**APPROVED** 

## **AGREED**

Head of Academics Department

## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE **National Aviation University**

## **EXTENDED CURRICULUM EDUCATION SEEKERS TRAINING**

foreign students - english project Nº ECB - 5 - 192 - 1 / 22 - fs

Educational and Professional Program: Industrial and civil engineering

**Bachelor** 

Academic Degree: Field of study:

O. Holubnychyi

2022

19 192 Architecture and construction

Specialty: Educational qualification: Mode of study: Training period:

Building and civil engineering Bachelor in Building and Civil Engineering

Full-time

3 years 10 months

A. Polukhin 2022

Vice-Rector for Academics

On the basis of complete secondary education

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	(in weel	ks)	

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			Hou	urs per	semest	ers					dent's we Nork with	ork (hour h a tutor	s)		-		1 Yea	rofstu	dy				2	Yearo		s per ye	ears of s	study a	nd sem		ar of	study					4	Year	of study				
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	Humanities and Socio-Economic Subjudies of Ukrainian Statehood and		(510 / 17	7,0)		_									-	П	-																		1		$\top$			_		-	
1.1	Culture	2			ļ			3,0	90	34	17	17		56		Ш		2	1 1		6										1						Ш	Ш	Щ		Ш		
1.2	Business Ukrainian Language	1						3,0	90	34		34		56	2	2	56														1							$\square$	Ш		Щ	_	Ŀ
1.3	Professional Foreign Language (Ukrainian)	2	1g					4,5	135	68		68		67	2	2	26	2	2	4	1																						Ľ
1.4	Philosophy	3		1				3,5	105	51	17	34		54							3	1	2	54							_												
1.5	Physical Training and Self- improvement		1g					3,0	90	34		34		56	2	2	56																Ш										
2. F	rofessional and Practical Training ( 48	90 / 1	63,0)																											-													
2.1.	Professionally Oriented Subjects (4	350 /	145.0)																																								
2.1.1	Higher Mathematics	1	2g,3g		1,2,3			17,0	510	255	102	153		255	5 2	2 3	95	5	2 3	8	0 5	2	3	80																			
2.1.2	Physics	2	1g		1			6,0	180	85	34	17	34	95	3	1 1	1 39	2	1	1 5	6																						
2.1.3	Chemistry		1g					3,5	105	51	34		17	54	3 2	2	1 54																										
2.1.4	Informatics (General Course)	1		1				6,0	180	85	34		51	95	5	2	3 95																										
2.1.5	Theoretical Mechanics (Statics)		2g	2				4,5	135	68	34		34	67				4	2	2 6	7																						
2.1.6	Introduction to Civil Engineering		2g		2			5,0	150	68	34	34		82				4	2 2	8	2																						
2.1.7	Engineering Graphics		1g,2g	1,2				7,0	210	102	34	34	34	108	3 -	2	54	3	1	2 5	4																						
2.1.8	Urban Planning and Transport	3				3		4,5	135	68	17	51		67							4	1	3	67																			
2.1.9	Mechanics of Materials	3		3,3				4,5	135	68	34		34	67							4	2	2	67							T												Ī
2.1.10	Structural Mechanics		49	4				5,0	150	68	34		34	82											4 2	2	82																
2.1.11	Engineering Geodesy (General Course)	4		4		1		3,5	105	51	17		34	54											3 1	2	54										П			Т			
2.1.12	Architecture of Buildings and	5		$\top$		5		5,0	150	68	34		34	82	+	Ħ							+					4	2	2 82	2	+		+			+		+	+	+	$\rightarrow$	
	Structures Engineering Geology	6		6		+		5,0	150	68	34		-	82	-	+	+			-	+	+	+-			+	+				+	1 2	:	2 82	-	+	+	-		+	+	-	H
_	Building Technical Equipment	0	5g	-	5			3,5	105	51	17	34	34	54		+++	+	-	-		+	H	+	$\vdash$		+		3	1 2	54	-	+ 2	- 1	02	┢		++		-	+	-	+	
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-	Construction Technology	6		6				5,0	150	68	34	_		82			-	-			_	Ш	_						1	-	ļ.			2 82	1		$\perp$	$\Box$			1	_	L
	Fluid Mechanics		6g	-	6			4.0	120	51	34	_	17	69		11						Ш	+									3 2		1 69	╙		Ш				4	4	L
	Heat-Gas Supply and Ventilation	7		7				3,5	105	51	17	_	34	54		11	_				4	Н	+			1				_	_			1	3	1	2		_		Ш	_	
	Water Supply and Drain	7		-	7			3,5	105	51	17	_	34	54		-	_	-			_	Н	-			4			4	+	+			+	3	1	2	-	_		Ш	_	
	Building Constructions	7		-		7		4,5	135	68	34	_	-	67		++	4	-			-	Н	+			_				_	4	4.	4	_	+-	2	2	_	_		4	_	-
_	Fundamentals of Labor Protection		7g	-				3,0	90	34	17	_	17	56							+	Ш	-			4				_	1	-		-	2	1	1	56	_		Ш		L
2.1.21	Organization of Construction  Mechanics of Materials (Special	8		+			8	5,0	150	70	28		42	80	_	11	4	-	Ш.		+	Н				_		_		+	+			+		4	$\perp$		5	2	3	80	
2.1.22	Course) and Fundamentals of Plasticity	4					4	5,5	165	68	34		34	97											4 2	2	97																
1 23	and Elasticity Theory  Civil Engineering Materials	4		+	4			5,0	150	68	34		34	82	_	+	+-				+	$\forall$	+	-	4 2	2	82	-	++	+	+	+		+		+	+		-	+	H	$\dashv$	
	Production Base of Civil Engineering				5							34	-	-	-		+		+	-	+		+	+	7 2	2	02	_	2 2	82	1		+	1	-	+	+	$\dashv$	+	+	+	+	H
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- 1	Metal Structures	6					6	5,0	150	68	34	-	-	82	-	+	-	-			-		-			+		-	++	+	+	1 2	- 2	82			+	_	$\dashv$	+	#	_	L
1.1.26	Structural Mechanics (Special Course)	5		5,5				4,5	135	68	34		34	67														4	2	2 67	7												
.1.27	Erection and Assembling of Structures		7g	7				3,5	105	51	17	34		54																					3	1 2		54					
1 28	Construction Economics		8g		8,8			4,0	120	56	14		42	64			Т			1		$\Box$							$\dagger \dagger$										4	1	3 (	64	-
.1.29	Foundation Engineering	8		8,8				4,0	120	56	28	28		64																									4	-		64	
2.2.	Practical Subjects ( 360 / 12,0 )																										-												_				
2.2.1	Educational Trainings																																										Ī
.2.1.1	Professional Introductory Training in Industrial and Civil Engineering		2g					3,0	90					90				90		9	0																						ĺ
2.2.2	On-the-Job training										$\vdash$										+	1						+	+			+	+	+		1	+	+	+	+	+	+	
.2.2.1	Geodetic Practice for Industrial and		4g	t				3,0	90					90				$\vdash$				П			90		90		+								+		+	+	+	+	ŀ
	Civil Engineering		79	+				5,0	50				_	50		+	-				+		+		50		90		++		-	-		-	-	+	$\perp$			$\perp$	$\perp$	_	-
2.2.2	Technological Training for Industrial and Civil Engineering		6g					3,0	90					90																	9	0		90									
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223	Major-related Training for Industrial and Civil Engineering		8g	100				3,0	90									1				1 1				- 1					- 1	- 1				1			90	1 0			

			-4											5	SELEC	CTIVE	CON	IPON	ENTS																							
3.	Subjects Selected by Students ( 1800 /	60,0)																																								
3.1	Ukrainian as a foreign language		3g,5g			8,0	240	102		102		138								3		3	69				3	3		69												151
3.2	Introduction to Computer-Aided Design		3g			4,0	120	51	17		34	69						П		3	1	2	69																			53
3.3	Solid Mechanics		3g			4,0	120	51	17		34	69								3	1	2	69																			53
3.4	BIM-management		4g			4,0	120	51	17		34	69						Ш						3 1		2 69																53
3.5	Fundamentals of Programming		4g			4,0	120	51	17		34	69									П			3 1		2 69																53
3.6	Numerical Methods for Structural Design		5g			4,0	120	51	17	34		69															3	1 2		69												53
3.7	Airport Buildings and Structures		5g			4,0	120	51	34	17		69															3	2 1		69												53
3.8	Fundamentals of Computer Modeling		6g			4,0	120	51	17		34	69																			3 1	1	2 69									53
3.9	Constructions of Buildings and Structures		6g			4,0	120	51	17		34	69																			3 1	1	2 69									53
3.10	BIM-technologies		7g			4,0	120	51	17		34	69																						3	1	2	69					53
3.11	Fundamentals of Electrical Engineering		7g			4,0	120	51	17		34	69																						3	1	2	69					31
3.12	Metals and Welding in Construction		7g			4,0	120	51	17		34	69																						3	1	2	69					53
3.13	Reinforced Concrete and Stone Structures		8g			4,0	120	56	28		28	64																										4	2	2	64	53
3.14	Organization of Construction (Special Course)		8g			4,0	120	56	28	28		64																										4	2 2		64	53
	Total Hours				Ï		7200	3048	1197	787	1064	4152	25	8 1	2 5	475	22 9	8	5 526	25	8	11 6	475	21 9	1	12 543	24	10 10	4 4	92 2	21 1	0	11 54	3 24	9	2 13	492	21	9 4	8	606	
	Total ECTS Credits					240,0							30,0				30,0			30,0				30,0			30,0			31	0,0			30,0	П			30,0				
per	Examinations	23											3				3			3				3			3				3			3				2				
Nun	Graded Tests		35										5				5			4				4			4				4			5				4				
	Term Papers			3																1							1							1								
	Course Projects				3													$\top$			П			1							1							1		$\top$		

## Optional Disciplines (by additional contract):

1	Foreign Language for Professional Purpose	3g,4g, 5g,6g, 7g,8g		18	,0 5	40 1	198	198	342							2	2	2	56	2	2	56	2	2	56	2	2	56	2	2	56	2	2	62	87
2	Primary Medical Care	2g		3,	0 9	90	34	34	56				2	2	56																				811
3	Modern Ukrainian Language	1g		3,	0 9	90	34	34	56	2	2	56																							151

Chairman of the Student Council of the Faculty of Architecture, Civil Engineering and Design

K. Anikanova

Dean of the Faculty of Architecture, Civil Engineering and Design

V. Karpov

Guarantor of the Educational and Professional Program

N. Kostyra

Head of the Graduate Department of Computer Technologies of Airport Construction and Reconstruction

O. Lapenko

AGREED

by the Research and Methodological Council

Minutes No. 2 of 18.04 2022