MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2022)

APPROVED

by Academic Council

Igor Sikorsky Kyiv Polytechnic Institute
(meeting protocol № __ from _____ 2022)

Head of Academic Council

_____ Mykhaylo ILCHENKO

Level PhD

Speciality 184 Mining

Educational and Scientific program

Geoengineering

Graduation Departments Geoengineering

Faculty (Institute) Educational and Scientific Institute for Energy Saving and Energy Management

Form of study full-time (full-time, part-time)

Qualification Philosophy Doctor

Study duration 4 years

Base level Master degree

Educational component 40 ECTS Credits

Schedule of study

YEAR	October					November				December					January				February				March				April					May				June				July					August				September			
	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	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
I														E	E	E	R	R	RT	RT		RT																E	E	R	H	H	H	H	H	H	H	H	H	R	RT	RT	RT
II												P	P	E	E	E	R	R	RT	RT		RT																E	E	R	H	H	H	H	H	H	H	H	H	R	RT	RT	RT
III	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	RT	RT		RT	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	H	H	H	H	H	H	H	H	H	R	RT	RT	RT
IV	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	RT	RT		RT	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	H	H	H	H	H	H	H	H	H	R	RT	RT	RT

Symbols: Learning period; E Examination; P Practice; R Research; RT Report; A Assessment; H Holiday

I. Educational component

Summary table of time budget (Weeks)

YEAR	Learning period	Examination	Internship	Holiday	Total
I	28	5		9	42
II	26	5	2	9	42

Internship

Type of Internship	YEAR	Weeks
Pedagogical practice	3	2

Plan of Educational process

Code	Educational components	Distribution for terms (semesters): Exams	Final tests	Module test	Calculation, graphic, calculation and graphic assignment	Home test	Essay, abstract	ECTS Credits	Number of hours: Total	Lectures/practical lessons: Lectures	Practical	Laboratory	Self-study
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. NORMATIVE educational components													
Subjects for Owning General Scientific (Philosophical) Competencies													
ЗО1.1	Philosophical Principles of Scientific Activities. Part 1. Scientific Outlook and Ethical Culture of a Scientist		1	1				2	26	13	13		34
ЗО1.2	Philosophical Principles of Scientific Activities. Part 2. Philosophical Gnosiology and Epistemology	2					2	4	54	18	36		66
Subjects for Gaining Language Competencies													
ЗО2.1	Foreign Language for Scientific Activities. Part 1. Scientific Research		1				1	3	39		39		51
ЗО2.2	Foreign Language for Scientific Activities. Part 2. Scientific Communication	2		2				3	36		36		54
Subjects for Gaining Deep Knowledge on Speciality													
ЗО3	Geomechanical Processes in Rock Ranges	3		3				6	65	26	39		115
ЗО4.1	Mathematical Modelling of Geomechanical Processes. Part 1. Mechanics of Deformed Solid Body		3				3	3	39	13	26		51
ЗО4.2	Mathematical Modelling of Geomechanical Processes. Part 2. Numerical Methods in Geomechanics		4					3	36	18	18		54
Subjects for Gaining Universal Competencies of Researcher													
ПО1	Organization of scientific and innovative activities		2	2		2		4	54	36	18		66
ПО2	Improving the Pedagogical Skills of a Lecturer and Researcher		1	1		1		4	52	26	26		68
ПО3	Pedagogical practice*		3					4					120
	TOTAL of NORMATIVE educational components	3	7	5		2	3	36	401	150	251	0	679
2. ELECTIVE educational components													
В1	Educational component 1 F		4			4		6	72	36	36		108
В2	Educational component 2 F		4			4		6	72	36	36		108
	TOTAL of ELECTIVE educational components		2			2		12	144	72	72		216
	TOTAL	3	9	5		4	3	48	545	222	323	0	895

Exams		2	1	
Final tests	3	1	2	3

II. Scientific component

YEAR	The content of the graduate student's scientific work	Forms of control (Reporting)
1st year	Choosing and justification the topic of your own scientific research, defining the content, deadlines and scope of scientific work; selection and substantiation of the methodology for conducting one's own scientific research, the implementation of inspection and analysis of existing views and approaches that have developed in modern science in the chosen direction. Ttraining and publication of at least 1 article (usually a review article) in scientific journals (domestic or foreign) on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts.	Approval of the individual work plan of the graduate student at the academic council of the institute / faculty, reporting on the progress of the individual plan of the graduate student twice a year
2nd year	Conducting, under the guidance of a scientific supervisor, one's own scientific research, which involves solving research problems by applying a complex of theoretical and empirical methods	Report on the progress of the individual plan of the graduate student twice a year
3rd year	Analysis and generalization of the obtained results of own scientific research; substantiation of the scientific novelty of the results obtained, their theoretical and / or practical significance.	Report on the progress of the individual plan of the graduate student twice a year
4th year	Registration of scientific achievements of a graduate student in the form of a dissertation, summing up the completeness of coverage of the results of the dissertation in scientific articles according to the current requirements. Implementation of the results obtained and obtaining supporting documents. Submission of documents for preliminary examination of the dissertation. Preparation of a scientific report for graduation certification (protection of the dissertation).	Report on the progress of the individual plan of the graduate student twice a year. Providing an opinion on scientific novelty, theoretical and practical significance of the results of the dissertation.

Head of the Department _____/_ Oksana VOVK

Dean of the Faculty (Director of the Institute) _____/ Serhii DENYSIUK