Head of the Department of curricula development and strategic planning
Viktoria Melnikova

Name	Form of assessment							Credits	Total academic hours					Year 1		Year 2		Year 3		Year 4		Assigned department	
														Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8		
	Examination	Pass/ fail test	Pass/ fail exam with a grade	Term project	Course work	Module test	Calculation and graphic work	Fact	As sheduled	Work with a teacher	Class-room	Self-study	Control	Credits	Credits	Credits	Credits	Credits	Credits	Credits	Credits	Code	Name
Unit 1.Disciplines (modules)								216	7776	3507.1	2904	3078.65	1190.25	29	28	26	31	29	25	27	21		
Core part								116	4176	1926.1	1630	1619.9	630	22	26	24	17	17	6	4			
Socio-humanitarian module	**13**	**11234 56**	**224**					**28**	**1008**	**488**	**416**	**434.5**	**85.5**	8	6	6	4	2	2				
History (history of Russia, general history)	1							4	144	48.25	30	53	42.75	4								71	Department of History
Philosophy	3							4	144	48.25	30	53	42.75			4						72	Department of Philosophy and Culturology
Law		5						2	72	32.15	30	39.85						2				73	Department of Social sciences, pedagogy and law
Basics project activities		6						2	72	32.15	30	39.85							2			51	Department of Economics and finances
Time-management		4						2	72	32.15	30	39.85					2					52	Department of Management
Culturology		1						2	72	32.15	30	39.85		2								72	Department of Philosophy and Culturology
Conflict studies			2					2	72	46.15	30	25.85			2							72	Department of Philosophy and Culturology
Foreign language		13	24					8	288	184.6	176	103.4		2	2	2	2					45	Department of Foreign languages
Basics of business communication		2						2	72	32.15	30	39.85			2							55	Department of Russian language
Module "Physical education and sport"		**16**						**2**	**72**	**32.3**	**32**	**39.7**		1					1				
Basics of PE		1						1	36	16.15	16	19.85		1								56	Department of Physical education
Physical self-perfection		6						1	36	16.15	16	19.85							1			56	Department of Physical education
Mathematical and natural scientific module	**12223**	**113**				**11222 3**		**29**	**1044**	**503.5**	**434**	**344.75**	**195.75**	9	14	6							
Higher mathematics	**123**	**1**				**1223**		**14**	**504**	**252.1**	**210**	**132.65**	**119.25**	6	5	3							
Algebra and geometry	1					1		4	144	62.55	44	38.7	42.75	4								13	Department of Applied mathematics and information technologies
Mathematical analysis	2	1				22		7	252	139	120	70.25	42.75	2	5							13	Department of Applied mathematics and information technologies
Probabiliy theory and mathematical statistics	3					3		3	108	50.55	46	23.7	33.75			3						13	Department of Applied mathematics and information technologies
Informatics	2							4	144	78.25	60	32	33.75		4							13	Department of Applied mathematics and information technologies
Physics	2	1				12		8	288	127	120	118.25	42.75	3	5							25	Department of Physics
Information technologies in professional activities		3						3	108	46.15	44	61.85				3						13	Department of Applied mathematics and information technologies
Module "Safe living environment"	**7**							**4**	**144**	**62.25**	**44**	**48**	**33.75**							4			
Life safety	7							4	144	62.25	44	48	33.75							4		42	Department of Technosphere safety and environmental management
Engineering and technical module	**233**	**112**	**56**				**123**	**23**	**828**	**332.5**	**256**	**385.25**	**110.25**	4	6	7		3	3				
Engineering and computer graphics	2	1					12	6	216	82.4	60	90.85	42.75	2	4							32	Department of Production equipment engineering
Electrotechnical and construction materials	**3**	**1**					**3**	**5**	**180**	**67.4**	**60**	**78.85**	**33.75**	2		3							
Material science		1						2	72	32.15	30	39.85		2								32	Department of Production equipment engineering
Electrotechnical materials	3						3	3	108	35.25	30	39	33.75			3						22	Department of Power engineering
Technical mechanics	3	2						6	216	78.4	60	103.85	33.75		2	4						24	Department of Theory of machines and mechanisms and machine parts
Information and measuring technology			5					3	108	44.15	30	63.85						3				11	Department of Production processes automation
Metrology, standardization and certification			6					3	108	60.15	46	47.85							3			11	Department of Production processes automation
General professional module	**44555**	**4**	**3**	**5**	**45**			**30**	**1080**	**507.55**	**448**	**367.7**	**204.75**			5	13	12					
Theoretical foundations of electrical engineering	4		3		4			12	432	201.4	180	187.85	42.75			5	7					22	Department of Power engineering
Industrial electronics	**45**				**5**			**7**	**252**	**115.5**	**104**	**60**	**76.5**				3	4					
Part 1. Basics of electronics	4							3	108	48.25	44	26	33.75				3					11	Department of Production processes automation
Part 2. Power electronics	5				5			4	144	67.25	60	34	42.75					4				22	Department of Power engineering
Electrical machines	5	4		5				8	288	144.4	134	100.85	42.75				3	5				22	Department of Power engineering
Electrical and electronic apparatus	5							3	108	46.25	30	19	42.75					3				22	Department of Power engineering
Part fomed by the educational process participants								100	3600	1581	1274	1458.75	560.25	7	2	2	14	12	19	23	21		
Socio-humanitarian module (B)	**6**	**5**						**5**	**180**	**92.4**	**60**	**53.85**	**33.75**					2	3				
Economy and management in an enterprise	6	5						5	180	92.4	60	53.85	33.75					2	3			52	Department of Management
Mathematics and natural scientific module (B)	**14**	**34**				**1**		**13**	**468**	**193.1**	**166**	**189.4**	**85.5**	4		2	7						
Mathematical modelling		4						3	108	48.15	46	59.85					3					13	Department of Applied mathematics and information technologies
Scientific research methods	4							4	144	48.25	30	53	42.75				4					22	Department of Power engineering
Chemistry	1					1		4	144	64.55	60	36.7	42.75	4								35	Department of Chemistry
Mathematical tasks of electrical power engineering		3						2	72	32.15	30	39.85				2						22	Department of Power engineering
Module "Safe living environment"		**4**						**2**	**72**	**46.15**	**30**	**25.85**					2						
Ecology and environmental management		4						2	72	46.15	30	25.85					2					44	Department of Water bioresoures and aquaculture
Professional module	**145666 777**	**67**	**557**	**6677**	**4**		**67**	**54**	**1944**	**848**	**678**	**765.25**	**330.75**	3			5	10	16	20			
Introduction to profession	1							3	108	46.25	30	28	33.75	3								22	Department of Power engineering
General power engineering	4				4			5	180	67.25	60	70	42.75				5					22	Department of Power engineering
Renewable energy sources			5					3	108	62.15	60	45.85						3				22	Department of Power engineering
Power stations and substations	6		5	6				8	288	128.4	104	125.85	33.75					3	5			22	Department of Power engineering
Electric drive	6						6	4	144	63.25	44	47	33.75						4			22	Department of Power engineering
Electric power systems and networks	56			6				9	324	128.5	92	119	76.5					4	5			22	Department of Power engineering
Power supply	7	6		7				6	216	82.4	60	99.85	33.75						2	4		22	Department of Power engineering
Electromagnetic compatibility in the power engineering		7						2	72	32.15	30	39.85								2		22	Department of Power engineering
Relay protection and automation of electric power systems			7					3	108	60.15	46	47.85								3		22	Department of Power engineering
Transient processes in electric power systems	7			7				6	216	96.25	76	86	33.75							6		22	Department of Power engineering
High voltage technology	7						7	5	180	81.25	76	56	42.75							5		22	Department of Power engineering
Elective courses		**2**						**2**	**72**	**32.15**	**22**	**39.85**			2								
Development of Russian power engineering		2						2	72	32.15	22	39.85			2							71	Department of History
Development of regional power engineering		2						2	72	32.15	22	39.85			2							71	Department of History
Elective modules	**888**	**78**	**8**	**8**				**24**	**864**	**369.2**	**318**	**384.55**	**110.25**							3	21		
Elective module 1 "Electrical power plants"	**888**	**78**	**8**	**8**				**24**	**864**	**369.2**	**318**	**384.55**	**110.25**							3	21		
Design of electrical installations of power plants and substations	8	7		8				9	324	118.4	100	162.85	42.75							3	6	22	Department of Power engineering
Operating modes of electrical equipment of power plants and substations			8					3	108	68.15	66	39.85									3	22	Department of Power engineering
Automated control systems for power plants	8							5	180	78.25	64	68	33.75								5	22	Department of Power engineering
Energy saving in the electric power engineering		8						3	108	46.15	44	61.85									3	22	Department of Power engineering
Fundamentals of operation of electrical equipment of power plants and substations	8							4	144	58.25	44	52	33.75								4	22	Department of Power engineering
Elective module 2 "Electrical supply"	**888**	**78**	**8**	**8**				**24**	**864**	**369.2**	**318**	**384.55**	**110.25**							3	21		
Design of substations of power supply systems	8	7		8				9	324	118.4	100	162.85	42.75							3	6	22	Department of Power engineering
Energy supply			8					3	108	68.15	66	39.85									3	22	Department of Power engineering
Automated power supply management systems	8							5	180	78.25	64	68	33.75								5	12	Department of Control systems and computer engineering
Energy-saving power supply technologies		8						3	108	46.15	44	61.85									3	22	Department of Power engineering
Fundamentals of operation of power supply systems	8							4	144	58.25	44	52	33.75								4	22	Department of Power engineering
Unit 2.Practical training								18	648	648					3		3		6		6		
Core part								18	648	648					3		3		6		6		
Academic training			**2**					**3**	**108**	**108**					3								
Introductory practice			2					3	108	108					3							22	Department of Power engineering
On-the-job training			**468**					**15**	**540**	**540**							3		6		6		
Scientific research work			4					3	108	108							3					22	Department of Power engineering
Operational practice			6					6	216	216									6			22	Department of Power engineering
Pregraduation practice			8					6	216	216											6	22	Department of Power engineering
Unit 3. State final examination								6	216				216								6		
Preparation for the defense procedure and defense of the final qualification work								6	216				216								6	22	Department of Power engineering
Elective courses								10	360	156.75	156	203.25				2		2	2	2	2		
Research workshop		5						2	72	30.15	30	41.85						2					
Information and bibliographic culture		3						2	72	16.15	16	55.85				2							
New technologies in electrical power engineering		6						2	72	30.15	30	41.85							2				
Practice-oriented course "Internet of things"		7	8					4	144	80.3	80	63.7								2	2		
Elective disciplines (modules) in Physical education and sport									330	330	330												
Module "Physical education and sport"(B)		**246**							**330**	**330**	**330**												
Practical training in PE and sport (elective course)		246							330	330	330											56	Department of Physical education