



MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

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

CURRICULUM

(Enrolment 2017)

APPROVED

by Rector of Igor Sikorsky Kyiv Polytechnic Institute

Level **Master**

Form of study

full-time

Michael Zgurovsky

Speciality **152 - Metrology and information-measuring technique**

Faculty (Institute)

FACULTY OF
INSTRUMENTATION
ENGINEERING

2017

Specialization **Information-measuring technologies of ecological monitoring**

Qualification

2149.2 Engineer for
development, levying and
testing

Profile program **Educational and Professional**

Study duration

1 year 4 months

Graduation Department **Scientific, analytical and environmental instruments and systems department**

Base level

Bachelor degree

I. Schedule of educational process

YEAR	September				October				November						December				January					February				March				April				May				June				July				August																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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II. Summary table of time budget (Weeks)

YEAR	Learning period	Examination	Practice	Assessment	Research	Holiday	Total
I	36	4				12	52
II			8	2	10		18

III. Practice

Type of practice	YEAR	Weeks
Pre-diploma practice	2	8

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
	Master Thesis Defense	2

V. Plan of Educational process

Code	Subjects	Distribution for terms (semesters)				ECTS Credits	Number of hours				
		Exams	Final tests	Course projects	Coursework		Total	Lectures/practical lessons			Self-study
								Lectures	Practical	Laboratory	
1	2	3	4	5	6	7	8	9	10	11	12
I. GENERAL TRAINING											
I.1. Basic training (major courses)											
	Information Measuring Systems Modeling	1				4	120	36	18		66
	Optimization Methods for Information Measuring Systems		2Д			4	120	36	18		66
	Patenting and Intellectual Property		2			3	90	36	18		36
total number of part I.1		1	2			11	330	108	54		168
I.2. Basic training (optional courses)											
	Workshop on Scientific Communication in Foreign Language		2			3	90		72		18
	Subjects on Sustainable Development Problems		2			2	60	30	6		24
	Management Subjects		1			3	90	18	36		36
total number of part I.2			3			8	240	48	114		78
I.3. Science Research (optional courses)											
	Scientific Work on the Topic of Master's Thesis										
	1. Fundamentals of Scientific Research		1			2	60	9	18		33
	2. Scientific and research work on the topic of Master's thesis.		2			2	60		18		42
	Scientific and Research Practice		3Д			14	420				420
	Master's Thesis Implementation					16	480				480
total number of part I.3			3			34	1020	9	36		975
TOTAL IN GENERAL TRAINING		1	8			53	1590	165	204		1221
II. VOCATIONAL TRAINING											
II.1. Vocational and practical training (major courses)											
	Computer-Aided Designs in Instrument Design and Engineering	2	1Д		2	9,5	285	36	72		177
	Information Measuring Systems for Charge-coupled Devices	1			1	7	210	36	36	18	120
	Quality Testing Tools for Food Products	1				5	150	36	18	18	78
	Metrological Support of Information Measuring Systems	2				4,5	135	36	36		63
	Nanomaterials and Nanotechnologies		2Д			3,5	105	18		36	51
	Information Technologies for Cloud Computing	2				4,5	135	18	36		81
total number of part II.1		5	2		2	34	1020	180	198	72	570
II.2. Vocational and practical training (optional courses)											
	Environmental Monitoring of Megapolises and Recreation Areas		1Д			3	90	18	18		54
	Environmental Monitoring of Natural Reserves and Recreation Areas										
total number of part II.2			1			3	90	18	18		54
TOTAL IN VOCATIONAL TRAINING		5	3		2	37	1110	198	216	72	624
TOTAL		6	11		2	90,0	2700	363	420	72	1845

Approved by Faculty Academic Council, Meeting protocol № 4/17 from April 24, 2017

Head of the Department _____ / Poryev V. A. /

Dean of the Faculty _____ / Tymchyk G. S. /