

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

CURRICULUM (Enrolment 2022)



APPROVED

protocol №

by Head of Academic Council

Igor Sikorsky Kyiv Polytechnic Institute

Education and Research Institute Institute of Mechanical Engineering Qualification Bachelor in Applied Mechanics

3 years 10 months

MA-21; MA-22; MA-23

complete general secondary education

Educational and Professional Program Study duration "Automated and Robotic Mechanical Systems" Basic education Full-time

_ 2022 Form of study _ Mykhaylo ILCHENKO

Graduation department

Department of Applied Fluid Mechanics and Mechatronics

Bachelor level in 13 Mechanical Engineering

Speciality 131 Applied mechanics

I. Schedule of educational process																				
February					Ma	arch				Apr	il			М	June					
	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42

 October
 November
 December
 January

 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
 September 1 2 3 4 ^C Examination □ Practice A Atestation Д Diploma project Symbols: Learning period

II. Summary table of time budget (Weeks) year Learning period Examination Practice Diploma project Atestation Vacation Total 36 52 12 0 12 52 12 52 36 0 0 0 36 0

Type of practice Semester Weeks				IV. Atestation									
Type of practice	Semester	Weeks		Subject	Form of graduates assessment	Semester							
Pre-diploma practice	8	5		Diploma project	Graduation Project	8							

Academic groups

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			V. P. Control activities				an or	of Educational p					Hours distributing per week among years and semesters								
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Code	Subjects	Exams	Final te			Abstracts CTS crds	Total amount	Leto	<u>a</u>	Lectures	Practices	Labs Self-study	1	2	3	4		5	6	7	8
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GC 01	Ukrainian language for Professional Purposes		2	2		2.0) 60) 3	6	18	18	24		2							
GC 02 GC 03	Ukraine in the Context of the Historical Development of Europe Basics of a Healthy Lifestyle	\vdash	1 2 1	_	++	2.0	_	_			18 54	24 18	2	2							
GC 04.1	Foreign Language. Part 1	\Box	2	1		3	_				72	18	2	2							
GC 04.2	Foreign Language. Part 2	_	4	_	\Box	3					72	18			2	2	!				
GC 05 GC 06	Introduction to Philosophy Business Law	\rightarrow	3	$\overline{}$	++	2.0			_		18 18	24			2						
GC 07	Economics and Production Organization		4	4		4.0	12	0 72	2	36	36	48				4					
GC 08 GC 09.1	Labor Safety and Civil Defence Foreign Language for Professional Purposes. Part 1	-	6	_	++	2.0	90			18	72	18 24 18						2	2		
GC 09.1	Foreign Language for Professional Purposes. Part 2	8	*	7	++	3	_	_			54	36						2		2	2
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PC 02	Chemistry Chemistry	Ħ	1	1	廿	3.0	90) 54	4	36		18 36	3								
PC 03	Linear Algebra and Analytic Geometry	\prod	1	1 1	+ [$\overline{}$	-	5 54	-	18	-	51	3								
PC 04.1	Further Mathematics. Part 1. Differential and Integral Calculation of one-variable functions	1		1 1		4.5	13	5 54	4	18	36	81	3								
PC 04.2	Further Mathematics. Part 2. Differential and Integral Calculus of multi-variable functions. Differtial equations	2		2 2	: [8.5	25	5 14	44	72	72	111		8							
PC 04.3	Further Mathematics. Part 3. Rows. Theory of complex function variable	3	_	3 3			12				36	48			4						
PC 05	Engineering and Computer Graphics		-	1 1	1		12	0 72 5 90		36 54	36	48 18 75	4 5								
PC 06.1 PC 06.2	General Physics. Part 1. Mechanics. Basics of Electrodynamics General Physics. Part 2. Electricity and Magnetism. Optics. Atomic Physics	++	2	1 2	++			5 72		36		18 /5 18 63	5	4							
PC 07	Materials Science	2		2 2		4.5	13	5 72	2	36	18	18 63		4							
PC 08 PC 09.1	Electrical Engineering and Electronics Theoretical Mechanics. Part 1. Statics	2	2	2 2 2	+		90			36 36		18 36 63		3 4							
PC 09.1	Theoretical Mechanics. Part 1. Statics Theoretical Mechanics. Part 2. Kinematics	3		3 3			15			36		78			4						
PC 09.3	Theoretical Mechanics. Part 3. Dynamics	-	4	_			10			36		33				4					
PC 10 PC 11	Informatics Theoretical foundations of heat engineering		3		+) 12			18 36		54 48 18 36			3						
PC 12.1	Mechanics of Materials and Structures. Part 1. Simple Load	3		$\overline{}$						54		18 87			6						
PC 12.2	Mechanics of Materials and Constructions. Part 2. Complex Load, rigidity and dynamics	4	.	4		6.5	5 19	5 10	08	54	36	18 87				6	,				
PC 13	Mechanics of Materials and Structures. Coursework		4	土	廿		30					30				X					
PC 14 PC 15	Metrology, standardization and certification Fluid and Gas Mechanics	4	4	4 4 4 4	\rightarrow		5 13 5 10	5 7				18 63 18 33				4					
PC 15	Theory of Mechanisms and Machines	\rightarrow	4	_	+	3.5	10	5 72		36		18 33				4					
PC 17	Theory of Mechanisms and Machines. Coursework	\longrightarrow	5	_			30			26	2.6	30						X			
PC 18 PC 19	Machine Parts and Design Fundamentals Machine Parts and Design Fundamentals. Courseproject	5	6	-	++) 18 5 45			36	36	18 90 45						5	X		
PC 19	Fundamentals of design and engineering	5		5 5		6.0	18	0 90	0	36		90						5			
PC 21	Fundamentals of mathematical modeling of physically heterogeneous systems Discrete control systems for actuators	5	_	6 6 5 5			5 16 0 18			36 36		36 93 54 90						5	4		
PC 22 PC 23	Fundamentals of industrial electric drive	6		6 6		5.0	15	0 72	2	36		36 78						3	4		
PC 24	Fundamentals of hydraulic automation	7		7			90			36	- 1	54								2	
PC 25 PC 26	Design of units of automated mechanical systems Design of units of automated mechanical systems. Coursework	 	7	+	++		12 45		_		54	66 45								3 X	
PC 27	Mechanical engineering technology	8	$\overline{}$	В		3.5	5 10	5 4	5	36	9	60									5
PC 28 PC 29	Mechanical engineering technology. Coursework Diploma Practice	-	8	+	++		30		_			30 180									X
PC 30	Diploma Project Preparation	\Box	1	+	++	6.0	18	0 0)			180									X
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	TOTAL IN COMPULSORY educational components	S [20]	26 4 2	Sel	ective	Edn D I 180	0 540 catio	00 2 <i>71</i> nal co	27 1 ompo	onents	107 S	432 26/3	28	29	27	28	3	17	12	/	7
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PS 14	Educational component 14 F- Catalog	П	8	8 8		4.0) 12	0 5	4	18		36 66	-	_	-				7.0	20	6
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Head of Science and Methodic Univercity Board - 131 Mykola BOBYR

> Director of ER IME Ihor GRYSHKO

Oleksandr LUHOVSKYI Head of the Department