



CURRICULUM

(Enrolment 2017)

APPROVED

by Rector of Igor Sikorsky Kyiv Polytechnic Institute

Level Master

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

Michael Zgurovsky

Specialty 122 Computer Science

Faculty (Institute) Institute for Applied System Analysis

2017

Specialization Artificial Intelligence Systems

Qualification Computer Science Analyst

Profile program Educational and Professional

Study duration 1 year 4 months

Graduation Department Mathematical Methods for System Analysis

Base level Bachelor degree

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	52				
I																					E	E	H	H																																
II	P	P	P	P	P	P	P	P	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	A																															

Symbols: Learning period Examination Practice Research Assessment Holiday

II. Summary table of time budget (Weeks)

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

III. Practice

Type of practice	YEAR	Weeks
Pre-Diploma Practice	II	8

IV. Graduates assessment

Subjects	Form of graduates assessment (exam, graduation project)	YEAR
	Master's Thesis Implementation	II

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)											
1/I	Patenting and Intellectual Property		1			3	90	36	18		36
2/I	Methods and Technologies of Computational Intelligence	1			1	5.5	165	54		18	93
3/I	Big Data Processing and Analysis	2				4.5	135	54		18	63
total number of part I.1		2	1		1	13	390	144	18	36	192
I.2. Basic training (optional courses)											
1/II	Subjects on Sustainable Development Problems		1			2	60	18	18		24
2/II	Pedagogy Subjects		2			2	60	30	6		24
3/II	Workshop on Scientific Communication in Foreign Language		2			3	90		72		18
4/II	Subjects on Startup Projects Development		2			3	90	18	36		36
total number of part I.2			4			10	300	66	132		102
I.3. Science Research (optional courses)											
1/III	Fundamentals of Scientific Research		1			2	60	9	18		33
2/III	Scientific Work on the Topic of Master's Thesis		1			2	60		18		42
3/III	Pre-Diploma Practice		3			14	420				420
4/III	Master's Thesis Implementation		16			16	480				480
total number of part I.3			2			34	1020	9	36		975
TOTAL IN GENERAL TRAINING		2	7		1	57	1710	219	186	36	1269
II. VOCATIONAL TRAINING											
II.1. Vocational and practical training (major courses)											
1/c	Cognitive Modeling		1d			3	90	36	18		36
2/c	Intelligent Systems for Decision-Making		2			3.5	105	36	18		51
3/c	High-Load Distributed Computational Systems	1				4	120	36		18	66
total number of part II.1		1	2			10.5	315	108	36	18	153
II.2. Vocational and practical training (optional courses)											
1/cb	Marketing		2			2.5	75	28	8		39
2/cb	Risk-Management by Data Mining Methods		2d			3.5	105	36	18		51
3/cb	Multi-Agents Systems	1				4	120	36		18	66
4/cb	Computer Information Systems in Economics and Finance	2				4.5	135	36		18	81
5/cb	Modern Programming Technologies	2			2	5	150	36		18	96
6/cb	Advanced Systems Selforganization and Evolutive Economics		1d			3	90	36	18		36
total number of part II.2		3	3		1	22.5	675	208	44	54	369
TOTAL IN VOCATIONAL TRAINING		4	5		1	33	990	316	80	72	522
TOTAL		6	12		2	90.0	2700	535	266	108	1791

Approved by Faculty Academic Council, Meeting protocol № ____ from April 25, 2017

Head of the Department _____ O.L.Tymoschuk

Dean of the Faculty (Director of the Institute) _____ V.D.Romanenko