MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

NATIONAL TECHNICAL UNIVERSITY OF UKRAINE
"IGOR SIKORSKY KYIV POLYTECHNIC INSTITUTE"

APPROVED
by the Academic Council
of the Igor Sikorsky KPI
(Protocol No. 4 dated 27.06.2022)
Chairman of the Academic Council
Mychail ILCHENKO

EDUCATIONAL AND SCIENTIFIC PROGRAM

MANAGEMENT

Level of higher education:	**Third (Educational and Scientific)**
Specialty:	**073 Management**
Areas of expertise:	**07 Management and Administration**
Qualification:	**Doctor of Philosophy in Management**

Introduced from 2022/2023 training year
by order of the Rector of Igor Sikorsky KPI
No. NON/201/2022 dated 30.06.2022

Kyiv – 2022

PREAMBLE

DEVELOPED
by the project team

Project team leader:

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Project team members:

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The following participants took part in the development of the educational and scientific program:

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specialty 073 Management, ESP Management, Igor Sikorsky KPI.

AGREED

by The Scientific and Methodical Commission
of the Igor Sikorsky KPI, specialty 073 Management
Chairman of SMC 073
Maryna KRAVCHENKO
(Protocol No. 8 dated May 18, 2022)

Methodical Council of the Igor Sikorsky KPI
Deputy head of the Methodical Council
Anatoly MELNYCHENKO
(Protocol No. 5 dated May 26, 2022)

CONSIDERED

1. Standard of higher education in the specialty 073 “Management” of areas of expertise 07 “Management and Administration” for the third (educational and scientific) level of higher education. Approved by the order of the Ministry of Education and Science of Ukraine No.1436 dated 24.12.2021. URL: https://mon.gov.ua/storage/app/media/vishcha-osvita/ zatverdzeni% 20standarty/2021/12/24/073-Menedzhment.Dok.filos.02.06.2022.pdf.
2. National Qualifications Framework. Approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1341 of 23.11.2011. URL: https://zakon.rada.gov.ua/laws/show/1341-2011-%D0%BF№Text.
3. Proposals of employers, the academic community and applicants of the third (educational and scientific) level of higher education regarding the content of the educational and scientific program, submitted at the meetings of the Scientific and Methodological Commission of Igor Sikorsky Kyiv Polytechnic Institute in the specialty 073 Management (protocols No. 5 dated 20.01.2022, No. 6 dated 23.02.2022, No. 7 dated 27.04.2022, No. 8 dated 18.05.2022).
4. The results of internal introspection, proposals of employers, the academic community and applicants of the third (educational and scientific) higher education on the content of the educational and scientific program, made at meetings of the Department of Management of Enterprises of the Igor Sikorsky Kyiv Polytechnic Institute (protocols No. 9 dated 14.01.2022, No. 12 dated 23.02.2022, No. 14 dated 21.04.2022, No. 15 dated 18.05.2022).
5. Reviews, feedback from employers, stakeholders, the results of public discussion of the content of the educational and scientific program. URL: https://kafedra.management.fmm.kpi.ua/main/?p=1782.
6. Regulations on the development, approval, monitoring and revision of educational programs at the Igor Sikorsky Kyiv Polytechnic Institute. Approved by the order of the Igor Sikorsky Kyiv Polytechnic Institute No. 7-70 dated 07.04.2020. URL: https://osvita.kpi.ua/node/137.
7. Order of the Igor Sikorsky Kyiv Polytechnic Institute “On the organization and planning of the educational process for the 2022-2023 academic year” No. NON/47/2022 dated 07.02.2022 URL: https://document.kpi.ua/2022_HOH-47.
8. Regulations on the preparation of applicants of higher education degree of Doctor of Philosophy in Igor Sikorsky Kyiv Polytechnic Institute, approved by the order of Igor Sikorsky Kyiv Polytechnic Institute No. 7-130 dated 07.27.2020. URL: https://osvita.kpi.ua/node/187.

The educational and scientific program “Management” was discussed after receiving all wishes and suggestions from employers and applicants, and approved at the meeting of the Department of Management of Enterprises (Protocol No. 15 dated 18.05.2022).

CONTENT

1. PROFILE OF THE EDUCATIONAL PROGRAM

1 – General information	
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
Higher education degree and qualification name in the original language	Degree – Doctor of Philosophy Educational qualification – Doctor of Philosophy in Management
The official name of the educational program	Management
Type of diploma and scope of educational program	Doctor of Philosophy Diploma. Educational component – 50 ECTS. Preparation period – 4 years. The scientific component involves conducting independent scientific research and design of its results in the form of a dissertation.
Availability of accreditation	Certificate of accreditation of the educational program ID 10381 from 17.05.2022, valid until 17.05.2023
Higher education cycle, level	NQF of Ukraine – 8th level, QF-EHEA – 3rd cycle, EQF-LLL – 8th level
Prerequisites	Availability of a master's degree (OCD “specialist”)
Language of teaching	Ukrainian
Duration of the educational program	until 17.05.2023
Internet address of the permanent placement of the educational program	https://osvita.kpi.ua/073, http://management.fmm.kpi.ua
2 – The purpose of the educational program	
Training of specialists of the highest category, capable of independently solving scientific and applied problems of management and administration of industrial enterprises capable, based on the integration of in-depth system knowledge, original scientific research and innovative developments, to generate new ideas and perform complex scientific and applied tasks in the development of management tools for ensuring breakthrough development of enterprises and neo-industrialization of the real sector of the economy	
3 – Characteristics of the educational program	
Subject area	*Object of study:* management of organizations and their divisions. *Training goals:* training specialists capable of producing new ideas, solving complex problems in the field of management and administration of industrial enterprises, which involves a deep rethinking of existing system management paradigms and the creation of new comprehensive knowledge and professional skills, the application of the latest methodologies in scientific activity and innovative methods - in pedagogical activities, carrying out original scientific research, the results of which have scientific novelty, theoretical and practical significance.

	Theoretical content of the subject area: – paradigms, laws, regularities, principles, historical prerequisites of management development; – concepts of systemic, situational, adaptive, anticipatory, anti-crisis, innovative, project management, etc.; – functions, methods, technologies and managerial decisions in management; – advanced conceptual and methodological knowledge of a research and professional nature in the field of management. *Methods, techniques, technologies:* – research methods and techniques (calculation-analytical, economic-statistical, economic-mathematical, expert assessment, factual, documentary, balance); – methods of implementation of management functions (methods of economic diagnostics; methods of forecasting and planning; methods of designing organizational management structures; – methods of motivation; control methods; methods of creating and developing organizational culture, methods of evaluating social, organizational and economic efficiency in management, etc.); – management methods (administrative, economic, socio-psychological, technological); – technologies for justifying management decisions (forecasting, analytical and game-theoretic methods, decision support systems, modern tools artificial intelligence in the field of management, etc.). *Tools and equipment:* information systems and software products used in management
Orientation of the educational program	Educational and scientific. The program is focused on theoretical, methodological and practical training of specialists for scientific research, scientific pedagogical, administrative and expert activities in the field of management and administration in the academic, public and economic spheres
The main focus of the educational program	Special education in management and administration. The main focus of the program is mastering innovative interdisciplinary approaches to research and scientific-pedagogical, administrative and expert activities in the field of management and administration. The program is designed to provide highly qualified specialists with the formation of philosophical and ethical principles, professional and personal skills and competencies in conducting scientific and applied research, professional and pedagogical skills in the field of management at the highest levels of excellence. The program is based on theoretical, methodical and scientific and practical provisions for solving actual scientific and applied tasks of management of industrial enterprises, taking into account existing and promising trends in the development of management science and practice. *Key words:* administration, innovation, management, methodology, modeling, science, system management, industrial enterprise

Features of the educational program	The special features of the educational and scientific program are the comprehensive provision of relevant interdisciplinary and professional knowledge regarding the theory, methodology and tools of system management of industrial enterprises, based on the model of learning through research. Such features are provided by the conditions of implementation of the "Management" program at the Igor Sikorsky Kyiv Polytechnic Institute, Ukraine's largest world-class research-type technical university. An educational and scientific environment shared with advanced technical faculties, integrated with innovative institutions of a national scale, such as the Kyiv Polytechnic Science Park and the Sikorsky Challenge Innovation Ecosystem, cooperation with scientific teams developing innovations in the field of critical technologies, and participation in joint interdisciplinary research programs and projects form a unique context for the training of top management specialists. The outlined factors provide additional opportunities for applicants, develop their innovative culture and form an applied problem-oriented vector of research activity. The uniqueness of the program is determined by the priority orientation of scientific research on the formation of system management imperatives of industrial enterprises, in particular machine building (including the defense-industrial complex), metallurgical, energy, and printing industries. The implementation of the program takes place in direct interaction with practicing professionals, industry experts, and employer representatives who participate in its discussion and updating, which ensures the synergy of the educational, scientific components of the educational program and practice, strengthening its applied value. The educational and scientific components of the program are formed on the basis of the individual educational trajectory of applicants, determined in accordance with the needs of professional development and research scientific and applied tasks. The development of professional and research competences of applicants can be carried out through academic internships abroad, credit mobility programs, professional development through the recognition of the results of non-formal education, participation in scientific and practical conferences, round tables and other scientific events. In the implementation of the scientific component, it is envisaged to carry out scientific research on the order of industrial enterprises and scientific institutions within the limits of the concluded agreements and memorandums of cooperation. Postgraduate students join the research programs and projects of their supervisors and have the opportunity to conduct joint interdisciplinary research with specialists of other specialties. There is a possibility of dual scientific supervision of research, including involving foreign specialists as supervisors. Applicants may receive grant support, in particular through participation in national and international programs and projects.
4 – Suitability of graduates for employment and further education	
Suitability for employment	Employment in research institutions, higher education institutions, other institutions and organizations that carry out research and / or training of specialists in the field of management.

	According to the classifier of professions DK 003: 2010: Section 1. Legislators, senior civil servants, leaders, managers 12 Heads of enterprises, institutions and organizations: 1210 Heads of enterprises, institutions and organizations; 1222 Heads of production units in industry; 1237 Heads of research units and units of scientific and technical training of production and other managers; 1238 Project and program managers; 1239 Heads of other functional divisions. Section 2. Professionals 23 Professionals in the field of education and training: 2310 Teachers of universities and institutions of higher education. 2359 Other professionals in the field of education and training. 24 Other professionals 2447 Professionals in the field of project and program management; 2447.1 Research staff (projects and programs); According to the International Standard Classification of Occupations 2008 (ISCO 08), graduates can work in positions corresponding to the following groups: 231 University and higher education teachers; 112 Managing Directors and Chief Executives; 12 Administrative and commercial managers; 1223 Research and Development Managers; 33 Business and administration associate professionals
Further training	Obtaining the degree of Doctor of Science and additional qualifications in the adult education system
5 – Teaching and Assessment	
Teaching and learning	Teaching and learning in the program are based on the application of a competency-based methodological approach. Problem-oriented, personal-oriented, student-centered, independent learning, learning through research, learning through teaching is expected. *Educational component.* Training is conducted in the form of problem-based lectures, practical classes, the use of information and communication technologies (online lectures, distance courses), independent work with the possibility of consulting with a teacher, work on one's own scientific research. Applies to: – joint training in interdisciplinary groups; – learning through research by participating in the performance of scientific research works within the scientific topics of the department, individual scientific research activities, consulting with the scientific supervisor, the scientific and pedagogical community; – learning through teaching in the process of passing pedagogical practice. *The scientific component* is carried out according to the individual plan of the postgraduate student's scientific work. Preparation is provided through the completion of a dissertation, its scientific guidance by a scientific supervisor, participation in scientific and practical conferences, seminars, writing theses and articles based on research results in specialized domestic and foreign publications, including those indexed in scient metric databases.

Educational component	*Educational component.* The evaluation of the learning outcomes of the applicants, determined in their individual educational plans, is based on a rating system, which is based on a certain educational component of post-operational control according to defined criteria and the accumulation of rating points. For the current assessment of the level of assimilation of educational components, the results of the performance of educational and individual tasks, knowledge testing, and control works are used in accordance with the defined criteria of the Rating Evaluation System. For the semester control of the assimilation of educational components, rating evaluation systems are used with the distribution of points in accordance with reference representations of three types depending on the form of final control: credit, exam (written or oral), defense of a report on pedagogical practice. The rating system for evaluating educational components is brought to the attention of applicants at the first lesson and does not change during the semester. Pedagogical practice is evaluated according to the defined criteria of the rating system. The assessment is carried out in the form of an oral defense of its results before the semester control committee. *Scientific component.* The evaluation of the recipient is carried out in accordance with the individual plan of his scientific work and includes: – evaluation of completed thesis work by a scientific supervisor; – coverage of the results of the dissertation in scientific publications; – approval at scientific and practical conferences with publication of theses; – reporting on the progress of individual plan implementation twice a year; – providing a conclusion on the scientific novelty, theoretical and practical significance of the results of the dissertation. Certification is carried out by a one-time specialized academic council on the basis of a public defense of scientific achievements in the form of a dissertation
6 – Program competencies	
Integral competence	Ability to produce new ideas, solve complex problems in the field of management and administration, which involves a deep rethinking of existing and the creation of new holistic knowledge and / or professional practice, apply the latest methodologies of scientific and pedagogical activity, carry out their own scientific research, the results of which have scientific novelty, theoretical and practical significance
General competencies (GC)	
GC 01	Ability to identify, pose and solve problems
GC 02	Ability to search, process and analyze information from various sources
GC 03	Ability to work in an international context
GC 04	Ability to solve complex problems in the field of management on the basis of a systematic scientific worldview and a general cultural outlook in compliance with the principles of professional ethics and academic integrity

Special (professional) competencies (SC)	
SC 01	Ability to perform original research, achieve scientific results that create new knowledge in management and related interdisciplinary areas
SC 02	Ability to orally and in writing present and discuss the results of research and / or innovative developments in Ukrainian and English, to process scientific literature on management and administration and to effectively use new information from various sources
SC 03	Ability to carry out scientific and pedagogical activities in the field of management in higher education institutions, including to ensure continuous self-development and self-improvement, to be responsible for the development of others in the professional field, adhering to pedagogical ethics, rules of academic integrity in scientific and pedagogical activities
SC 04	Ability to initiate, develop, implement and manage scientific projects in management and related interdisciplinary areas and / or make proposals for funding research, registration of intellectual property rights
SC 05	Ability to initiate, develop, implement and manage scientific projects in management and related interdisciplinary areas and / or make proposals for funding research, registration of intellectual property rights
SC 06	Ability to model the management of economic systems and processes of industrial enterprises, to verify the constructed economic and mathematical models with empirical data
7 – Learning outcomes	
LO 01	Apply modern tools and technologies for searching, processing and analyzing information, in particular, statistical methods of analyzing data of large volume and / or complex structure, specialized databases and information systems
LO 02	Freely present and discuss with specialists and non-specialists the results of research, scientific and applied problems of management in the state and English languages, qualified to reflect the results of research in scientific publications in leading international scientific journals
LO 03	Develop and research conceptual, mathematical and computer models of processes and systems, effectively use them to gain new knowledge and / or create innovative products in the field of management and related interdisciplinary areas, including in solving scientific and applied problems in the field of management of industrial enterprises
LO 04	Develop and implement scientific and applied projects that provide an opportunity to rethink existing and create new holistic knowledge and / or professional practice in the field of management and administration and solve significant scientific and technological problems in management in compliance with the norms of academic ethics and taking into account social, ethical, economic, environmental and legal aspects

LO 05	Deeply understand the general principles and methods of management sciences, as well as the methodology of scientific research, apply them in your own research in the field of management and in teaching practice
LO 06	Plan and carry out scientific and applied research on management and related interdisciplinary areas using modern tools, critically analyze the results of their own research and the results of other researchers in the context of the whole complex of modern knowledge about the problem under study; make proposals for funding research and/or projects
LO 07	Test and implement the results of their own research in the field of management
LO 08	Develop and teach special disciplines on management in educational institutions, including demonstrating the skills of planning the educational process, fulfilling the requirements for the preparation of documentary support of the educational process
LO 09	Form a systemic idea of an industrial enterprise as an object of management, to possess and be able to apply modern system theories and concepts of management of production and economic systems
LO 10	Apply the tools of applied system analysis and modeling in the management of industrial enterprises and their individual subsystems
8 – Resource support for the implementation of the program	
Staff support	In accordance with the personnel requirements for ensuring the implementation of educational activities for the appropriate level of HE, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 No. 1187, as amended by the Resolutions of the Cabinet of Ministers of Ukraine No. 347 of 10.05.2018, No. 180 of 03.03.2020, No. 365 of 24.03.2021
Material and technical support	In accordance with the personnel requirements for ensuring the implementation of educational activities for the appropriate level of HE, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 No. 1187, as amended by the Resolutions of the Cabinet of Ministers of Ukraine No. 347 of 10.05.2018, No. 180 of 03.03.2020, No. 365 of 24.03.2021. Educational and scientific activities for the training of applicants under the program are provided by the material and technical base of Igor Sikorsky Kyiv Polytechnic Institute, which meets the licensing requirements and requirements for the implementation of educational activities. The University has a developed social, household and sports infrastructure, which includes educational buildings, a library, a center for physical education and sports, a medical center, recreation centers, a center for culture and arts. The Department of Management of Enterprises has an educational multimedia laboratory equipped with modern computers, licensed software with connection to the internal network. The educational environment is safe for life and health, which is ensured by the activities of the university departments. To support the mental health of applicants, the Department of Social and Psychological Work functions – the Student Social Service. Applicants are provided with a dormitory

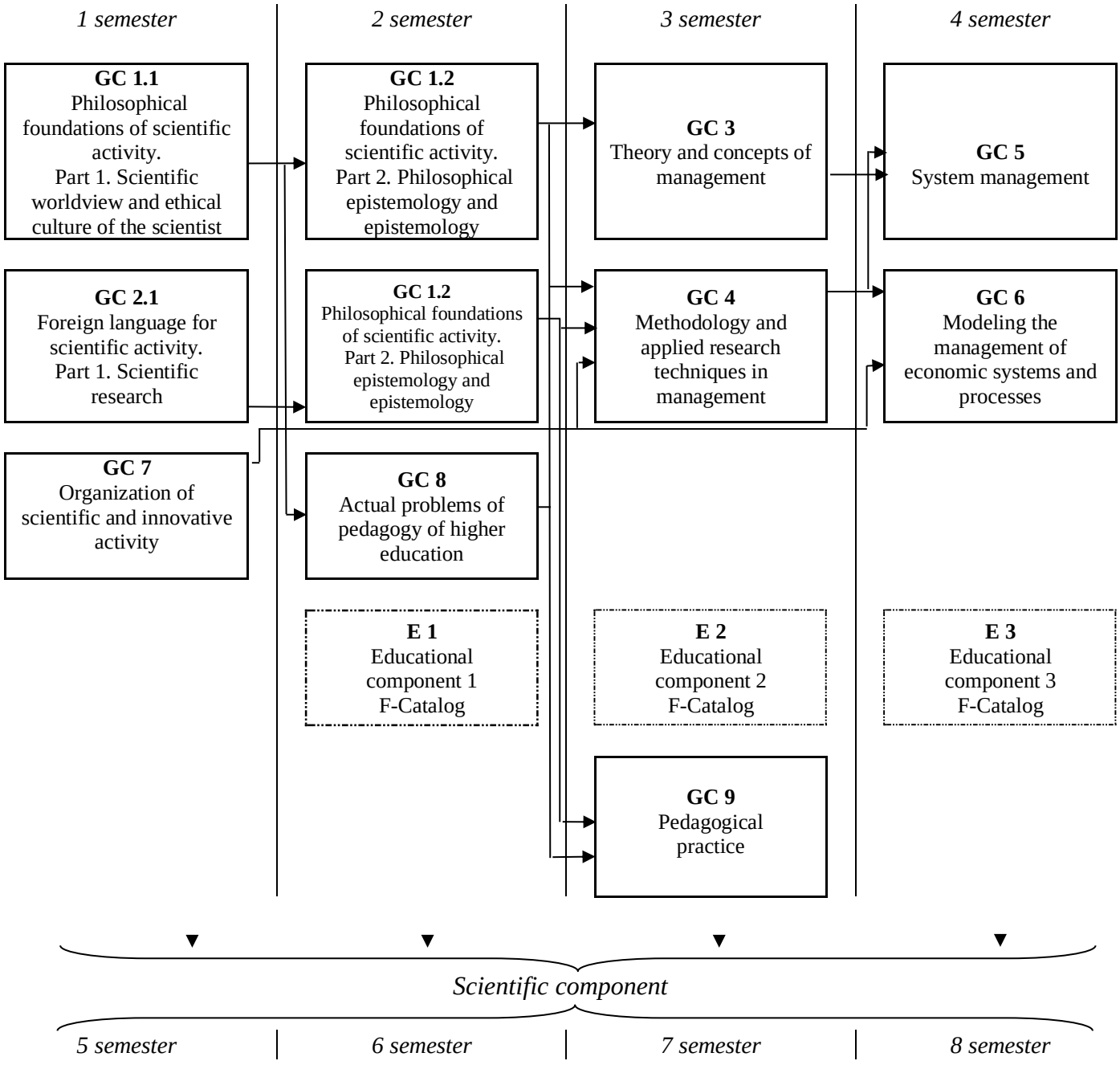
Informational and educational and methodological support	In accordance with the personnel requirements for ensuring the implementation of educational activities for the appropriate level of HE, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 No. 1187, as amended by the Resolutions of the Cabinet of Ministers of Ukraine No. 347 of 10.05.2018, No. 180 of 03.03.2020, No. 365 of 24.03.2021. 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 Igor Sikorsky Kyiv Polytechnic Institute ELAKPI. Applicants have free access to the Internet, access to prepaid databases – Scopus, Web of Science, Springer Nature, Business Source Premier (EBSCO Publishing), Science Direct, RePEc (Research Papers in Economics), UN data (Social Science Research Network) etc. Educational and methodical support of the educational component includes syllabuses, teaching materials, reference lecture notes, distance courses, monographs, scientific publications. The MyKPI automated system is used to organize the educational process. Scientific, educational and methodical materials are placed in the internal university network Electronic Campus, on the Sikorsky Distance Learning Platform, in personal offices of the teachers on the department's website. The software product Unicheck is used to check loans. The educational process uses the analytical online system YouControl, software and technical tools Zoom Education, Modular Object-Oriented Dynamic Learning Environment, G Suite for Education, software products Amplitude, Jira, Notion, R, SPSS Statistics.
9 – Academic mobility	
Academic mobility	Applicants have the right to use internal and external academic mobility programs. The right to academic mobility is implemented on the basis of international agreements on cooperation in the field of education and science, international programs and projects, agreements on cooperation between domestic and foreign institutions of higher education. as well as between applicants and the institution of higher education on their own initiative, supported by the university administration on the basis of individual invitations. Forms of academic mobility of applicants include study programs, language or scientific internships. Information support, consulting and organizational support is provided by the academic mobility department of the university.
Training of foreign applicants for higher education	For foreign applicants participating in academic mobility programs, training is carried out in Ukrainian in general groups or in English in separate groups, provided that the applicant speaks the language of instruction at a level not lower than B2.

2. LIST OF COMPONENTS OF THE EDUCATIONAL PROGRAM

Code	*Components of the educational program (academic disciplines, practices, qualification work)*	*Number of credits*	*Form of final control*
1. Mandatory educational components			
1.1. Academic disciplines for mastering general scientific (philosophical) competencies			
GC 1.1	Philosophical foundations of scientific activity. Part 1. Scientific worldview and ethical culture of the scientist	2,0	test
GC 1.2	Philosophical foundations of scientific activity. Part 2. Philosophical epistemology and epistemology	4,5	exam
1.2. Academic *disciplines for obtaining language competencies*			
GC 2.1	Foreign language for scientific activity. Part 1. Scientific research	3,0	test
GC 2.2	Foreign language for scientific activity. Part 2. Scientific communication	3,0	exam
1.3. Academic *disciplines for obtaining in-depth knowledge of the specialty*			
GC 3	Theory and concepts of management	4,0	exam
GC 4	Methodology and applied research techniques in management	4,0	exam
GC 5	System management	4,0	exam
GC 6	Modeling the management of economic systems and processes	4,0	exam
1.4. Academic disciplines for obtaining universal competencies of the researcher			
GC 7	Organization of scientific and innovative activity	4,0	exam
GC 8	Actual problems of pedagogy of higher education	2,0	test
GC 9	Pedagogical practice	3,0	test
2. Elective educational components[1]			
E 1	Educational component 1 F-Catalog	4,0	test
E 2	Educational component 2 F-Catalog	4,0	test
E 3	Educational component 3 F-Catalog	4,5	test
The total amount of mandatory educational components		37,5	
The total volume of elective educational components		12,5	
The scope of educational components that ensure the acquisition of competencies defined by the SHE		37,5	
The Total Amount Of The Educational Program		**50,0**	

[1]*The list of elective educational components of the faculty catalog for the educational program "Management" (P-Catalog) is posted at the link: https://kafedra.management.fmm.kpi.ua/main/?p=1720*

3. STRUCTURAL AND LOGICAL SCHEME OF THE EDUCATIONAL PROGRAM



4. SCIENTIFIC COMPONENT

Year of preparation	*The content of the scientific work of the graduate student*	*Form of control*
1st year	Selection and justification of the topic of own scientific research, determination of the content, terms of implementation and scope of scientific work; selection and justification of the methodology for conducting independent scientific research, reviewing and analyzing existing views and approaches that have developed in modern science in the chosen direction. Preparation and publication of at least the 1 article (usually review) in scientific professional journals (domestic or foreign) on the research topic; participation in scientific and practical conferences (seminars) with the publication of abstracts	Approval of the individual work plan of the postgraduate student at the academic council of the FMM, reporting on the progress of the individual plan of the graduate student twice a year
2nd year	Under the guidance of a scientific supervisor, conducting independent scientific research, which involves solving research tasks by applying a complex of theoretical and empirical methods. Preparation and publication of at least 1 article in scientific professional journals (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 independent scientific research; substantiation of the scientific novelty of the obtained results, their theoretical and / or practical significance. Preparation and publication of at least 1 article in scientific professional journals 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 postgraduate student in the form of a dissertation, summing up the completeness of the coverage of the results of the thesis in scientific articles in accordance with current requirements. Implementation of the obtained results and obtaining supporting documents. Submission of documents for preliminary examination of the thesis. Preparation of a scientific report for certification (defense of the thesis)	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 thesis results

5. FORM OF CERTIFICATION OF APPLICANTS OF HIGHER EDUCATION

Attestation of higher education holders of the degree of Doctor of Philosophy in the educational and scientific program “Management” specialty 073 “Management” is carried out by a one-time specialized academic council in the form of a public defense of the dissertation and is completed by providing a document of the established model on awarding him the degree of Doctor of Philosophy with the qualification “Doctor of Philosophy in Management”. The recipient has the right to choose a specialized academic council.

Attestation is carried out openly and publicly in accordance with Resolutions of the Cabinet of Ministers of Ukraine No. 261 dated 23.03.2016 “Procedure for training applicants for higher education degrees of Doctor of Philosophy and Doctor of Sciences in institutions of higher education (scientific institutions)” and No. 44 dated 12.01.2022.

“Procedure for awarding the degree of Doctor of Philosophy and annulment of the decision of the one-time specialized academic council of the institution of higher education, scientific institution on awarding the degree of Doctor of Philosophy”, Order of the Ministry of Education and Science of Ukraine No. 40 of 12.01.2017 “On approval of Requirements for the preparation of a dissertation” and regulated Rules and procedures for conducting dissertation defenses for PhD holders at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” (URL: https://rada.kpi.ua/node/1622).

The dissertation for obtaining the degree of Doctor of Philosophy is an independent comprehensive study that offers a solution to a complex problem in the field of management or on its border with other specialties, the results of which constitute an original contribution to the theory of management and are published in scientific publications in peer-reviewed scientific publications.

The volume of the dissertation should be 6.5-9.0 author's sheets of the main text, including the introduction, three chapters, and general conclusions. The dissertation should not contain academic plagiarism, falsification, fabrication.

The work is checked for plagiarism, placed on the website, as well as in the repository of the scientific and technical library of the University ELAKPI in free access, where it remains after defense. Compliance with academic integrity is carried out in accordance with current requirements and is regulated by the Regulation on the system of prevention of academic plagiarism at the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” and the Code of Honor of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”.

6. MATRIX OF COMPLIANCE OF PROGRAM COMPETENCIES WITH THE COMPONENTS OF THE EDUCATIONAL PROGRAM

	GC 1.1	GC 1.2	GC 2.1	GC 2.2	GC 3	GC 4	GC 5	GC 6	GC 7	GC 8	GC 9	Scientific component
GC 01	+	+				+	+	+				+
GC 02	+	+	+	+		+		+		+	+	+
GC 03			+	+					+			+
GC 04	+	+			+		+		+	+	+	+
SC 01					+	+		+	+			+
SC 02			+	+	+	+			+	+	+	+
SC 03										+	+	
SC 04							+		+			+
SC 05					+		+					+
SC 06								+				+

7. MATRIX OF ENSURING PROGRAM LEARNING OUTCOMES WITH EDUCATIONAL PROGRAM COMPONENTS

	GC 1.1	GC 1.2	GC 2.1	GC 2.2	GC 3	GC 4	GC 5	GC 6	GC 7	GC 8	GC 9	Scientific component
LO 01	+	+						+				+
LO 02			+	+		+			+	+	+	+
LO 03							+	+				+
LO 04	+	+							+			+
LO 05	+	+			+	+				+	+	+
LO 06			+	+	+	+	+		+			+
LO 07							+		+			+
LO 08										+	+	
LO 09					+		+					+
LO 10							+	+				+