



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 No. 10/2022)

Head of Academic Council

[Signature]



Level Master Field of Study 14 - Electrical engineering

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

Specialty 141 - Electric power engineering, electrotechnics and electromechanics

Faculty Educational and Scientific Institute for Energy Saving and Energy Management

Educational and Professional programme

Qualification Master in electric power engineering, electrical engineering and

Engineering of Intelligent Electrotechnical and Mechatronic Complexes

Study duration 1 year 4 months

Graduation Department Department of Automation of Electrotechnical and Mechatronic Complexes

Base level Bachelor's degree

I. Schedule of educational process

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

Symbols: P - Learning period, E - Examination, R - Practice, H - Rest/Retreat, A - Assessment, H - Holiday

II. Summary table of time budget (Weeks)

Year	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4	0	0	0	12	52
II	0	0	8	7	3	0	18

III. Practice

Type of practice	Term (Semester)	Weeks
Practice	3	8

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	Term (Semester)
Preparation of Master's Thesis	Defence of master's thesis	3

V. Plan of Educational process

Code	Educational components	Distribution for terms (semesters)						ECTS Credits	Number of hours					Distribution of classroom studies hours per week										
		Exams	Final tests	Module test	Calculation, graphic, calculation and graphic assignment	Home test	Essay, abstract		Total	Classroom studies			Self-study	1 year		2 year								
										Total number of classroom studies	Lectures	Practical		Laboratory	Terms		Terms							
															18	18	0	0						
1. NORMATIVE educational components																								
1.1. General training cycle																								
ZO 01.1	Intellectual Property and Parenting. Part I. Intellectual Property Rights of Rights						1	30	18	12	6		12		1									
ZO 01.2	Intellectual Property and Parenting. Part II. Patent Science and Acquisition	1	1				2	60	36	24	12		24		2									
ZO 02	Fundamentals of Engineering and Technology of Sustainable Development	1	1				2	60	36	18	18		24		2									
ZO 03	Foreign Language for Business Communication	2	1			1	3	90	72		72		18		2		2							
ZO 04	Management of Startup Projects	2	2				3	90	54	18	36		36				3							
Total number of Part 1.1		0	4	4	0	0	1	11	330	216	72	144	0	114	7		5							
1.2. Vocational training cycle																								
PO 01	Engineering of electrical and mechatronic systems	1	1	1			5	150	54	36		18	96		3									
PO 02	Intelligent decision making systems	1	1				4.5	135	54	36	18		81		3									
PO 03	Automated design systems for electromechanical systems and complexes	1	1	1			4	120	54	36	18		66		3									
PO 04	Reliability of electrical and mechatronic systems	1	1	1			4	120	54	36	18		66		3									
PO 05	Computer control of technological processes, experiment, equipment	2	2	2			4.5	135	54	36	18		81				3							
PO 06	Virtual devices of engineering researches	1	1	1			4	120	54	27	9	18	66		3									
PO 07.1	Research Work on Topic of Master's Thesis. Part I. Fundamentals of Scientific Research		1				2	60	27	9	18		33		1.5									
PO 07.2	Research Work on Topic of Master's Thesis. Part II. Scientific and Research Work on Topic of Master's Thesis		2				2	60	18		18		42				1							
PO 08	Practice		3				14	420	0				420					X						
PO 09	Preparation of Master's Thesis						12	360	0				360					X						
Total number of Part 1.2		3	6	6	5	0	0	56	1680	369	216	117	36	1311	16.5		4							
TOTAL OF NORMATIVE educational components		3	10	10	5	0	1	67	2010	585	288	261	36	1425	23.5		9							
2. ELECTIVE educational components																								
2.1. Vocational training cycle (Elective educational components from Faculty/Department catalogue)																								
PV 01	Optional subject #1 from F-Catalogue	2	2	2			5	150	54	36	18		96				3							
PV 02	Optional subject #2 from F-Catalogue	2	2	2			4	120	54	36	18		66				3							
PV 03	Optional subject #3 from F-Catalogue	2	2	2			5	150	54	36	18	18	96				3							
PV 04	Optional subject #4 from F-Catalogue	2	2	2			4	120	54	36	18	18	66				3							
PV 05	Optional subject #5 from F-Catalogue	2	2	2			5	150	54	36	18	18	96				3							
Total number of Part 2.1		3	2	5	3	0	0	23	690	270	144	72	54	420			15							
TOTAL OF ELECTIVE educational components		3	2	5	3	0	0	23	690	270	144	72	54	420			15							
TOTAL		6	12	15	8	0	1	90	2700	855	432	333	90	1845	23.5		24							
															Exams		3	3						
															Final tests		5	6	1					
															Courseworks									
															Course projects									
															Calculation, graphic, calculation and graphic assignment		4	4						
															Home test									
															Essay, abstract		1							

Head of the SMC *[Signature]* / Oleksandr YANDULSKY /

Head of the Department *[Signature]* / Sergii BOICHENKO /

Dean of the Faculty *[Signature]* / Sergii DENYSIUK /