B1.O			1					2	2	72	72	46.6	30	25.4		2								75	Social sciences, pedagogy and law
+	B1.O.01.05.02	Cultural studies and intercultural communication	B1.O		2						2	2	72	72	32.6	30	39.4			2							72	Philosophy and cultural studies
+	B1.O.01.05.03	Psychology of communication	B1.O		2						2	2	72	72	32.6	30	39.4			2							75	Social sciences, pedagogy and law
+	B1.O.01.06	Economics and management of enterprise	B1.O		6						2	2	72	72	44.6	30	27.4							2			61	Production management
+	B1.O.02	**Module "Fundamentals of business communication"**	**B1.O**		**113**	**24**					10	**10**	**360**	**360**	**219**	**206**	**141**		4	2	2	2						
+	B1.O.02.01	Russian language and culture of speech	B1.O		1						2	2	72	72	32.6	30	39.4		2								76	Russian language
+	B1.O.02.02	Foreign language	B1.O		13	24					8	8	288	288	186.4	176	101.6		2	2	2	2					73	Foreign languages
+	B1.O.03	**Physical culture and sport**	**B1.O**		**16**						2	**2**	**72**	**72**	**32.6**	**32**	**39.4**		1					1				
+	B1.O.03.01	Basics of physical culture	B1.O		1						1	1	36	36	16.3	16	19.7		1								74	Physical culture
+	B1.O.03.02	Physical self-improvement	B1.O		6						1	1	36	36	16.3	16	19.7							1			74	Physical culture
+	B1.O.04	**Physical and mathematical module**	**B1.O**	**11222 334**	**11234**				**11222 33**		45	**45**	**1620**	**1620**	**733.4**	**632**	**558**	**328.6**	12	15	11	7						
+	B1.O.04.01	Informatics	B1.O	2	1						6	6	216	216	97.4	90	76.4	42.2	2	4							82	Computer science and information technology
+	B1.O.04.02	Information technology	B1.O		3						3	3	108	108	46.6	44	61.4				3						82	Computer science and information technology
+	B1.O.04.03	Physics	B1.O	3	2				23		8	8	288	288	127.4	120	118.4	42.2		3	5						83	Physics
+	B1.O.04.04	Chemistry	B1.O	1					1		4	4	144	144	64.8	60	37	42.2	4								84	Chemistry
+	B1.O.04.05	**Mathematics**	**B1.O**	**1223**	**1**				**1223**		17	**17**	**612**	**612**	**285.8**	**226**	**166.4**	**159.8**	6	8	3							
+	B1.O.04.05.01	Algebra and geometry	B1.O	1					1		4	4	144	144	62.8	44	39	42.2	4								81	Calculus
+	B1.O.04.05.02	Mathematical analysis	B1.O	2	1				22		7	7	252	252	109.4	90	100.4	42.2	2	5							81	Calculus
+	B1.O.04.05.03	Numerical methods	B1.O	2							3	3	108	108	50.8	46	15	42.2		3							81	Calculus
+	B1.O.04.05.04	Probability theory and mathematical statistics	B1.O	3					3		3	3	108	108	62.8	46	12	33.2			3						81	Calculus
+	B1.O.04.06	Research methods	B1.O	4							4	4	144	144	62.8	46	39	42.2				4					52	Computer-aided machine building
+	B1.O.04.07	Mathematical modeling	B1.O		4						3	3	108	108	48.6	46	59.4					3					82	Computer science and information technology
+	B1.O.05	**General professional module**	**B1.O**	**22344 56**	**1135**		**5**	**24**		**12334**	36	**36**	**1296**	**1296**	**595**	**522**	**459.6**	**241.4**	4	7	6	7	8	4				
+	B1.O.05.01	Engineering and computer graphics	B1.O	2	1					12	5	5	180	180	83.4	74	63.4	33.2	2	3							35	Engineering graphics
+	B1.O.05.02	Materials engineering	B1.O	2	1			2			6	6	216	216	100.4	90	82.4	33.2	2	4							52	Computer-aided machine building
+	B1.O.05.03	**Mechanics**	**B1.O**	**3445**	**3**		**5**	**4**		**334**	18	**18**	**648**	**648**	**299.8**	**268**	**215.4**	**132.8**			6	7	5					
+	B1.O.05.03.01	Theoretical mechanics	B1.O	3						3	4	4	144	144	65.8	60	45	33.2			4						34	Theory of mechanisms and machines, machine parts
+	B1.O.05.03.02	Structural performance of materials	B1.O	4	3					34	5	5	180	180	83.4	74	63.4	33.2			2	3					41	Shipbuilding
+	B1.O.05.03.03	Theory of machines and mechanisms	B1.O	4				4			4	4	144	144	67.8	60	43	33.2				4					34	Theory of mechanisms and machines, machine parts
+	B1.O.05.03.04	Machine parts and design principles	B1.O	5			5				5	5	180	180	82.8	74	64	33.2					5				34	Theory of mechanisms and machines, machine parts
+	B1.O.05.04	Hydraulics	B1.O		5						3	3	108	108	48.6	46	59.4						3				93	Water resources and water use
+	B1.O.05.05	Metrology, standardization and certification	B1.O	6							4	4	144	144	62.8	44	39	42.2						4			52	Computer-aided machine building
+	B1.O.06	**Module "Safe conditions of vital activities"**	**B1.O**	**7**	**5**						6	**6**	**216**	**216**	**111.4**	**90**	**62.4**	**42.2**					2		4			
+	B1.O.06.01	Ecology and environmental management	B1.O		5						2	2	72	72	46.6	30	25.4						2				11	Ichthyology and ecology
+	B1.O.06.02	Life safety	B1.O	7							4	4	144	144	64.8	60	37	42.2							4		23	Life safety
											120	*120*	*4320*	*4320*	*2026.8*	*1722*	*1563.4*	*729.8*	*27*	*28*	*23*	*16*	*13*	*9*	*4*			
The part formed by the participants of educational relations																												
+	B1.V. 01	**General professional module (In)**	**B1.V**	**5**	**3446**	**1**					16	**16**	**576**	**576**	**263.8**	**210**	**270**	**42.2**	2		2	5	4	3				
+	B1.V. 01.01	Introduction into a profession	B1.V			1					2	2	72	72	44.6	30	27.4		2								52	Computer-aided machine building
+	B1.V.01.02	Thermophysics	B1.V		3						2	2	72	72	32.6	30	39.4				2						32	Food refrigerating machines
+	B1.V.01.03	Tribology	B1.V		4						3	3	108	108	44.6	30	63.4					3					34	Theory of mechanisms and machines, machine parts
+	B1.V.01.04	Industrial gauging	B1.V		4						2	2	72	72	32.6	30	39.4					2					52	Computer-aided machine building
+	B1.V. 01.05	Electrical engineering and electronics	B1.V	5							4	4	144	144	64.8	60	37	42.2					4				51	Automation of productions
+	B1.V. 01.06	Fundamentals of engineering	B1.V		6						3	3	108	108	44.6	30	63.4							3			34	Theory of mechanisms and machines, machine parts
+	B1.V.02	**Professional module (B)**	**B1.V**	**45666 778**	**35667 7**		**6778**	**456**			49	**49**	**1764**	**1764**	**833**	**754**	**656.4**	**274.6**			2	4	8	15	15	5		
+	B1.V. 02.01	Construction materials engineering	B1.V	4	3			4			6	6	216	216	100.4	90	82.4	33.2			2	4					52	Computer-aided machine building
+	B1.V.02.02	Forming processes and tools	B1.V	5				5			5	5	180	180	81.8	74	65	33.2					5				52	Computer-aided machine building
+	B1.V.02.03	Technological equipment	B1.V	6	5		6				7	7	252	252	117.4	106	101.4	33.2					3	4			52	Computer-aided machine building
+	B1.V.02.04	Technological supply of machine-building production	B1.V	6							3	3	108	108	50.8	46	24	33.2						3			52	Computer-aided machine building
+	B1.V.02.05	Management of technical systems and processes	B1.V	6				6			4	4	144	144	67.8	60	43	33.2						4			52	Computer-aided machine building
+	B1.V.02.06	Lifting, loading and transportation gears	B1.V		6						2	2	72	72	32.6	30	39.4							2			34	Theory of mechanisms and machines, machine parts
+	B1.V.02.07	Design of machine building plants	B1.V	7			7				5	5	180	180	68.8	60	78	33.2							5		52	Computer-aided machine building
+	B1.V.02.08	Waste disposal in machine-building production	B1.V		7						3	3	108	108	76.6	74	31.4								3		52	Computer-aided machine building
+	B1.V.02.09	Machine-building technology	B1.V	7	6		7				7	7	252	252	115.4	104	94.4	42.2						2	5		52	Computer-aided machine building
+	B1.V.02.10	Automation of production processes in machine building industry	B1.V	8	7		8				7	7	252	252	121.4	110	97.4	33.2							2	5	52	Computer-aided machine building
+	B1.OD.01	**Optional disciplines B1.OD.1**	**B1.V**		**4**						2	**2**	**72**	**72**	**32.6**	**30**	**39.4**					2						
+	B1.OD.01.01	Corporate culture in professional activity	B1.V		4						2	2	72	72	32.6	30	39.4					2					72	Philosophy and cultural studies
-	B1.OD.01.02	Professional ethics	B1.V		4						2	2	72	72	32.6	30	39.4					2					72	Philosophy and cultural studies
+	B1.OD.02.	**Optional disciplines B1.OD.2**	**B1.V**		**7**						2	**2**	**72**	**72**	**32.6**	**30**	**39.4**								2			
+	B1.OD.02.01	Intellectual property in professional activity	B1.V		7						2	2	72	72	32.6	30	39.4								2		75	Social sciences, pedagogy and law
-	B1.OD.02.02.	Legal regulation of labor relations in the professional sphere	B1.V		7						2	2	72	72	32.6	30	39.4								2		75	Social sciences, pedagogy and law
+	B1.OD.03.	**Optional disciplines B1.OD.3**	**B1.V**		**5**						2	**2**	**72**	**72**	**32.6**	**30**	**39.4**						2					
+	B1.OD.03.01	Design technology software	B1.V		5						2	2	72	72	32.6	30	39.4						2				52	Computer-aided machine building
-	B1.OD.03.02	Information systems in machine building industry	B1.V		5						2	2	72	72	32.6	30	39.4						2				52	Computer-aided machine building
+	B1.OD.04	**Elective modules**	**B1.V**	**88**	**77888**		**8**				22	**22**	**792**	**792**	**348.6**	**322**	**377**	**66.4**							5	17		
+	B1.OD.04.01	**Optional module 1. Computer-aided engineering technologies**	**B1.V**	**88**	**77888**		**8**				22	**22**	**792**	**792**	**348.6**	**322**	**377**	**66.4**							5	17		
+	B1.OD.04.01.01	Programming of numerical control machines	B1.V		7						3	3	108	108	48.6	46	59.4								3		52	Computer-aided machine building
+	B1.OD.04.01.02	Promising technologies at computer-aided machine building	B1.V	8	7		8				6	6	216	216	85.4	74	97.4	33.2							2	4	52	Computer-aided machine building
+	B1.OD.04.01.03	Technologies and equipment for blanking production	B1.V		8						3	3	108	108	46.6	44	61.4									3	52	Computer-aided machine building
+	B1.OD.04.01.04	Technologies and equipment of assembly plant	B1.V	8							4	4	144	144	70.8	66	40	33.2								4	52	Computer-aided machine building
+	B1.OD.04.01.05	Technologies of chipless shaping	B1.V		8						3	3	108	108	48.6	46	59.4									3	52	Computer-aided machine building
+	B1.OD.04.01.06	Welding in mechanical engineering	B1.V		8						3	3	108	108	48.6	46	59.4									3	52	Computer-aided machine building
-	B1.OD.04.02	**Optional module 2. Renovations in machine building**	**B1.V**	**88**	**77888**		**8**				22	**22**	**792**	**792**	**348.6**	**322**	**377**	**66.4**							5	17		
-	B1.OD.04.02.01	Promising technologies and economics in machine building sphere	B1.V		7						3	3	108	108	48.6	46	59.4								3		52	Computer-aided machine building
-	B1.OD.04.02.02	Renovation technologies of facilities and objects of material production in machine building sphere	B1.V	8	7		8				6	6	216	216	85.4	74	97.4	33.2							2	4	52	Computer-aided machine building
-	B1.OD.04.02.03	Renovation technology for of non-metallic materials	B1.V		8						3	3	108	108	46.6	44	61.4									3	52	Computer-aided machine building
-	B1.OD.04.02.04	Physical and technical methods of processing in machine building sphere	B1.V	8							4	4	144	144	70.8	66	40	33.2								4	52	Computer-aided machine building
-	B1.OD.04.02.05	Control and diagnostics of renovation objects	B1.V		8						3	3	108	108	48.6	46	59.4									3	52	Computer-aided machine building
-	B1.OD.04.02.06	Organization of renovation enterprise	B1.V		8						3	3	108	108	48.6	46	59.4									3	52	Computer-aided machine building
											93	*93*	*3348*	*3348*	*1543.2*	*1376*	*1421.6*	*383.2*	*2*		*4*	*11*	*14*	*18*	*22*	*22*		
											213	*213*	*7668*	*7668*	*3570*	*3098*	*2985*	*1113*	*29*	*28*	*27*	*27*	*27*	*27*	*26*	*22*		
Box 2.Practice																												
The part formed by the participants of educational relations																												
+	B2.V. 01	**Study practice**	**B2.V**			**2**					3	**3**	**108**	**108**	**108**					3								

-	-	-	-	Form of control							number of credits		Total number of acad.hours						1st year		2nd Year		3rd Year		4th Year		Responsible academic department	
																			1st semester	2nd semester	3rd semester	4th semester	5th semester	6th semester	7th semester	8th semester		
To consider in the plan	Index	Name	Box/part	Examination	Credit	Graded test	Term project	Course work	Review work	Calculated graphic work	Expert	Fact	Expert	According to plan	Auditorium hours	AUD.	Solo work	Rewiew work	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	number of credits	Code	Name
+	B2.V. 01.01(Study practice)	Study practice - practice aimed at obtaining primary professional skills, including primary skills of research activities	B2.V			2					3	3	108	108	108					3							52	Computer-aided machine building
+	B2.V. 02	**Industrial placement**	**B2.V**		**8**	**468**					18	**18**	**648**	**648**	**648**							6		6		6		
+	B2.V. 02.01(Technological Practice)	Industrial placement - practice aimed at obtaining professional skills and experience of professional activity	B2.V			46					12	12	432	432	432							6		6			52	Computer-aided machine building
+	B2.V. 02.02(Scientific research-SR)	Industrial placement and research work	B2.V		8						3	3	108	108	108											3	52	Computer-aided machine building
+	B2.B. 02.03(Externship)	Industrial externship practice	B2.V			8					3	3	108	108	108											3		
											21	*21*	*756*	*756*	*756*					*3*		*6*		*6*		*6*		
											21	*21*	*756*	*756*	*756*					*3*		*6*		*6*		*6*		
Box 3.State final attestation																												
+	B3.01	Writting and defence of final qualifying project (thesis)	B3								6	6	216	216				216								6	52	Computer-aided machine building
											6	*6*	*216*	*216*				*216*								*6*		
											6	*6*	*216*	*216*				*216*								*6*		
OC.Optional courses																												
+	OC.01	Information and bibliographic culture	OC		2						2	2	72	72	16.6	16	55.4			2								
+	OC.02	Research seminar	OC		6						2	2	72	72	30.6	30	41.4							2				
											4	*4*	*144*	*144*	*47.2*	*46*	*96.8*			*2*				*2*				
											4	*4*	*144*	*144*	*47.2*	*46*	*96.8*			*2*				*2*				
Elective disciplines (modules) on physical culture and sport (ED on Ph C and S)																												
+	ED on Ph C and S..01	**Module "Physical culture and sport" (V)**	**OC on Ph C and S.**		**123456**								**330**	**330**	**330**	**330**												
+	ED on Ph C and S..01.01	Practical training in physical culture and sports (elective courses)	OC on Ph C and S.		123456								330	330	330	330											74	Physical culture
													330	*330*	*330*	*330*												
													330	*330*	*330*	*330*												