-	-	-	-	Form of control							number of credits		Total number of acad.hours						1st year		2nd Year		3rd Year		4th Year		Responsible academic department	
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	Reviewe work	1st semester number of credits	2nd semester number of credits	3rd semester number of credits	4th semester number of credits	5th semester number of credits	6th semester number of credits	7th semester number of credits	8th semester number of credits	Code	Name
Box 1.Discipline (modules)																												
Mandatory part																												
+	B1.O. 01	**Socio-humanitarian module**	**B1.O**	**16**	**114**	**23**					18	**18**	**648**	**648**	**274.6**	**218.6**	**298**	**75.4**	8	2	3	2		3				
+	B1.O.01.01	History	B1.O	1							4	4	144	144	48.8	32.8	53	42.2	4								71	History
+	B1.O.01.02	**Social cooperation in the industry**	**B1.O**		**11**	**2**					6	**6**	**216**	**216**	**97.8**	**91.8**	**118.2**		4	2								
+	B1.O.01.02.01	Cultural studies and intercultural communication	B1.O		1						2	2	72	72	32.6	30.6	39.4		2								72	Philosophy and cultural studies
+	B1.O.01.02.02	Sociology	B1.O			2					2	2	72	72	32.6	30.6	39.4			2							75	Social Sciences, pedagogy and law
+	B1.O.01.02.03	Psychology of communication	B1.O		1						2	2	72	72	32.6	30.6	39.4		2								75	Social Sciences, pedagogy and law
+	B1.O.01.03	Philosophy	B1.O			3					3	3	108	108	46.6	30.6	61.4				3						72	Philosophy and cultural studies
+	B1.O.01.04	Industry economics	B1.O	6							3	3	108	108	48.8	32.8	26	33.2						3			64	Economic theory
+	B1.O.01.05	Statutory regulation in building. Corruption risks	B1.O		4						2	2	72	72	32.6	30.6	39.4					2					75	Social Sciences, pedagogy and law
+	B1.O.02	**Module "Physical culture and sport"**	**B1.O**		**16**						2	**2**	**72**	**72**	**32.6**	**32.6**	**39.4**		1					1				
+	B1.O.02.01	Basics of physical culture	B1.O		1						1	1	36	36	16.3	16.3	19.7		1								74	Physical culture
+	B1.O.02.02	Physical self-improvement	B1.O		6						1	1	36	36	16.3	16.3	19.7							1			74	Physical culture
+	B1.O.03	**Mathematical and natural science module**	**B1.O**	**112333**	**1224**				**112233**		35	**35**	**1260**	**1260**	**593.2**	**487.2**	**449.6**	**217.2**	10	11	11	3						
+	B1.O.03.01	Chemistry	B1.O	1					1		4	4	144	144	64.8	62.8	37	42.2	4								84	Chemistry
+	B1.O.03.02	**Mathematics**	**B1.O**	**123**	**1**				**1223**		14	**14**	**504**	**504**	**235**	**189**	**160.4**	**108.6**	6	5	3							
+	B1.O.03.02.01	Algebra and geometry	B1.O	1					1		4	4	144	144	62.8	46.8	39	42.2	4								81	Calculus
+	B1.O.03.02.02	Mathematical analysis	B1.O	2	1				22		7	7	252	252	109.4	93.4	109.4	33.2	2	5							81	Calculus
+	B1.O.03.02.03	Probability theory and mathematical statistics	B1.O	3					3		3	3	108	108	62.8	48.8	12	33.2			3						81	Calculus
+	B1.O.03.03	Physics	B1.O	3	2				23		8	8	288	288	123.4	95.4	131.4	33.2		3	5						83	Physics
+	B1.O.03.04	Information technology	B1.O	3	2						6	6	216	216	123.4	93.4	59.4	33.2		3	3						82	Computer science and information technology
+	B1.O.03.05	Mathematical modeling	B1.O		4						3	3	108	108	46.6	46.6	61.4					3					82	Computer science and information technology
+	B1.O.04	**Module "Business communication"**	**B1.O**		**123**	**24**					10	**10**	**360**	**360**	**219**	**209**	**141**		2	4	2	2						
+	B1.O.04.01	Russian language and culture of speech	B1.O		2						2	2	72	72	32.6	30.6	39.4			2							76	Russian language
+	B1.O.04.02	Foreign language	B1.O		13	24					8	8	288	288	186.4	178.4	101.6		2	2	2	2					73	Foreign languages
+	B1.O.05	**Module "Safe conditions of vital activities"**	**B1.O**		**4**	**5**					4	**4**	**144**	**144**	**91.2**	**61.2**	**52.8**					2	2					
+	B1.O.05.01	Engineering ecology	B1.O		4						2	2	72	72	46.6	30.6	25.4					2					11	Ichthyology and ecology
+	B1.O.05.02	Life safety	B1.O			5					2	2	72	72	44.6	30.6	27.4						2				23	Life safety
+	B1.O.06	**Engineering module**	**B1.O**	**2244**	**112233456**					**123444**	30	**30**	**1080**	**1080**	**547.6**	**440.6**	**399.6**	**132.8**	4	10	4	8	2	2				
+	B1.O.06.01	Engineering and computer graphics	B1.O	2	1					12	5	5	180	180	81.4	65.4	65.4	33.2	2	3							35	Engineering graphics
+	B1.O.06.02	Engineering geodesy	B1.O	2	1						5	5	180	180	67.4	63.4	79.4	33.2	2	3							91	Industrial and civil construction
+	B1.O.06.03	Engineering geology	B1.O		2						2	2	72	72	46.6	30.6	25.4			2							91	Industrial and civil construction
+	B1.O.06.04	Fluid and gas mechanics	B1.O		2						2	2	72	72	46.6	30.6	25.4			2							93	Water resources and water use
+	B1.O.06.05	Theoretical mechanics	B1.O		3						2	2	72	72	46.6	44.6	25.4				2						34	Theory of mechanisms and machines, machine parts
+	B1.O.06.06	Structural performance of materials	B1.O	4	3					34	5	5	180	180	84.4	79.4	62.4	33.2			2	3					91	Industrial and civil construction
+	B1.O.06.07	Basics of technical mechanics	B1.O		4					4	2	2	72	72	47.6	33.6	24.4					2					34	Theory of mechanisms and machines, machine parts
+	B1.O.06.08	Electrical engineering and electronics	B1.O	4						4	3	3	108	108	47.8	31.8	27	33.2				3					45	Electrical equipment of ships and electric power industry
+	B1.06.09	Metrology, standardization, certification and quality management	B1.O		5						2	2	72	72	46.6	30.6	25.4						2				91	Industrial and civil construction
+	B1.O.06.10	Basics of geotechnics	B1.O		6						2	2	72	72	32.6	30.6	39.4							2			91	Industrial and civil construction
+	B1.O.07	**General professional module**	**B1.O**	**3455**	**4477**	**3**	**5**	**344**			30	**30**	**1080**	**1080**	**465.2**	**373.2**	**448.8**	**166**			7	10	8		5			
+	B1.O.07.01	Building materials	B1.O	3							4	4	144	144	48.8	32.8	62	33.2			4						91	Industrial and civil construction
+	B1.O.07.02	The basic architecture	B1.O			3		3			3	3	108	108	47.6	33.6	60.4				3						91	Industrial and civil construction
+	B1.O.07.03	Fundamentals of building structures	B1.O		4			4			4	4	144	144	51.6	49.6	59.2	33.2				4					91	Industrial and civil construction
+	B1.O.07.04	Basics of heat and gas supply and ventilation	B1.O	4				4			3	3	108	108	51.8	49.8	23	33.2				3					92	Heat and gas supply and ventilation
+	B1.O.07.05	Basics of water supply and sanitation	B1.O		4						3	3	108	108	44.6	30.6	63.4					3					92	Heat and gas supply and ventilation
+	B1.O.07.06	Technological processes in construction	B1.O	5			5				4	4	144	144	68.8	66.8	42	33.2					4				91	Industrial and civil construction
+	B1.O.07.07	Means of mechanization in construction	B1.O	5							4	4	144	144	62.8	48.8	48	33.2					4				91	Industrial and civil construction
+	B1.O.07.08	Organization, planning and construction management	B1.O		7						3	3	108	108	44.6	30.6	63.4								3		92	Heat and gas supply and ventilation
+	B1.O.07.09	Basics of technical maintenance of buildings and structures	B1.O		7						2	2	72	72	44.6	30.6	27.4								2		92	Heat and gas supply and ventilation
+	B1.O.08	**Professional module**	**B1.O**	**566777788**	**555667**	**6**	**77788**	**66**		**6**	56	**56**	**2016**	**2016**	**905.6**	**829.6**	**799.8**	**310.6**					10	17	18	11		
+	B1.O.08.01	Technical thermodynamics and heat-and mass-transfer	B1.O	5							5	5	180	180	66.8	62.8	80	33.2					5				44	Marine power plants and heat power engineering
+	B1.O.08.02	Heat generating plants	B1.O	6	5			6			5	5	180	180	96.4	78.4	50.4	33.2					2	3			44	Marine power plants and heat power engineering
+	B1.O.08.03	Blowers in the system of heat and gas supply and ventilation (HGV)	B1.O	6	5			6			7	7	252	252	144.4	140.4	65.4	42.2					3	4			92	Heat and gas supply and ventilation
+	B1.O.08.04	Theoretical bases of indoor microclimate creation	B1.O			6				6	5	5	180	180	61.6	45.6	118.4							5			92	Heat and gas supply and ventilation
+	B1.O.08.05	Heating	B1.O	7	6		7				6	6	216	216	101.4	97.4	72.4	42.2						2	4		92	Heat and gas supply and ventilation
+	B1.O.08.06	Heat supply	B1.O	7	6		7				7	7	252	252	131.4	127.4	78.4	42.2						3	4		92	Heat and gas supply and ventilation
+	B1.O.08.07	Ventilation	B1.O	7			7				6	6	216	216	80.8	66.8	93	42.2							6		92	Heat and gas supply and ventilation
+	B1.O.08.08	Air conditioning	B1.O	8	7		8				6	6	216	216	75.4	69.4	107.4	33.2							2	4	92	Heat and gas supply and ventilation
+	B1.O.08.09	Gas supply	B1.O	8			8				7	7	252	252	98.8	96.8	111	42.2								7	92	Heat and gas supply and ventilation
+	B1.O.08.10	Automated design of heat and gas supply and ventilation systems	B1.O		7						2	2	72	72	48.6	44.6	23.4								2		92	Heat and gas supply and ventilation
											185	*185*	*6660*	*6660*	*3129*	*2652*	*2629*	*902*	*25*	*27*	*27*	*27*	*22*	*23*	*23*	*11*		
The part formed by the participants of educational relations																												
+	B1.V. 01	Introduction into a profession	B1.V			1					3	3	108	108	44.6	30.6	63.4		3								92	Heat and gas supply and ventilation
+	B1.V.02	Engineering surveys for construction	B1.V		6						2	2	72	72	32.6	30.6	39.4							2			93	Water resources and water use
+	B1.V.03	Quality control of HGV systems	B1.V		8						2	2	72	72	32.6	30.6	39.4									2	92	Heat and gas supply and ventilation
+	B1.V. 04	Research methods	B1.V	6							3	3	108	108	46.8	32.8	19	42.2						3			92	Heat and gas supply and ventilation
+	B1.V.05	Technology of HGV systems	B1.V			7					3	3	108	108	46.6	30.6	61.4								3		92	Heat and gas supply and ventilation
+	B1.OD.01	**Optional disciplines B1.OD.2**	**B1.V**		**5**						2	**2**	**72**	**72**	**32.6**	**30.6**	**39.4**						2					
+	B1.OD.01.01	Regulatory documents for the design of buildings and engineering structures	B1.V		5						2	2	72	72	32.6	30.6	39.4						2				92	Heat and gas supply and ventilation
-	B1.OD.01.02	Preparing documentation and documentation flow in construction	B1.V		5						2	2	72	72	32.6	30.6	39.4						2				92	Heat and gas supply and ventilation
+	B1.OD.02.	**Optional disciplines B1.OD.02**	**B1.V**			**7**					3	**3**	**108**	**108**	**32.6**	**22.6**	**75.4**								3			
+	B1.OD.02.01	Technology of HGV systems	B1.V			7					3	3	108	108	32.6	22.6	75.4								3		92	Heat and gas supply and ventilation
-	B1.OD.02.02.	Pricing and budgeting in construction	B1.V			7					3	3	108	108	32.6	22.6	75.4								3		92	Heat and gas supply and ventilation
+	B1.OD.03.	**Optional disciplines B1.OD.4**	**B1.V**		**8**			**8**			3	**3**	**108**	**108**	**41.6**	**33.6**	**66.4**									3		
+	B1.OD.03.01	Air pool security	B1.V		8			8			3	3	108	108	41.6	33.6	66.4									3	92	Heat and gas supply and ventilation
-	B1.OD.03.02	Blowers in the system of heat and gas supply and ventilation (HGV)	B1.V		8			8			3	3	108	108	41.6	33.6	66.4									3	92	Heat and gas supply and ventilation
+	B1.OD.04	**Optional disciplines B1.OD.6**	**B1.V**	**8**							4	**4**	**144**	**144**	**68.8**	**52.8**	**42**	**33.2**								4		
+	B1.OD.04.01	Technology of HGV systems	B1.V	8							4	4	144	144	68.8	52.8	42	33.2								4	92	Heat and gas supply and ventilation
-	B1.OD.04.02	Mechanization and automation of TGV systems production	B1.V	8							4	4	144	144	68.8	52.8	42	33.2								4	92	Heat and gas supply and ventilation
											25	*25*	*900*	*900*	*378.8*	*294.8*	*445.8*	*75.4*	*3*				*2*	*5*	*6*	*9*		
											210	*210*	*7560*	*7560*	*3507.8*	*2946.8*	*3074.8*	*977.4*	*28*	*27*	*27*	*27*	*24*	*28*	*29*	*20*		
Box 2.Practice																												
Mandatory part																												
+	B2.O. 01	**Study practice**	**B2.O**			**2**					6	**6**	**216**	**216**	**216**	**216**				6								
+	B2.O.01.01(Study practice)	Introductory practice	B2.O			2					6	6	216	216	216	216				6							91	Industrial and civil construction
+	B2.O. 02	**Industrial placement**	**B2.O**			**468**					18	**18**	**648**	**648**	**648**	**648**						6		6		6		

+	B2.O. 02.01(Industrial)	Technological practice	B2.O			46					12	12	432	432	432	432						6		6			92	Heat and gas supply and ventilation
+	B2.O. 02.02(Externship)	Externship	B2.O			8					6	6	216	216	216	216										6	92	Heat and gas supply and ventilation
											24	*24*	*864*	*864*	*864*	*864*				*6*		*6*		*6*		*6*		
											24	*24*	*864*	*864*	*864*	*864*				*6*		*6*		*6*		*6*		
Box 3.State final attestation																												
+	B3.01(D)	Preparation for defense procedure and thesis (final qualifying work) defense	B3								6	6	216	216				216								6	92	Heat and gas supply and ventilation
											6	*6*	*216*	*216*				*216*								*6*		
											6	*6*	*216*	*216*				*216*								*6*		
OC.Optional courses																												
+	OC.01	Research seminar	OC			5					2	2	72	72	30.6	30.6	41.4						2					
+	OC.02	Information and bibliographic culture	OC			3					2	2	72	72	16.6	16.6	55.4				2							
											4	*4*	*144*	*144*	*47,2*	*47,2*	*96,8*				*2*		*2*					
											4	*4*	*144*	*144*	*47,2*	*47,2*	*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*												