National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

STUDY PLAN

for the 2017/2018 academic year

(Enrolment 2017)

APPROVED
by first Vice-rector of Igor Sikorsky Kyiv Polytechnic Institute

_____Y. Yakymenko

"____"_____ 2017

Speciality - **131 - Applied mechanics**
Specialization - **Information systems and technologies in aircraft engineering**
for an educational professional program of master's training
Level - **Master**
Graduation Department - **Department of dynamics and strength of machines and strength of mat**

Faculty (Institute) - **Institute of Mechanical Engineering**
Form of study - **full-time**
Study duration - **1 years 4 months**
Qualification - **2145.1 Researcher**

Code	Subjects	Department	Amount: Number of credits	Amount: Number of hours	Lectures/ Practical: Total	Lectures: according to curriculum	Lectures: with individual classes	Practical: according to curriculum	Practical: with individual classes	Laboratory: according to curriculum	Laboratory: with individual classes	Individual lessons	Self-study	Control measures and their distribution by semester: Exams	Final tests	Modular. test works	Course projects	Coursework	personal assignment	home tests	Pedpsame	Distribution of class hours per week by courses and semesters: 1 Course MP-72mp(9+0) 1 semester 18 weeks: Total	Lectures	Practical	Laboratory	2 semester 18 weeks: Total	Lectures	Practical	Laboratory
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
I. GENERAL TRAINING																													
I.1. Basic training (major courses)																													
1	Intellectual Property and Patented Science	Department of Design of Machine Tools and Machines	3	90	54	36		18					36		1	1						3	2	1					
	total number of part 1.1.		3	90	54	36		18					36		1	1						3	2	1					
I.2.Basic training (optional courses)																													
2	Fundamentals of Engineering and Sustainable Technology	Department of Cybernetics of chemical and technological processes	2	60	36	18		18					24		1						1	2	1	1					
3	Workshop on foreign language scientific communication	Department of the English Language of Technical Orientation № 2	3	90	72			72					18		2						1	2		2		2		2	
4	Project management in high technology engineering	Department of dynamics and strength of machines and strength of materials	3	90	54	18		36					36		2											3	1	2	
	total number of part 1.2.		8	240	162	36		126					78		3						2	4	1	3		5	1	4	
I.3.Science Research (optional courses)																													
5	Scientific work on the topic of master's thesis 1. Basics of the scientific research	Department of dynamics and strength of machines and strength of materials	2	60	27	9		18					33		1							1,5	0,5	1					
6	Scientific work on the topic of master's thesis1. Scientific work on the topic of master's thesis	Department of dynamics and strength of machines and strength of materials	2	60	18			18					42		2											1		1	
	total number of part 1.3.		4	120	45	9		36					75		2							1,5	0,5	1		1		1	
	TOTAL IN GENERAL TRAINING		15	450	261	81		180					189		6	1					2	8,5	3,5	5		6	1	5	
II. VOCATIONAL TRAINING																													
II.1. Vocational and practical training (major courses)																													
7	Statistical methods in mechanics 1. Probability theory, probabilistic processes and their application	Department of dynamics and strength of machines and strength of materials	4,5	135	81	45		36					54		1d					1		4,5	2,5	2					
8	Statistical methods in mechanics 2. Reliability of mechanical systems	Department of dynamics and strength of machines and strength of materials	5,5	165	72	36		36					93	2						2						4	2	2	
9	Experimental Mechanics 1. Mechanical characteristics and methods of their determination	Department of dynamics and strength of machines and strength of materials	4	120	54	36				18			66	1								3	2		1				
10	Experimental Mechanics 2. Means of Measurement and Automation	Department of dynamics and strength of machines and strength of materials	5	150	72	36				36			78	2												4	2		2
	total number of part 2.1.		19	570	279	153		72		54			291	3	1d					2		7,5	4,5	2	1	8	4	2	2
II.2. Vocational and practical training (optional courses)																													
11	Oscillations and stability of motion of mechanical systems 1.	Department of dynamics and strength of machines and strength of materials	1	30	9			9					21		1							0,5		0,5					
12	Oscillations and stability of motion of mechanical systems 2. Coursework	Department of dynamics and strength of machines and strength of materials	1,5	45									45				1												
13	The Grid Projection Methods in Mechanics i 1.	Department of dynamics and strength of machines and strength of materials	1,5	45	27	9				18			18		1							1,5	0,5		1				
14	The Grid Projection Methods in Mechanics 2. Coursework	Department of dynamics and strength of machines and strength of materials	1	30									30					2											
15	Strength under non-stationary loads	Department of dynamics and strength of machines and strength of materials	4	120	54	36		18					66	1								3	2	1					
16	Calculation of the strength of aviation structures 1. Supporting structures of aircrafts	Department of dynamics and strength of machines and strength of materials	2	60	18					18			42		1d				1			1			1				
17	Calculation of the strength of aviation structures 2. Strength and buckling	Department of dynamics and strength of machines and strength of materials	3	90	54	36				18			36		2d				2							3	2		1
18	Information systems and technologies in aviation engineering 1. Computer technologies of life cycle product support	Department of dynamics and strength of machines and strength of materials	3	90	36	18				18			54	1					1			2	1		1				
19	Information Systems and Technologies in aviation engineering 2. CAD / CAE	Department of dynamics and strength of machines and strength of materials	6	180	90	45				45			90		2d				2							5	2,5		3
20	Structural strength	Department of dynamics and strength of machines and strength of materials	3	90	36	30		6					54	2												2	1,7	0,3	
	total number of part 2.2.		26	780	324	174		33		117			456	3	2;3d		1	1	4			8	3,5	1,5	3	10	6,2	0,3	4
	TOTAL IN VOCATIONAL TRAINING		45	1350	603	327		105		171			747	6	2;4d		1	1	4	2		16	8	3,5	4	18	10	2,3	6
	TOTAL		60	1800	864	408		285		171			936	6	8;4d	1	1	1	4	2	2	24	11,5	8,5	4	24	11,2	7,3	5,5
	Number of: exams																					3				3			
	Number of: final tests																						5;2d				3;2d		
	Number of: modular, test works																							1					
	Number of: course projects																					1							
	Number of: number of courseworks																									1			
	Number of: personal assignment																						2				2		
	Number of: home tests																							1				1	
	Number of: Abstracts																								2				
1	Civil Protection	Department of labor protection of industrial and civil security	1	30	18	10		8					12		1							1	0,6	0,4					

Approved at the Meating of the Institute's Academic Counsil No. 8 on 27/03/2017

Head of the Department _____ / Babenko A. /

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

NOTE: compiled for each academic year separately in accordance with the curriculum.