

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
NATIONAL TECHNICAL UNIVERSITY OF UKRAINE  
«IGOR SIKORSKY KYIV POLYTECHNIC INSTITUTE»**

APPROVED by  
The Academic Council of  
Igor Sikorsky Kyiv Polytechnic Institute  
(Protocol № \_\_\_ dated «\_\_\_» \_\_\_\_\_ 20\_\_\_)  
The educational program has been in effect  
since the 2021/2022 academic year  
(Order № \_\_\_\_\_ dated «\_\_\_» \_\_\_\_\_ 20\_\_\_)

**MANAGEMENT OF INVESTMENTS AND INNOVATIONS**

**EDUCATIONAL AND PROFESSIONAL PROGRAM**

**of the Second (Master's) Level of Higher Education**

**by specialty                    073 Management**  
**field of knowledge        07 Management and administration**  
**qualification                Master of Management**

The updated educational program was approved by  
The Scientific and Methodical Commission of the  
University in the specialty 073 Management  
(Protocol № 8 dated «27» January 2021)

Kyiv – 2021

## **PREAMBLE**

### **DEVELOPED by the project team:**

#### *Project Team Leader:*

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ZHYGALKEVYCH Zhanna Mykhailivna, Associate Professor of the Department of Management, Associate Professor, Candidate of Economic Sciences/

The Department of Management is responsible for teaching of applicants for higher education according to the educational program

### **AGREED:**

The educational program was approved by the Methodical Council of Igor Sikorsky Kyiv Polytechnic Institute (Protocol № \_\_\_ dated «\_\_\_» \_\_\_\_\_ 20\_\_\_) and approved by the Academic Council of Igor Sikorsky Kyiv Polytechnic Institute (Protocol № \_\_\_ dated «\_\_\_» \_\_\_\_\_ 20\_\_\_)

Changes and additions to the educational program are approved by the Scientific and Methodical Commission of the University in the specialty 073 Management (Protocol № 8 dated «27» January 2021)

Head of the SMCU 073

\_\_\_\_\_ Victoria DERGACHOVA

## **TAKEN INTO ACCOUNT:**

1. The current standard of higher education in the specialty 073 "Management" for the second (master's) level of higher education (Order of the Ministry of Education and Science № 959 dated 10.07.2019)
2. Discussion of proposals from employers and students at meetings SMCU 073 (Protocols № 5 dated October, 27, 2020 and № 6 dated November, 24, 2020).
3. Discussion of the results of internal self-analysis, proposals from employers and students at meetings of the department (Protocols № 4 from October, 12, 2020, № 5 dated November, 2, 2020, and № 8 dated December, 21, 2020).

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## 1. PROFILE OF THE EDUCATIONAL PROGRAM IN THE SPECIALTY 073 MANAGEMENT

<b>1 – General information</b>	
Full name of the institution of higher education and faculty	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute " Faculty of Management and Marketing
Degree of higher education and the title of the qualification in the original language	Degree – master Qualification – Master of Management
Level in NQF	NQF of Ukraine – Level 8 QF-EHEA – second cycle EQF-LLL – Level 7
Official name of the educational program	Management of Investments and Innovations
Type of diploma and scope of educational program	Master's degree, single, 90 credits, educational period 1 year, 4 months
Availability of accreditation	Accreditation Certificate Series ND № 1192611 issued on September 25, 2017 by the Ministry of Education and Science of Ukraine, the Accreditation Commission of Ukraine; accreditation period (2013-2023)
Prerequisites	Presence of bachelor's degree
Teaching language	Ukrainian / English
Validity of the educational program	Until the next accreditation
Internet address of the permanent placement of the educational program	<a href="http://management.fmm.kpi.ua/">http://management.fmm.kpi.ua/</a>
<b>2 – The purpose of the educational program</b>	
Providing systematic interdisciplinary basic training of specialists capable of solving practical problems and specialized management tasks in the field of innovation and venture investment in accordance with the requirements of the high-tech labor market, focused on providing technological renewal of industrial enterprises and development of intellectual business areas	

### 3 – Characteristics of the educational program

Subject area	<p><b>The objects of study:</b> management of organizations and their divisions.</p> <p><b>Learning objectives:</b> training of specialists capable of identifying and solving complex tasks and problems in the field of management or in the learning process, which provide conducting research and / or implementing innovations and are characterized by uncertainty of conditions and requirements.</p> <p><b>Theoretical content of the subject area:</b></p> <ul style="list-style-type: none"> <li>- paradigms, laws, patterns, principles, historical prerequisites for management development;</li> <li>- concepts of system, situational, adaptive, antisipative, anti-crisis, innovative, project management, etc;</li> <li>- functions, methods, technologies and management decisions in management.</li> </ul>
	<p><b>Methods, techniques and technologies:</b></p> <ul style="list-style-type: none"> <li>- general scientific and specific research methods (calculation and analytical, economic and statistical, economic and mathematical, expert evaluation, factual, sociological, documentary, balance etc.);</li> <li>- methods of realization of management functions (methods of marketing researches; methods of economic diagnostics; methods of forecasting and planning; methods of designing of organizational structures of management; methods of motivation; methods of control; methods of estimation of social, organizational and economic efficiency in management);</li> <li>- management methods (administrative, economic, socio-psychological, technological);</li> <li>- technologies for substantiation of management decisions (economic analysis, simulation modeling, decision tree, etc.).</li> </ul> <p><b>Tools and equipment:</b> modern information and communication equipment, information systems and software products used in management.</p>
Orientation of the educational program	Educational and professional
The main focus of the educational program and specialization	<p>Special education in the field of investment and innovation management.</p> <p>Key words: management, innovations, investments, innovation and investment activity</p>

<p>Peculiarities of the program</p>	<p>The peculiarities of the program are the comprehensive provision of relevant interdisciplinary knowledge, development of skills and abilities that provide the formation of a system of general and professional competencies for the organization and management in the field of investment and innovation.</p> <p>The uniqueness of the program is due to its priority focus on the management of industrial enterprises, which are drivers of economic development of the country, on the one hand, and the most complex objects for the organization of investment and innovation activities, on the other.</p> <p>Training includes a combination of theoretical and methodological, professional and practical, and research training.</p> <p>To ensure the comprehensiveness of training, cooperation agreements have been concluded between the university and enterprises. The program provides opportunities for short-term academic internships abroad under credit mobility programs.</p>
<p><b>4 – Suitability of graduates for employment and further study</b></p>	
<p>Suitability for employment</p>	<p>According to the classifier of professions SC 003:2010:  14 Managers of enterprises, institutions, organizations and their divisions:  143 Managers in the manufacturing industry and in the production of electricity, gas and water:  1439 Managers in other areas of manufacturing and in the production of electricity, gas and water;  1474 Managers in the field of research and development;  1475.3 Managers for market research and public opinion polls;  1475.4 Managers for business and management;  149 Managers in other economic activities:  1499 Managers in other economic activities, not included in other groups.</p>
<p>Further studying</p>	<p>An opportunity to study at the third (educational and scientific) level of higher education - Doctor of Philosophy.  Acquisition of additional qualifications in the system of postgraduate education.</p>
<p><b>5 – Teaching and assessment</b></p>	
<p>Teaching and learning</p>	<p>Forms of study: full-time, part-time, blended learning.  Teaching methods: lectures, workshops and seminars, computer workshops, modular tests, undergraduate internships at the company, individual research and analytical activities of students in the preparation of calculation, term papers, presentations, abstracts, final qualifying work.  Teaching technologies: problem-oriented, practical, project, independent learning.  Teaching and learning in the program is based on the application of a competency-based methodological approach and adherence to the principles of student-centered learning</p>

Assessment	<p>Knowledge testing, tests, term papers, practice reports, reports on computer workshops, written exams and tests, public defense of qualification work are used for the current assessment of the level of mastering of educational components.</p> <p>Rating systems of assessment with distribution of points according to reference representations of three types depending on the form of final control over results of mastering of an educational component are applied:</p> <ul style="list-style-type: none"> <li>- with pass/fail test,</li> <li>- with an exam (written or oral),</li> <li>- with the defense of the course work,</li> <li>- with the protection of the practice report,</li> <li>- with protection of attestation final work.</li> </ul>
<b>6 – Program competencies</b>	
Integral competence	The ability to solve complex tasks and problems in the field of management or in the learning process, which provide conducting research and / or implementing innovations and are characterized by uncertainty of conditions and requirements
<b>General competencies (GC)</b>	
GC 1	Ability to conduct research at the appropriate level
GC 2	Ability to communicate with representatives of other professional groups of different levels (with experts from other fields of knowledge / types of economic activity)
GC 3	Skills in the use of information and communication technologies
GC 4	Ability to motivate people and move towards a common goal
GC 5	Ability to act on the basis of ethical considerations (motives)
GC 6	Ability to generate new ideas (creativity)
GC 7	Ability to abstract thinking, analysis and synthesis
<b>Professional competencies (PC)</b>	
PC 1	Ability to select and use concepts, methods, and management tools, including in accordance with defined goals and international standards;
PC 2	Ability to set values, visions, mission, goals and criteria by which the organization determines further directions of development, to develop and implement appropriate strategies and plans;
PC 3	Ability for self-development, lifelong learning and effective self-management
PC 4	Ability to effectively use and develop the organization's resources
PC 5	Ability to create and organize effective communications in the management proces
PC 6	Ability to form leadership qualities and demonstrate them in the process of managing people;
PC 7	Ability to develop projects, manage them, show initiative and entrepreneurship
PC 8	Ability to use psychological technology to work with staff



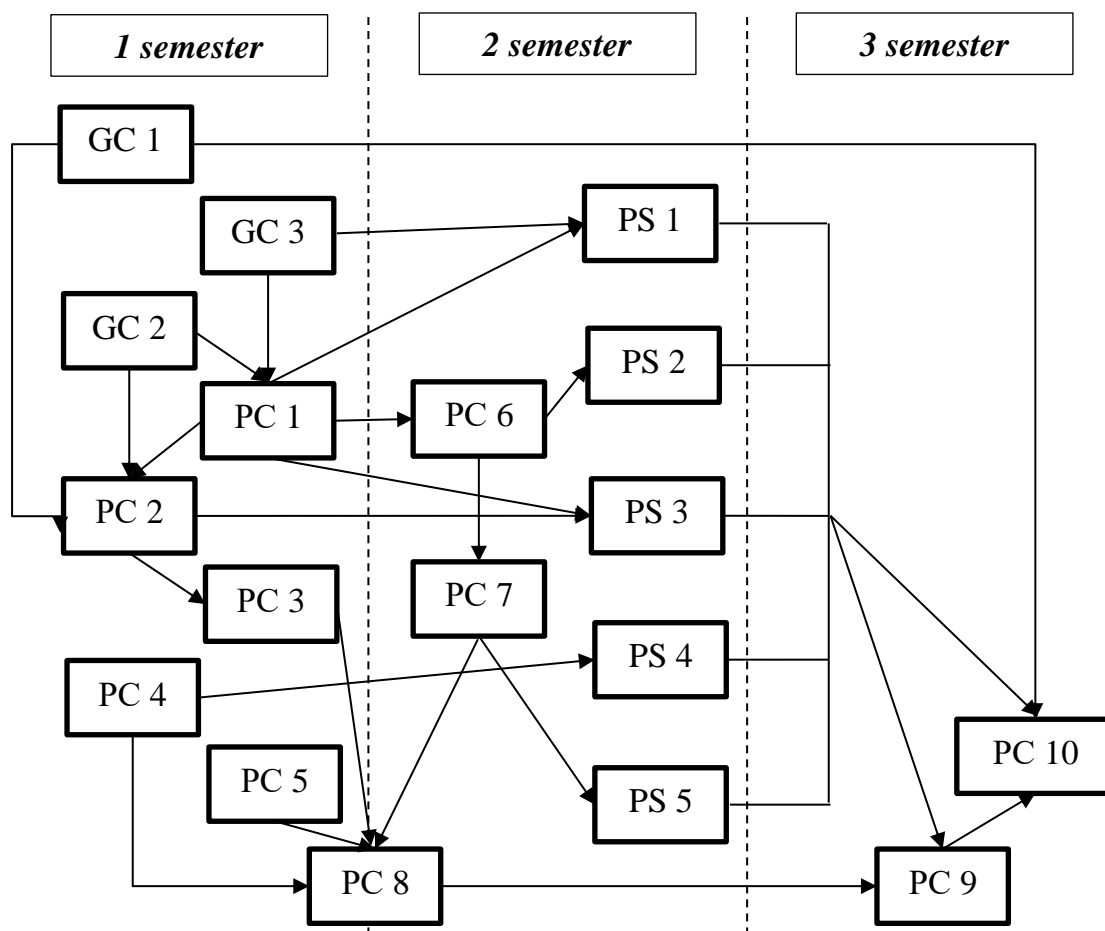
PC 9	Ability to analyze and structure the problems of the organization, make effective management decisions and ensure their implementation
PC 10	Ability to manage the organization and its development
PC 11	Ability to analyze the capabilities of potential commercial partners based on market research to ensure the development of logistics
PC 12	Ability to form strategies for logistics activities of enterprises on the basis of sustainable development, taking into account the potential of digital transformations in the world economy
PC 13	Ability to organize, plan logistics activities of enterprises taking into account current trends in the world economy and using promising business models
PC 14	Ability to find and evaluate new market opportunities for the development of the organization, promising areas of supply chain development, to substantiate the mechanisms of transformation of management systems based on integration management decisions
PC 15	Ability to develop, economically justify and implement in the practice of the organization of project solutions to ensure the efficient use of various types of resources, increase profitability and form the preconditions for the development of the potential of logistics activities
<b>7 – Program learning outcomes</b>	
PLO 1	Critically comprehend, select and use the necessary scientific, methodological and analytical tools for management in unpredictable conditions;
PLO 2	Identify problems in the organization and justify methods of solving them;
PLO 3	Develop the effective management systems for organizations;
PLO 4	Substantiate and manage projects, generate business ideas;
PLO 5	Plan the activities of the organization in strategic and tactical sections;
PLO 6	To have the skills to make, justify and ensure the implementation of management decisions in unpredictable conditions, taking into account the requirements of applicable law, ethical considerations and social responsibility;
PLO 7	Organize and carry out effective communication within the team, with representatives of various professional groups and in the international context;
PLO 8	Use specialized software and information systems to solve management problems of the organization;
PLO 9	Be able to communicate in professional and scientific circles in the state and foreign languages;
PLO 10	Demonstrate leadership skills and ability to work in a team, interact with people, influence their behavior to solve professional problems;
PLO 11	Provide personal professional development and planning your own time;
PLO 12	Be able to delegate authority and management of the organization (unit);
PLO 13	Be able to plan and implement information, methodological, material, financial and personnel support of the organization (unit);

PLO 14	Determine and develop optimal forms of organization of logistics activities of enterprises, taking into account the peculiarities of doing business, the impact of digital information on the implementation of economic activity;
PLO 15	Be able to identify patterns, conditions and factors of national and international nature that determine the formation of effective strategies for the development of logistics activities;
PLO 16	Identify and analyze the possible impact of modern logistics trends in the world economy on the functioning of national economies.
<b>8 – Resource support for program implementation</b>	
Staffing	Scientific and pedagogical staff involved in the implementation of the educational program meets the requirements of the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 № 1187 (current) as amended on 23.05.2018 № 347.
Material and technical support	Educational and scientific activities for the teaching of EP applicants are provided by the material and technical base of Igor Sikorsky Kyiv Polytechnic Institute, which meets the licensing requirements and requirements for educational activities. The university has a developed social infrastructure, including educational buildings, a library. The Department of Management has an educational multimedia laboratory equipped with modern computers, licensed software connected to the internal network. Access to the YouControl database is available. The educational environment is safe for the life and health of students, provided by the activities of the university. There is a Department of Social and Psychological Work to support the mental health of applicants.
Information, educational and methodical support	The general library fund of book paper copies of the Igor Sikorsky Kyiv Polytechnic Institute library, as well as electronic resources, including the Electronic Archive of Scientific and Educational Materials "ELAKPI", subscribed to various databases, free access to the Internet. Scientific and educational, educational and methodical materials of the internal network of the University "Electronic Campus", personal cabinets of teaching staff on the website of the department.
<b>9 – Academic mobility</b>	
National credit mobility	Possibility of concluding agreements on academic mobility
International credit mobility	Interuniversity agreement within the framework of the KA1 program dated 24/07/2019 with the University of Jena (Germany) Interuniversity agreement within the framework of KA1 program, October 2017 with Poznan University of Technology (Republic of Poland) Agreement on cooperation with the Technological University of Varna (Republic of Bulgaria) 70170/0300 / 1-0 dated 5/12/2019 MEVLANA EXCHANGE PROGRAM PROTOCOL with Selcuk University (Republic of Turkey)
Teaching of foreign applicants for higher education	Teaching is carried out in English

## 2. LIST OF COMPONENTS OF THE EDUCATIONAL PROGRAM

<i>Code</i>	<i>Components of the educational program (academic disciplines, practices, qualification work)</i>	<i>Number of credits</i>	<i>Form of final control</i>
1	2	3	4
<b>1. Compulsory components</b>			
<b>1.1. General training cycle</b>			
GC 1	Practical Course of Foreign Language Business Communication	3	pass/fail test
GC 2	Financial Management	4,5	exam
GC 3	Design of Integration Structures	4	pass/fail test
<b>1.2. Professional training cycle</b>			
PC 1	Strategic Management of Innovative Development of Enterprises	5	exam
PC 2	Regulation of Innovation Activity	4	exam
PC 3	Course work on Regulation of Innovation Activity	1	pass/fail test
PC 4	Commercialization of Innovations	4	pass/fail test
PC 5	Technology Management	4	pass/fail test
PC 6	Investing in Innovation Activity	5	exam
PC 7	Course work on Investing in Innovation Activity	1	pass/fail test
PC 8	Scientific Work on the topic of Master's Thesis	4	pass/fail test
PC 9	Pre-diploma Practice	14	pass/fail test
PC 10	Work on A Master's Thesis	12	defense
<b>2. Selective components</b>			
PS 1	Educational component 1 of the F-Catalog	5,5	exam
PS 2	Educational component 2 of the F-Catalog	5,5	exam
PS 3	Educational component 3 of the F-Catalog	4,5	pass/fail test
PS 4	Educational component 4 of the F-Catalog	4,5	pass/fail test
PS 5	Educational component 5 of the F-Catalog	4,5	pass/fail test
<b>Total volume of compulsory components:</b>		<b>65,5</b>	
<b>Total volume selective components:</b>		<b>24,5</b>	
<b>Total volume of educational components that ensure the acquisition of competencies of certain SHE</b>		<b>65,5</b>	
<b>TOTAL VOLUME OF THE EDUCATIONAL PROGRAM</b>		<b>90</b>	

### 3. STRUCTURAL AND LOGICAL SCHEME OF THE EDUCATIONAL PROGRAM



### 4. CERTIFICATION FORM OF APPLICANTS OF HIGHER EDUCATION

Certification of applicants for higher education under the educational program "Management of Investments and Innovations" is carried out in the form of public defense of qualification work.

Qualification work should involve solving a complex task or problem in the field of management, a task or problem in the field of management that requires implementation of research and / or innovation and is characterized by complexity and uncertainty of conditions, using theories and methods of economics.

Qualification work should not contain academic plagiarism, falsification, fabrication.

Qualification work must be published on the official website of the higher education institution or its subdivision, or in the repository of the higher education institution.

## 5. MATRIXES OF COMPATIBILITY OF PROGRAM COMPETENCIES TO THE COMPONENTS OF THE EDUCATIONAL PROGRAM

	GC 1	GC 2	GC 3	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10
GC 1						+	+	+		+	+	+	+
GC 2	+						+					+	
GC 3								+			+		+
GC 4			+	+	+								
GC 5											+	+	+
GC 6				+			+				+		+
GC 7		+							+	+	+		+
PC 1		+		+	+	+	+	+				+	+
PC 2				+	+	+	+				+		+
PC 3	+									+	+	+	+
PC 4		+	+		+	+		+					+
PC 5	+		+	+								+	
PC 6												+	
PC 7			+				+	+	+	+		+	+
PC 8												+	
PC 9		+						+				+	+
PC 10				+	+	+							+
PC 11					+	+	+					+	+
PC 12									+	+	+	+	+
PC 13				+	+	+	+				+		+
PC 14		+				+			+	+	+	+	+
PC 15		+		+			+	+	+	+		+	+

## 6. MATRIXES OF PROVIDING PROGRAM LEARNING RESULTS BY COMPONENTS OF THE EDUCATIONAL PROGRAM

	GC 1	GC 2	GC 3	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10
PLO 1		+		+	+	+	+	+	+	+	+	+	+
PLO 2				+			+	+			+	+	+
PLO 3	+	+	+	+	+	+	+	+	+	+	+	+	+
PLO 4			+	+			+	+	+	+		+	+
PLO 5		+		+	+	+	+	+			+		+
PLO 6		+		+	+	+	+	+	+	+	+	+	+
PLO 7	+			+			+				+	+	+
PLO 8	+			+			+	+			+	+	+
PLO 9											+	+	+
PLO 10			+									+	
PLO 11	+									+	+	+	+
PLO 12	+		+	+			+	+	+	+		+	+
PLO 13		+		+			+	+	+	+	+	+	+
PLO 14		+	+	+	+	+	+	+	+	+	+	+	+
PLO 15	+	+		+	+	+	+	+	+	+	+	+	+
PLO 16		+		+	+	+	+		+	+	+	+	+

