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 2020)

Level PhD

Speciality Electric power engineering, electrical engineering and electromechanics

Educational and Scientific program Electric power engineering, electrical engineering and electromechanics

Faculty (Institute) Faculty of electric power engineering and automatics

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

Qualification Doctor of philosophy in electric power engineering, electrical engineering and electromechanics

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												I	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
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	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	H	H	H	H	H	H	H	H	H	R	RT	RT	RT

Symbols: Learning period; E Examination; I Internship; 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 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: Lectures	Practical	Laboratory	Self-study
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**	**6**	**180**	31	49		100
1.2. Language training cycle											
ZO2	Foreign Language for Scientific Activity	**2**	**1**	**1**	**2**	**6**	**180**		76		104
1.3. General training cycle											
ZO3	Methods of Research, Formation and Control of Intelligent Energy Systems and Complexes	**4**		**4**	**4**	**3**	**90**	36	18		36

ZO4	Fundamentals of Theory of Electromagnetic Field and Processes		**3**	**3**	**3**	**3**	**90**	26	13		51
ZO5	Non-conventional and Renewable Energy Sources in Electric Power Systems and Electrotechnical Comlexes		**4**	**4**	**4**	**3**	**90**	36	18		36
ZO6	Monitoring, Control and Protection of Electric Power Systems and Electrotechnical Complexes	**3**		**3**	**3**	**3**	**90**	26	13		51
1.4. Vocational training cycle											
PO1	Advanced Technologies in Electric Drive and Electromechanical Systems	**3**	**2**	**2,3**	**2,3**	**4**	**120**	31	9		80
PO2	Pedagogical Internship		**3**			**2**	**60**				60
	TOTAL of NORMATIVE educational components	**5**	**6**	**8**	**8**	**30**	**900**	**186**	**196**		**518**
2. Elective components											
V1	Optional subject #1 from F-Catalogue		**3**	**3**	**3**	**3**	**90**	27			63
V2	Optional subject #1 from F-Catalogue		**4**	**4**	**4**	**3**	**90**	18	9		63
V3	Optional subject #1 from F-Catalogue	**4**		**4**	**4**	**4**	**120**	18	9		93
	TOTAL of ELECTIVE educational components	**1**	**2**	**3**	**3**	**10**	**300**	**63**	**18**		**219**
	TOTAL	**6**	**8**	**11**	**11**	**40**	**1200**	**249**	**214**		**737**

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 /