



**CURRICULUM**

(Enrolment 2022)

APPROVED

by Head of Academic Council

Level

Master

Form of study

full-time

Igor Sikorsky Kyiv Polytechnic Institute

(name of the level)

Faculty

Educational and Scientific Institute for Energy Saving and Energy Management

Mykhaylo ILCHENKO

Specialty

184 Mining

Qualification

Master Degree in Mining

2022

Educational and Scientific program

(cipher and specialty name)

Study duration

1 years 9 months

Base level

Bachelor Degree

Graduation Department

Department of Geoengineering

**I. Schedule of educational process**

YEAR	September	October	November	December	January	February	March	April	May	June	July	August
I												
II												

Symbols: Learning period (L), Examination (E), Practice (P), Research (R), Assessment (A), Holiday (H)

**II. Summary table of time budget (Weeks)**

YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II	18	2	5	2	10	2	39

**III. Practice**

Type of practice	YEAR	Weeks
Scientific and Research Practice	2	5

**IV. Graduates assessment**

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
Work of Master Thesis	The defense of Master's Thesis	2

**V. Plan of Educational process**

The code for the EPP (EDUCATIONAL-PROFESSIONAL PROGRAM)	Name of the discipline	Distribution for terms (semesters)						ECTS Credits	Number of hours					
		Exams	Tests	Tests	Tests	Individual task	Module test		General amount	Auditory including			Self-study	
										Total	Lectures	Practical		Laboratory
<b>1. Compulsory educational components</b>														
<b>1.1. General training cycle</b>														
30 1.1	Intellectual Property and Patenting. Part 1. Intellectual Property Law						1	30	18	12	6			12
30 1.2	Intellectual Property and Patenting. Part 2. Patenting and Acquisitions		1	1			2	60	36	24	12			24
30 2	Basics of Engineering and Sustainable Development Technologies		1	1			2	60	36	18	18			24
30 3.1	Practical Course of a Foreign Language for Research Communication. Part 1		2	1		1	3	90	72		72			18
30 3.2	Practical Course of a Foreign Language for Research Communication. Part 2		3	3			1.5	45	36		36			9
30 4	Management of Startup Projects		2	2			3	90	54	18	36			36
30 5	Pedagogics of Graduate School		3	3			2	60	36	18	18			24
30 6	Methods of Mathematical Optimization		3	3			4	120	54	36	18			66
30 7	Mathematical Modeling of Systems and Processes		3	3		3	4	120	54	36	18			66
Total number of part 1.1			8	8		1	1	22.5	675	396	162	234		279
<b>1.2. Vocational training cycle</b>														
PO 1	Surface complex of Mining Enterprises		1	1	1		3	90	54	27	27			36
PO 2	Geocontrol of Mining Processes		1	1			3	90	54	27	27			36
PO 3	Reconstruction Underground Enterprises	1		1	1		3.5	105	54	27	27			51
PO 4	Specialized Course On Underground Construction		1	1	1		3.5	105	72	36	36			33
PO 5	Computer-Aided Design System		1	1	1		3.5	105	54	18		36		51
PO 6	Special Methods of Building	2		2		2	3.5	105	54	27	27			51
PO 7	Municipal Underground Structures Engineering	1		1			3.5	105	36	18	18			69
PO 8	Municipal Underground Structures Engineering. Course project		1				1.5	45						45
<b>Research component</b>														
PO 9.1	Scientific Work on the Topic of Master's Thesis. Part 1. Fundamentals of the scientific research		1				2	60	27	9	18			33
PO 9.2	Scientific Work on the Topic of Master's Thesis. Part 2. Scientific Work on the Topic of Master's Thesis		3				2	5.5	165	18	18			147
PO 10	Modern Methods of Engineering Survey	3		3	3		3	90	36	18	18			54
PO	Scientific and Research Practice		4				9	270						270
PO	Master's Thesis Implementation						17	510						510
Total number of part 1.2		4	8	8	5		2	61.5	1845	459	207	216	36	1386
<b>TOTAL for the NORMATIVE educational components</b>		4	16	16	5	1	3	84	2520	855	369	450	36	1665
<b>2. Optional educational components</b>														
<b>2.1. Vocational training cycle (Optional subjects from Faculty/Department catalogue)</b>														
PB 1	Educational Component 1 of D-catalogue	2		2	2		4	120	54	27	27			66
PB 2	Educational Component 2 of D-catalogue	2		2	2		4	120	54	27	27			66
PB 3	Educational Component 3 of D-catalogue		2				4	120	54	27	27			66
PB 4	Educational Component 4 of D-catalogue		2				4	120	54	27	27			66
PB 5	Educational Component 5 of D-catalogue		2				4	120	54	27	27			66
PB 6	Educational Component 6 of D-catalogue		2	2	2		4	120	54	27	27			66
PB 7	Educational Component 7 of D-catalogue	3		3	3		6	180	90	45	45			90
PB 8	Educational Component 8 of D-catalogue	3		3	3		6	180	90	45	45			90
Total number of part 2.1		4	4	5	5	0	0	36	1080	504	252	252		576
<b>Total for the ELECTIVE educational components</b>		4	4	5	5	0	0	36	1080	504	252	252		576
<b>TOTAL</b>		8	20	21	10	1	3	120	3600	1359	621	702	36	2241

Exams	2	3	3
Final tests	8	6	5
Courseworks			1
Course projects	1		

Head of the Department \_\_\_\_\_ Oksana VOVK

Dean of the Faculty (Director of the Institute) \_\_\_\_\_ / Serhii DENYSIUK