

**APPROVED**

by Academic Council

Igor Sikorsky Kyiv Polytechnic Institute
(meeting protocol № __ from _____ 2020)

Head of Academic Council

____ Mykhaylo ILCHENKO

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2019 of citizen of the Republic of India)

Level PhDSpeciality 141 - Electric power engineering, electrical engineering and electromechanicsEducational and Scientific program Electric power engineering,electrical engineering and electromechanicsForm of study part-timeQualification Doctor of philosophy in electric power engineering, electrical engineering and electromechanicsStudy duration 4 yearsBase level Master degreeEducational component **40 ECTS Credits**Faculty (Institute) Faculty of electric power engineering and automatics**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					S	S	S	S	S	S	S/E	S	S/R																																							
II	S/E	S/R	S/R	S	S	S	S	S	S	S	S	S/E	S	S/R																																						
III	S/E	S/R	S/R	S	S	S	S	S	S	S	S	S	S/R	S/R																																						
IV	According to an individual plan of doctor of philosophy thesis																																																			

Symbols: ☐ Holiday ☐ S Session ☐ S/E Tests and examination ☐ S/R Research report**I. Educational component**

Summary table of time budget (Weeks)					
YEAR	Learning period	Examination	Internship	Holiday	Total
I	8	2		42	52
II	9	3	2	38	52

Internship		
Type of Internship	YEAR	Weeks
Pedagogical internship	2	2

Plan of Educational process

Code	Educational components	Distribution for terms (semesters)				ECTS Credits	Number of hours				
		Exams	Final tests	Individual task	Module test		Total	Lectures/practical lessons			Self-study
								Lectures	Practical	Laboratory	
1	2	3	4	5	6	7	8	9	10	11	12
1. Normative components											
1.1. Humanities training cycle											
ZO1	Philosophical Principles of Scientific Activity	2	1	2	1	4	120	19	30		71
1.2. Language training cycle											
ZO2	Foreign Language for Scientific Activity	2	1	1	2	6	180		45		135
1.3. General training cycle											
ZO3	Methods of Research, Formation and Control of Intelligent Energy Systems and Complexes	4		4	4	3	90	4	2		84

ZO4	Fundamentals of Theory of Electromagnetic Field and Processes		3	3	3	3	90	13	13		64
ZO5	Non-conventional and Renewable Energy Sources in Electric Power Systems and Electrotechnical Complexes		4	4	4	3	90	4	2		84
ZO6	Monitoring, Control and Protection of Electric Power Systems and Electrotechnical Complexes	3		3	3	3	90	13	13		64
1.4. Vocational training cycle											
PO1	Advanced Technologies in Electric Drive and Electromechanical Systems	3	2	2,3	2,3	4	120	19	2		99
PO2	Pedagogical Internship		3			4	120				120
TOTAL of NORMATIVE educational components		5	6	8	8	30	900	72	107		721
2. Elective components											
V1	Optional subject #1 from F-Catalogue		3	3	3	3	90	7	6		77
V2	Optional subject #2 from F-Catalogue		4	4	4	3	90	4	2		84
V3	Optional subject #3 from F-Catalogue	4		4	4	4	120	4	2		114
TOTAL of ELECTIVE educational components		1	2	3	3	10	300	15	10		275
TOTAL		6	8	11	11	40	1200	87	117		996

II. Scientific component		
YEAR	The content of the graduate student's scientific work	Forms of control (Reporting)
1st year	Choice and substantiation of the topic of own scientific research, determination of the content, terms of performance and volume of scientific works; selection and substantiation of the methodology of conducting own research, review and analysis of existing views and approaches that have developed in modern science in the chosen field. Preparation and publication of at least 1 article (usually a review) in scientific professional publications (domestic or foreign) on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts.	Approval of the individual plan of the postgraduate student's work at the academic council of the institute / faculty, reporting on the progress of the individual postgraduate student's plan twice a year
2nd year	Conducting own research under the guidance of the supervisor, which involves solving research problems through the use of a set of theoretical and empirical methods. Preparation and publication of at least 1 article in scientific professional publications (domestic or foreign) on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts.	Reporting on the progress of the individual postgraduate student's plan twice a year
3rd year	Analysis and generalization of the obtained results of own scientific research; substantiation of scientific novelty of the obtained results, their theoretical and / or practical significance. Preparation and publication of at least the 1st article in scientific professional publications on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts.	Reporting on the progress of the individual postgraduate student's plan twice a year
4th year	Registration of scientific achievements of the post-graduate student in the form of the dissertation, summing up concerning completeness of coverage of results of the dissertation in scientific articles according to the current requirements. Implementation of the obtained results and receipt of supporting documents. Submission of documents for preliminary examination of the dissertation. Preparation of a scientific report for final certification (defense of the dissertation).	Reporting on the progress of the individual postgraduate student's plan twice a year. Providing an opinion on the scientific novelty, theoretical and practical significance of the dissertation results.

Head of the Scientific and Methodical Board of Speciality _____ / Oleksandr Yandulsky /
Dean of the Faculty _____ / Oleksandr Yandulsky /