



## CURRICULUM

(Enrolment 2018)

Form of study	<u>full-time</u> (full-time, part-time)
Faculty (Institute)	<u>Institute of Mechanical Engineering</u>
Qualification	<u>2145.1 Researcher</u>
Study duration	<u>1 years 9 months</u>
Base level	<u>Bachelor degree</u>

[illegible]

Kycp	Theoretical training	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II	18	2	5		12	2	30

Type of practice	YEAR	Weeks
Scientific research practice	4	5

Subjects	Form of graduates assessment (exam, graduation project)	YEARS
Work on master's thesis	Master's thesis defense	4

Code	Subjects	Distribution for terms (semesters)					Number of hours					Self-study	Distribution of class hours per week by courses and semesters							
		Exams	Final tests	Course projects (seminars)	Coursework	ECTS Credits	Aggregate total	Total	Lectures/ Practical				Laboratory	I course		II course				
									Lectures	Practical	Laboratory			Semesters		Semesters				
														1	2	3	4			
														The number of weeks in the semester						
														18	18	18	17			
1	2	3	4	5	6	7	8	9	10	11		13	14	15	16	17	18	19	20	21
I. GENERAL TRAINING																				
I.1. Basic training (major courses)																				
GM 1	Intellectual Property and Patented Science		1			3	90	54	36	18		36	3							
GM 2	Mathematical Modeling of Systems and Processes	3				4	120	54	36	18		66					3			
GM 3	Modern design methods		3			4	120	54	36	18		66					3			
total number of part I.1		1	2			11	330	162	108	54		168	3				6			
I.2.Science Research (optional courses)																				
GM 4	Scientific work on the topic of master's thesis		1;3			7,5	225	45	9	36		180	1,5	1						
GM 5	Research Practice		4			9	270					270								
GM 6	Writing a Masters Dissertation					21	630					630								
total number of part I.2			3			37,5	1125	45	9	36		1080	1,5	1						
I.3. Basic training (optional courses)																				
GS 1	Workshop on foreign language scientific communication		2;3			4,5	135	108		108		27	2	2		2				
GS 2	Academic discipline on sustainable development		1			2	60	36	18	18		24	2							
GS 3	Academic discipline on management		2			3	90	54	18	36		36		3						
GS 4	Academic disciplines in pedagogy		3			2	60	36	30	6		24					2			
total number of part I.3			5			11,5	345	234	66	168		111	4	5			4			
TOTAL IN GENERAL TRAINING		1	10	0	0	60	1800	441	183	258		1359	8,5	6		10				
II. VOCATIONAL TRAINING																				
II.1. Vocational and practical training (major courses)																				
PM 1.1	Information systems and technologies in aircraft engineering	1	2			9	270	126	63		63	144	2	5						
total number of part II.1		1	1			9	270	126	63		63	144	2	5		0				
Specialization: Dynamics and Strength of Machines																				
II.2. Vocational and practical training (major courses)																				

PSU 1.1	The theory of oscillation and stability of motion		1	1		2,5	75	9		9	66	0,5			
PSU 1.2	Numerical methods for dynamics and strength of machines		1		2	2,5	75	27	9		18	48	1,5		
PSU 1.3	Fatigue of materials	1				4	120	54	36	18		66	3		
PSU 1.4	Statistical dynamics and reliability	2	1			10	300	153	81	72		147	4,5	4	
PSU 1.5	Experimental methods of research	1;2				9	270	126	72		54	144	3	4	
PSU 1.6	Designing and calculating elements of aviation constructions		1;2			5	150	72	36		36	78	1	3	
PSU 1.7	Strength and fracture of structures	2				3	90	36	27	9		54		2	
PSU 1.8	Mechatronics	3				5	150	72	36		36	78			4
PSU 1.9	Special calculation systems	3				6,5	195	54			54	141			3
PSU 1.10	Research on the topic of the dissertation					3,5	105	54			54	51			3
total number of part II.2		7	5	1	1	51	1530	657	297	108	##	873	13,5	13	10
TOTAL IN VOCATIONAL TRAINING		8	6	1	1	60	1800	783	360	108	##	1017	15,5	18	10
TOTAL		9	16	1	1	120	3600	1224	543	366	##	2376	24	24	20
Number of hours per week												24	24	20	
Number of exams												3	3	3	
Number of credits												7	4	4	1
Number of course projects												1			
Number of courseworks													1		
Specialization: Information systems and technologies in aircraft engineering															
II.1. Vocational and practical training (major courses)															
PSU 2.1	Oscillations and Stability of Mechanical Systems Motion		1	1		2,5	75	9		9	66	0,5			
PSU 2.2	The Grid Projection Methods in Mechanics		1		2	2,5	75	27	9		18	48	1,5		
PSU 2.3	Strength under non-stationary loads	1				4	120	54	36	18		66	3		
PSU 2.4	Statistical Methods in Mechanics	2	1			10	300	153	81	72		147	4,5	4	
PSU 2.5	Experimental Mechanics	1;2				9	270	126	72		54	144	3	4	
PSU 2.11	Strength Calculations of aviation structures		1;2			5	150	72	36		36	78	1	3	
PSU 2.6	Structural Strength	2				3	90	36	27	9		54		2	
PSU 2.7	Hydraulic and Pneumatic Control Systems	3				5	150	72	36		36	78			4
PSU 2.8	Special software packages	3				6,5	195	54			54	141			3
PSU 2.9	Research on the topic of the dissertation					3,5	105	54			54	51			3
total number of part II.2		7	5	1	1	51	1530	657	297	108	##	873	13,5	13	10
TOTAL IN VOCATIONAL TRAINING		8	6	1	1	60	1800	783	360	108	##	1017	15,5	18	10
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Number of hours per week												24	24	20	
Number of exams												3	3	3	
Number of credits												7	4	4	1
Number of course projects												1			
Number of courseworks													1		
1	Civil Protection		1			1	30	18	10	8		12	1		

Approved at the Meeting of the Institute's Academic Council No. 4 on 02/04/2018

Head of the Department \_\_\_\_\_ / Babenko A. /

Dean of the Faculty (Director of the Institute) \_\_\_\_\_ / Bobyr M. /