



**WORK CURRICULUM**  
for the 2021/2022 academic year

(Enrolment 2021)

Faculty (institute)

Institute of Energy Saving and Energy Management

APPROVED

Vice-rector for educational work  
Igor Sikorsky Kyiv Polytechnic Institute

Specialty (code and name)

**184 Mining**

according to the educational-professional program of master's training (specialization)

Form of study

**Part-time**

Study duration

**1 year 4 months**

**Geoengineering**

Educational degree

**Master**

Qualification

Master of Mining

\_\_\_\_\_ Anatoliy MELNYCHENKO

" " 2021

Graduation department

**Department of Geoengineering**

№	Educational components	Name of departments	Volume of the subject		Number of Auditory hours								Self-study	Control measures and their distribution by semesters								Distribution of auditory hours per week by courses and semesters									
			ECTS Credits	General amount	Total	including						Individual work		Exams	Tests	Module test	Course project	Coursework	calculation and graphic work	Home control work	Summary	I course			II course						
						Lectures	Practical	Laboratory																							
			за НР	з урахуван. НР, заняття	за НР	з урахуван. НР, заняття	за НР	з урахуван. НР, заняття	Individual work																						
<b>1. Compulsory educational components</b>																															
<b>1.1. General training cycle</b>																															
1	Intellectual Property and Patenting-1. Intellectual property	Department of Intellectual property and private	1	30	4	2	2						26												4	2	2				
2	Intellectual Property and Patenting-2. Patenting and acquisitions	Department of Machine Design	2	60	6	4	2						54	1	1										6	4	2				
3	Basics of Engineering and Sustainable Development Technologies	Power Supply Department	2	60	8	4	4						52	1	1										8	4	4				
4	Practical course of Foreign Language on Business Communication	Department of English for Engineering 1	3	90	12		12						78	2	1										1	6	6		6		6
5	Management of startup projects	Department of Economic Cybernetics	3	90	10	4	6						80	2	2													10	4	6	
Total number of part 1.1			11	330	40	14	26						290	4	4										1	24	10	14	16	4	12
<b>1.2. Vocational training cycle</b>																															
6	Geotechnical Structures Construction	Department of Geoengineering	4	120	18	8	10						102	1	1		1								18	8	10				
7	Underground Enterprises Reconstruction	Department of Geoengineering	4	120	16	8	8						104	1	1		1								16	8	8				
8	Specialized Course On Underground Construction	Department of Geoengineering	4	120	16	8	8						104	1	1		1								16	8	8				
9	Specialized Course On Underground Construction	Department of Geoengineering	4	120	16	4				12			104	1	1		1								16	4	12				
10	Special Methods of Building	Department of Geoengineering	4	120	16	8	8						104	2	2														16	8	8
11	Municipal Underground Structures Engineering	Department of Geoengineering	3.5	105	18	8	10						87	1	1										18	8	10				
12	Course project in Municipal Underground Structures Engineering	Department of Geoengineering	1.5	45									45	1	1																
<b>Research (scientific) component</b>																															

13	Scientific Work on the Topic of Master's Thesis-1. Fundamentals of the scientific research	Department of Geoengineering	2	60	8	4	4					52	1				8	4	4																							
14	Scientific Work on the Topic of Master's Thesis-2. Scientific Work on the Topic of Master's Thesis	Department of Geoengineering	2	60	8		8					52	2								8					8		8														
Total number of part 1.2			29	870	116	48	56					12					754	4	5	6	1		4	1	92	40	40	12	24	8	16	0										
TOTAL for the NORMATIVE educational components			40	1200	156	62	82					12					1044	4	9	10	1		4	2	116	50	54	12	40	12	28	0										
<b>2. Optional educational components</b>																																										
<b>2.1. Vocational training cycle (Optional subjects from Faculty/Department catalogue)</b>																																										
	<b>Educational components</b>	<b>Name of departments</b>	К-ть.здоб які вибр. дисципл																																							
			Б	К																																						
15	Educational Component 1 of D-catalogue																																									
	Designing of Underground Transport Systems	Department of Geoengineering	*		4	120	12	6	6																			12	6	6												
16	Educational Component 2 of D-catalogue																																									
	Designing of connection between ground and underground facilities	Department of Geoengineering	*		4	120	12	6	6																				12	6	6											
17	Educational Component 3 of D-catalogue																																									
	Modernization of underground networks	Department of Geoengineering	*		4	120	10	4	6																				10	4	6											
18	Educational Component 4 of D-catalogue																																									
	Designing underground structures of special purpose	Department of Geoengineering	*		4	120	10	4	6																				10	4	6											
19	Educational Component 5 of D-catalogue																																									
	Resource management of a geotechnical enterprise	Department of Geoengineering	*		4	120	10	4	6																				10	4	6											
20	Educational Component 6 of D-catalogue																																									
	Geoinformation systems of construction objects	Department of Geoengineering	*		4	120	10	4	6																				10	4	6											
Total number of part 2.1			24	720	64	28	36																						64	28	36											
Total for the ELECTIVE educational components			24	720	64	28	36																						64	28	36											
<b>TOTAL</b>			<b>64</b>	<b>1920</b>	<b>220</b>	<b>90</b>	<b>118</b>																						<b>1700</b>	<b>6</b>	<b>13</b>	<b>16</b>	<b>1</b>	<b>7</b>	<b>2</b>	<b>116</b>	<b>50</b>	<b>54</b>	<b>12</b>	<b>104</b>	<b>40</b>	<b>64</b>
<b>TOTAL</b>							Exams								3																											
							Tests								6																											
							Module test								8																											
							Course project								1																											
							Coursework																																			
							Calculation and graphic work								4																											
							Home control work																																			
							Summary												1																							

\*Дисципліни, які студенти опановують в рамках сертифікатної програми "Ресурсозберігаючі технології надрокористування", введеної в дію наказом № від

\*\*Дисципліни, які студенти опановують в рамках сертифікатної програми "Екобезпечні технології в гірництві", введеної в дію наказом № від

Approved by Institute Academic Council, Meeting protocol №\_10\_ from March 30, 2021

Head of the Department

(підпис)

/ Anatoliy KRUCHKOV/

(П.І.Б.)

Dean of the Faculty (Director of the Institute)

(підпис)

/Serhii DENYSIUK /

(П.І.Б.)