



MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2021)

Level	Master	Form of study	full-time (full-time, part-time)
Speciality	144 Heat power	Qualification	Master degree
Educational and Scientific program	Heat Power and Heat Power Units of Power Plants	Study duration	1 year 9 months
Graduation Department	Department of Heat and Power Engineering	Base level	Bachelor degree
Faculty (Institute)	Faculty of Heat and Power Engineering		

APPROVED

by Academic Council

Igor Sikorsky Kyiv Polytechnic Institute
(meeting protocol № №_3_ from _15.03_ 2021)

Head of Academic Council

Mykhaylo ILCHENKO

2021

I. Schedule of educational process

YEAR	September				October					November					December				January					February				March				April				May				June				July				August			
	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
I																			E	E	H	H																													
II																			E	E	H	H	P	P	P	P	R	R	R	R	R	R	R	R	R	R	R	A													
Symbols:				Learning period					E	Examination					P	Practice				R	Research				A	Assessment				H	Holiday																				

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

II. Summary table of time budget (Weeks)

YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II	18	2	6	2	9	2	39

III. Practice

Type of practice	YEAR	Weeks
Research practice	4	6

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
Master's Thesis Implementation	Protection of the master's thesis	4

V. Plan of Educational process

Code	Subjects	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 educational components											
1.1. General training cycle											
GM 1	Intellectual Property and Patenting		1		1	3	54	36	18		36
GM 2	Sustainable Innovative Development		1		1	2	36	18	18		24
GM 3	Management of Startup Projects		2		2	3	54	18	36		36
GM 4	Workshop on Foreign Language Scientific Communication		2.3	1	1.3	4.5	72		72		63
GM 5	Pedagogy of High School		3	3	3	2	36	18	18		24
total number of part 1.1			6	2	6	14.5	252	90	162		183

1.2. Vocational training cycle											
VM 1	Energy and Resource Saving in Energetics	1		1	1	4	54	36	18		66
VM 2	Course Work on Energy and Resource Saving		2			1					30
VM 3	Methods of Thermodynamic Analysis of Plants and Systems Subject	1		1	1	5	72	54	18		78
VM 4	Design of Thermal and Nuclear Power Plants	1				5	72	36	36		78
VM 5	Course Project on Design of Thermal and Nuclear Power Plants		1			1.5					45
VM 6	Combined Energy Generation		1	1	1	2	36	18	18		24
VM 7	Automated control systems for thermal energy processes		1		1	4	72	36		36	48
VM 8	Organization and planning of a scientific experiment		2		2	3.5	54	36		18	51
VM 9	Mathematical Simulation of Systems and Processes	3		3	3	4	54	36	18		66
VM 10	Use of Solar Energy and Energy Accumulation	3		3	3	3.5	36	18	18		69
VM 11	Course Work on Use of Solar Energy and Energy Accumulation		3			1					30
VM 12	Special Issues of Thermal Power Plants		3	3	3	3	54	36	18		36
total number of part 1.2		5	7	6	8	38	504	306	144	54	621
I.3. Science (Research) component											
VM 13	Scientific Work on the Topic of Master's Thesis		1,2,3			10	90	18	72		210
VM 14	Research practice		4			10					300
VM 15	Master's Thesis Implementation					16					480
total number of part 1.3			4			36	90	18	72		990
TOTAL of NORMATIVE educational components		5	17	8	14	88	846	414	378	54	1794
2. Optional educational components											
2.1. Vocational training cycle (Optional educational components from faculty / department catalogs)											
VO 1	Educational component 1. P-Catalog	2		2	2	5	54	36	18		96
VO 2	Educational component 2. P-Catalog	2		2	2	5	54	36	18		96
VO 3	Educational component 3. P-Catalog		2	2	2	4	54	36	18		66
VO 4	Educational component 4. P-Catalog		2	2	2	4	54	36	18		66
VO 5	Educational component 5. P-Catalog	2		2	2	5	54	36	18		96
VO 6	Educational component 6. P-Catalog		3	3	3	4	72	36	36		48
VO 7	Educational component 7. P-Catalog	3		3	3	5	72	36	36		78
total number of part 2.1		4	3	7	7	32	414	252	162		546
TOTAL of OPTIONAL educational components		4	3	7	7	32	414	252	162		546
TOTAL		9	20	15	21	120	1260	666	540	54	2340

Approved by University Academic Council, Meeting protocol № 3 from March 15, 2021

Act. Head of the Department _____/Olga CHERNOUSENKO/

Dean of the Faculty (Director of the Institute) _____/Yevhen PYSMENNY/