

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL TECHNICAL UNIVERSITY OF UKRAINE
“IGOR SIKORSKY KYIV POLYTECHNIC INSTITUTE”**

APPROVED
The Academic Council
of Igor Sikorsky Kyiv Polytechnic Institute
(meeting protocol No. 10
from December 13, 2021)
Chairman of the Academic Council
Mykhaylo ILCHENKO

INTERNATIONAL ECONOMICS

EDUCATIONAL PROFESSIONAL PROGRAM

First (bachelor's) level of higher education

in specialty	051 Economics
Areas of knowledge	05 Social and behavioral sciences
Qualification	Bachelor of Economics

Entered into force
by Order of the Rector of Igor Sikorsky
Kyiv Polytechnic Institute
from February 15, 2022 No. HOH/75/2022

Kyiv – 2022

DEVELOPED by the project team:

Project team leader:

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Project team members:

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Hlushchenko Yaroslava, Ph.D., associate professor, Department of International Economics

Skorobogatova Natalia, Ph.D., associate professor, Department of International Economics

The Department of International Economics is responsible for the training of higher education students in the educational program

AGREED:

The Scientific and Methodical Council of Speciality 051 Economics of Igor Sikorsky Kyiv Polytechnic Institute

Head of the Scientific and Methodical Council

Serhii VOITKO

(meeting protocol No. 4 from December 2, 2021)

The Methodical Council Igor Sikorsky Kyiv Polytechnic Institute

Head of the Methodical Council

Yuri Yakimenko

(meeting protocol No. 2 from December 9, 2021)

INCLUDED:

1. Approved standard of higher education in specialty 051 Economics (order of the Ministry of Education and Science No. 1244 of November 13, 2018);
2. Regulations on the development, approval, monitoring and review of educational programs in KPI. Igor Sikorsky (order No. 7/70 of April 7, 2020), access mode <https://osvita.kpi.ua/node/137>;
3. Comments and suggestions of stakeholders and employers at the meetings of the Scientific and Methodical Council of Speciality 051 Economics of Igor Sikorsky Kyiv Polytechnic Institute, meeting protocol No. 4 of December 2, 2021:
Novakivsky Eugene, Technical Director of LLC "Center for Resource Efficient Production";
4. Comments and suggestions of research and teaching staff discussed at the meeting of the Department of International Economics (meeting protocol No.5 of November 23, 2021);
5. Discussion of the results of internal self-analysis of the Department of International Economics (meeting protocol No. 5 of November 20, 2021);
6. Remarks and suggestions of applicants for higher education who study in the specialty 051 "Economics" educational and professional program "International Economics":
 - Khmilevska Anastasia Alexandrovna, applicant for higher education, Igor Sikorsky Kyiv Polytechnic Institute;
 - Zrobok Oleksiy Olehovych, applicant for higher education, Igor Sikorsky Kyiv Polytechnic Institute;

Reviews and feedback from stakeholders are attached.

The educational and professional program "International Economics" was discussed and changed after receiving all the wishes and suggestions from employers and higher education Igor Sikorsky Kyiv Polytechnic Institute and approved at the meeting of the Department of International Economics (meeting protocol No. 6 on December 8, 2021).

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1. Educational program profile, specialty Economics 051

1 – General information

Full name of the Higher Education Institution and the institute / faculty	National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Department of International Economics
Higher education degree and title of qualification in the original language	Educational degree – Bachelor of Economics Educational qualification – Bachelor of Economics in OPP "International Economics"
EP official name	International Economics
Diploma type and EP scope	Bachelor's degree, unitary, 240 ECTS credits, study period 3 years 10 months
Accreditation availability	Certificate of accreditation of the specialty ND 1192537, valid til 01.07.2025
Program cycle / level	HPK of Ukraine – 6 level QF-EHEA – first cycle EQF-LLL – 6 level
Prerequisites	Completed general secondary education
Teaching language	Ukrainian, English
EP validity	Until 01.07.2025
Permanent placement of the educational program	https://osvita.kpi.ua/op
Internet address	

2 – Educational program purpose

Training of specialists in the economics who have modern thinking, theoretical knowledge and practical skills needed to solve the problems of the subject area; able to identify problems in the international economic system functioning as a whole and make informed management decisions regarding specific subjects of international economic relations; as well as able to comprehensively and systematically analyze, provide and conduct intercultural communication, aware of the nature of environmental processes and phenomena, to form a high adaptability in the labor market transformation through interaction with employers and other stakeholders.

3 – Characteristics of the educational program

Subject area	<p><i>Object of study and / or activity:</i> patterns of functioning and development of the socio-economic systems and processes, their modeling, forecasting and regulation, motivation and behavior of economic entities.</p> <p><i>Educational objectives:</i> to train specialists who have modern economic thinking, theoretical knowledge and practical skills needed to solve the problems in this subject area</p> <p><i>Theoretical content of the subject area:</i> definition, categories, concepts, principles of economic sciences.</p> <p><i>Methods, techniques and technologies:</i> general scientific methods of cognition and research, mathematical and statistical methods of economic analysis, economic and mathematical modeling, information and communication technologies of research, dissemination and presentation of research results.</p> <p><i>Tools and equipment:</i> modern information and communication equipment, information systems and software products used in professional activities.</p>
EP Orientation	Educational and professional
EP main focus	Special education in the "Social and Behavioral Sciences" in the specialty 051 "Economics". (General higher education in economics, in particular, in international economic relations, international insurance market, analysis of changes in international monetary policy, etc., through the acquisition of additional fundamental and professional-oriented disciplines, which together

	provide the necessary competencies for further professional activity). Key words: world market, international economy, international economic system, international economic relations, subjects of international business, management decision-making, management efficiency, international economic activity, world economy, transnational corporations, international organizations.
EP features	Thorough fundamental training in combination with modern professional training, which allows to carry out innovative activities and work with leading institutions in the field of international economic relations, as well as the implementation of the program involves the involvement of practitioners, industry experts, employers. It is planned to pass an internship, pass a comprehensive final exam in the specialty and defend the qualification (diploma) work of a bachelor.
Suitability for employment	<p>4 – Suitability of graduates for employment and further study</p> <p>Graduates can work at enterprises of any organizational and legal form in positions (according to the classifier of professions of Ukraine DK 003: 2010):</p> <p>2419.2 Professionals in the field of marketing, business efficiency, production rationalization, intellectual property. Entrepreneurship efficiency specialist; Product rationalization specialist; Public Procurement Specialist; Specialist in the market expanding methods; Specialist in standardization, certification and quality; Commodity market research analyst; Expert in foreign economic issues; Production management engineer; Consultant on foreign economic issues.</p> <p>Jobs in domestic and international companies in various sectors of the economy; in public authorities and local governments; international organizations; international consulting and auditing companies.</p>
Further training	Further education at the second (master's) level of higher education and / or acquisition of additional qualifications in the system of postgraduate education.
Teaching and learning	<p>5 –Teaching and assessment</p> <p>General learning style - task-oriented. Teaching is carried out in the form of: lectures, practical classes, computer workshops, independent work with the possibility of consulting with the teacher, term papers, individual tasks, practice, application of information and communication technologies (e-learning, online lectures, distance learning courses) educational components, performance of qualification work. All educational process participants are provided with timely and understandable information on the goals, content and program learning outcomes, the procedure and evaluation criteria.</p>
Assessment	Current and semester control and qualification work defense are assessed in accordance with the defined criteria of the Rating system. Also, the assessment of students' knowledge is carried out in accordance with the Regulations of the assessment learning system of outcomes in KPI named by Igor Sikorsky for all types of classroom and extracurricular work (current, calendar, semester control, oral and written exams, tests).
Integral competence	<p>6 – Program competencies</p> <p>The ability to solve complex specialized and practical problems in the economic sphere, which are characterized by complexity and uncertainty of the conditions and imply application of theories and methods of economics.</p> <p>General competencies (ZK)</p>
ZK 1	The ability to realize rights and responsibilities as a member of society, the values of civil (democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
ZK 2	The ability to preserve moral, cultural, scientific values and multiply the achievements of society on the basis of understanding of history and patterns of development of the subject

area, its place in the general system of knowledge about nature and society and in the development of society and technology using different types and forms of motor activity for active rest and healthy lifestyle.

- ZK 3 The ability to think abstractly, to analyze and to synthesize.
- ZK 4 The ability to apply knowledge in practical problems.
- ZK 5 Ability to communicate in the official language both verbally and in writing.
- ZK 6 Ability to communicate in foreign language.
- ZK 7 Skills of using information and communication technologies.
- ZK 8 The ability to search, process and analyze information from different sources.
- ZK 9 The ability to adapt and act in a new situation.
- ZK 10 The ability to be critical and self-critical.
- ZK 11 The ability to make informed decisions.
- ZK 12 Interpersonal skills.
- ZK 13 The ability to act socially and consciously.

Professional competencies (FK)

- FK 1 The ability to identify knowledge and understanding of the problems of the subject area, the foundations of the functioning of the modern economy at the micro, meso, macro and international levels.
- FK 2 The ability to carry out professional activity in accordance with current normative and legal acts.
- FK 3 Understanding the features of leading scientific schools and areas of economics.
- FK 4 The ability to explain economic and social processes and phenomena on the basis of theoretical models, analyze and comprehensively interpret the obtained results.
- FK 5 Understanding the features of the modern world and national economy, their institutional structure, substantiation of directions of social, economic and foreign economic policy.
- FK 6 The ability to apply economic and mathematical methods and models for solving economic problems.
- FK 7 The ability to apply computer technology and data processing software to solve economic problems and analyze information and prepare analytical reports.
- FK 8 The ability to analyze and solve tasks in the field of economic and socio-labor relations.
- FK 9 The ability to predict socio-economic processes on the basis of standard theoretical and econometric models.
- FK 10 The ability to use modern sources of economic, social, managerial, accounting information for drawing up of official documents and analytical reports.
- FK 11 The ability to substantiate economic decisions on the basis of understanding the regularities of economic systems and processes and using modern methodological tools.
- FK 12 The ability to independently identify problems of economic nature while analyzing specific situations, suggest means to solve them.
- FK 13 The ability to conduct an economic analysis of the functioning and development of economic entities, assess their competitiveness.
- FK 14 The ability to in-depth analyze issues and phenomena in one or more professional fields, taking into account economic risks and possible socio-economic consequences.
- FK 15 *Ability to have a holistic system of knowledge about the essence of economic processes occurring in the international insurance market.***
- FK 16 *Ability to summarize information about the latest phenomena and processes occurring in the international economic system, and justify the strategies of its actors in the global environment.***

7 – Program learning outcomes (PIO)

- PIO 1 To associate oneself as a member of the civil society, the scientific community, to recognize the rule of law, in particular in professional activities, to understand and be able to use their own rights and freedoms, to show respect for the rights and freedoms of other persons, in particular, members of the collective.

- PLO 2 To reproduce moral, cultural, scientific values, multiply the achievements of society in the socioeconomic sphere, and promote healthy lifestyles.
- PLO 3 To know and use economic terminology, explain the basic concepts of micro- and macroeconomics.
- PLO 4 To understand the principles of economics, especially the functioning of economic systems.
- PLO 5 To apply analytical and methodical tools for substantiating proposals and making managerial decisions by various economic agents (individuals, households, enterprises and government authorities).
- PLO 6 To use professional arguments to transmit information, ideas, problems and ways of their solving to professionals and non-professionals in the field of economic activity.
- PLO 7 To explain the models of socio-economic phenomena from the point of view of fundamental principles and knowledge on the basis of understanding the basic directions of the development of economics.
- PLO 8 To apply appropriate economic and mathematical methods and models for solving economic problems.
- PLO 9 To realize the main features of the modern world and national economy, the institutional structure, directions of social, economic and foreign economic policy of the state.
- PLO 10 To analyze the functioning and development of economic entities, to identify functional areas, to calculate the relevant indicators that characterize the performance of their activities.
- PLO 11 To be able to analyze the processes of government authorities and market regulation of socio-economic and labor relations.
- PLO 12 To apply the acquired theoretical knowledge to solve practical problems and interpret the obtained results in a meaningful way.
- PLO 13 To identify sources and understand the methodology of determination and methods for obtaining socioeconomic data, collect and analyze the necessary information, calculate economic and social indicators.
- PLO 14 To identify and plan personal career development opportunities.
- PLO 15 To demonstrate the basic skills of creative and critical thinking in research and professional communication.
- PLO 16 To be able to use data, provide argumentation, critically evaluate logic and draw conclusions from scientific and analytical texts on economics.
- PLO 17 To perform multidisciplinary analysis of socioeconomic phenomena and problems in one or more professional fields, taking into account risks and possible socio-economic consequences.
- PLO 18 To use normative and legal acts regulating professional activities.
- PLO 19 To use information and communication technologies to solve socio-economic problems, prepare and present analytical reports.
- PLO 20 To master the skills of oral and written professional communication in official and foreign languages.
- PLO 21 To be able to think abstractly, apply analysis and synthesis to identify the key characteristics of economic systems of various levels, as well as the peculiarities of their subjects' behavior.
- PLO 22 To demonstrate flexibility and adaptability in new situations, in working with new objects and in uncertain conditions.
- PLO 23 To show skills of independent work, demonstrate critical, creative, self-critical thinking.
- PLO 24 To demonstrate the ability to act socially and consciously on the basis of ethical principles, to appreciate and respect cultural diversity, individual differences of people.
- PLO 25 Determine the influence of factors and analyze changes in the country's international monetary policy; to organize the functional support of foreign trade agreements involving the necessary foreign exchange transactions.
- PLO 26 Calculate the parity ratio of exchange rates, cross-rates, forward rates.
- PLO 27 To form the mission and strategic goals of the enterprise.

- PLO 28 Develop systems for monitoring the strategic activities of the enterprise.
- PLO 29 Identify and understand the causal links between economic phenomena and processes in the professional field, identify and assess the factors of influence.
- PLO 30 Determine the performance of export and import operations.
- PLO 31 Carry out financial planning of the enterprise.
- PLO 32 Carry out a comparative description of insurance products and choose the appropriate ones.

8 - Resource support for the implementation of the program

Staffing	According to the personnel requirements for ensuring the implementation of educational activities for the relevant level of HE, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 № 1187 as amended in accordance with the Resolution of the Cabinet of Ministers of Ukraine №347 dated 10.05.2018.
Material and technical support	According to the technological requirements for the material and technical support of educational activities of the corresponding level of Higher Education, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 № 1187 as amended in accordance with the Resolution of the Cabinet of Ministers of Ukraine № 347 dated 10.05.2018. Use of equipment for lectures in the format of presentations, network technologies, in particular on the distance learning platform Sikorsky, demonstration industry equipment during laboratory workshops.
Information, educational and methodological support	According to the technological requirements for educational, methodological and informational support of educational activities of the corresponding level of Higher Education approved by the Resolution of the Cabinet of Ministers of Ukraine dated 30.12.2015 № 1187 as amended in accordance with the Resolution of the Cabinet of Ministers of Ukraine № 347 dated 10.05.2018. Use of the Scientific and Technical Library of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute".
9 - Academic mobility	
National credit mobility	The opportunity for concluding relevant agreements
International credit mobility	Erasmus +, Eurasia
Training for foreign applicants of HE	Teaching with the condition of proficiency in the Ukrainian language - teaching in general groups, or in separate groups with teaching in English

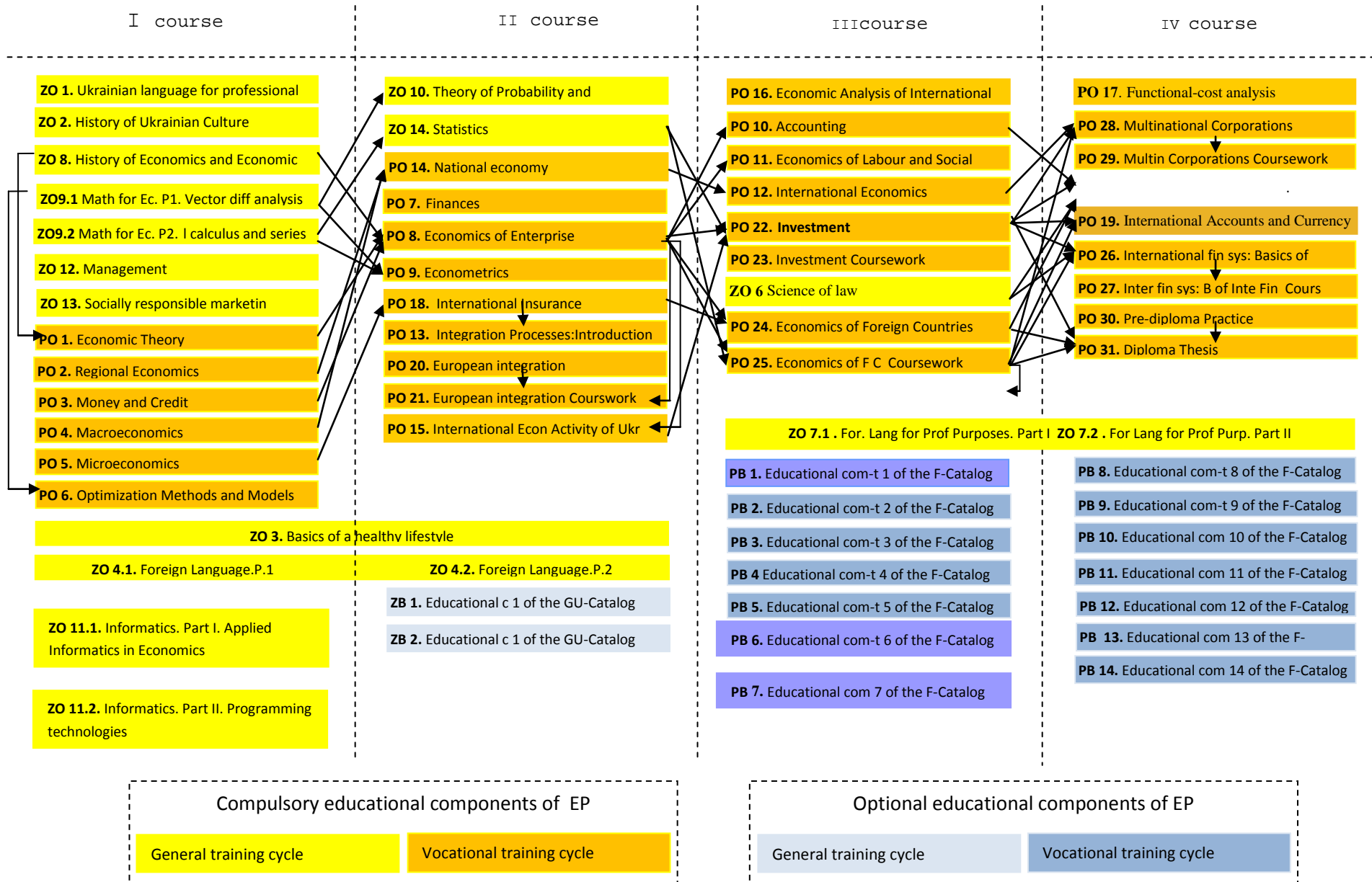
2. EDUCATIONAL PROGRAM COMPONENTS LIST

Code	Components of the educational program (disciplines, course projects / works, practice, qualification work)	Number of ECTS credits	Form of final control
1. Compulsory educational components			
1.1. General training cycle			
ZO 1	Ukrainian language for professional purposes	2	Test
ZO 2	History of Ukrainian Culture	2	Test
ZO 3	Basics of a healthy lifestyle	3	Test
ZO 4.1	Foreign Language. Part I	3	Test
ZO 4.2	Foreign Language. Part II	3	Test
ZO 5	Philosophy	2	Test
ZO 6	Science of law	2	Test
ZO 7.1	Foreign Language for Professional Purposes. Part I	3	Test
ZO 7.2	Foreign Language for Professional Purposes. Part II	3	Exam
ZO 8	History of Economics and Economic Concept	4,5	Exam
ZO 9.1	Mathematics for Economists. Part I. Vector and differential analysis	3,5	Test
ZO 9.2	Mathematics for Economists. Part II. Integral calculus and series	4	Exam
ZO 10	Theory of Probability and Mathematical Statistics	5	Exam
ZO 11.1	Informatics. Part I. Applied Informatics in Economics	3	Test
ZO 11.2	Informatics. Part II. Programming technologies	3	Test
ZO 12	Management	3,5	Test
ZO 13	Socially responsible marketing	3,5	Test
ZO 14	Statistics	5	Exam
1.2. Vocational training cycle			
PO 1	Economic Theory	4,5	Exam
PO 2	Regional Economics	3,5	Test
PO 3	Money and Credit	4	Exam
PO 4	Macroeconomics	4,5	Exam

PO 5	Microeconomics	4	Test
PO 6	Optimization Methods and Models	4,5	Exam
PO 7	Finances	5	Exam
PO 8	Economics of Enterprise	5	Test
PO 9	Econometrics	4,5	Test
PO 10	Accounting	4,5	Exam
PO 11	Economics of Labour and Social Labour Relations	5	Exam
PO 12	International Economics	4,5	Exam
PO 13	Integration Processes:Introduction to Specialty	3	Test
PO 14	National economy	4.5	Test
PO 15	International Economic Activity of Ukraine	5	Exam
PO 16	Economic Analysis of International Business	4	Exam
PO 17	Functional-cost analysis	3,5	Test
PO 18	International Insurance	3,5	Exam
PO 19	International Accounts and Currency Operations	5	Exam
PO 20	European integration	4	Test
PO 21	European integration. Coursework	1	Test
PO 22	Investment	4.5	Exam
PO 23	Investment. Coursework	1	Test
PO 24	Economics of Foreign Countries	4	Exam
PO 25	Economics of Foreign Countries. Coursework	1	
PO 26.1	International financial system. Part I. Fundamentals of international finance	3	Test
PO 26.2	International financial system. Part II. International financial relations	3.5	Exam
PO 27	International financial system. Coursework	1	Test
PO 28	Multinational Corporations	4	Exam
PO 29	Multinational Corporations. Coursework	1	Test
PO 30	Pre-diploma Practice	6	Test
PO 31	Diploma Thesis	6	Defence

2. Optional educational components			
2.1. General training cycle (Optional subjects from University catalogue)			
ZB 1	Educational component 1 of the GU-Catalog	2	Test
ZB 2	Educational component 2 of the GU-Catalog	2	Test
2.2. Vocational training cycle (Optional subjects from Faculty catalogue)			
PB 1	Educational component 1 of the F-Catalog	4	Test
PB 2	Educational component 2 of the F-Catalog	4	Test
PB 3	Educational component 3 of the F-Catalog	4	Test
PB 4	Educational component 4 of the F-Catalog	4	Test
PB 5	Educational component 5 of the F-Catalog	4	Test
PB 6	Educational component 6 of the F-Catalog	4	Test
PB 7	Educational component 7 of the F-Catalog	4	Test
PB 8	Educational component 8 of the F-Catalog	4	Test
PB 9	Educational component 9 of the F-Catalog	4	Test
PB 10	Educational component 10 of the F-Catalog	4	Test
PB 11	Educational component 11 of the F-Catalog	4	Test
PB 12	Educational component 12 of the F-Catalog	4	Test
PB 13	Educational component 13 of the F-Catalog	4	Test
PB 14	Educational component 14 of the F-Catalog	4	Test
TOTAL IN COMPULSORY educational components:		180	
TOTAL IN SELECTIVE educational components:		60	
TOTAL OF THE EDUCATIONAL PROGRAM		240	

3. EDUCATIONAL PROGRAM STRUCTURAL AND LOGICAL SCHEME



4. GRADUATE CERTIFICATION FORM OF HIGHER EDUCATION APPLICANTS

Forms for certification for applicants of higher education	Certification for applicants of higher education under the educational program "International Economics" specialty 051 "Economics" is conducted in the form of public defense of the qualification work. The qualification work is checked for plagiarism and after the defense is placed in the repository of KPI Library for free access. Publication of qualification works containing information with limited access should be carried out in accordance with the requirements of current legislation. Graduation certification ends with the issuance of a standard document on the award of a bachelor's degree with the qualification: Bachelor of Economics for EPP "International Economics".
Requirements for qualification work	The qualification work (as a Diploma Thesis) should involve solving a complex specialized problem or practical problem in the economic field using theories and methods of economics. There can't be academic plagiarism, falsification or writing off in the qualification work.

5. CONFORMITY MATRIX OF SOFTWARE COMPETENCIES TO THE COMPONENTS OF THE EDUCATIONAL PROGRAM

5.1. Compulsory educational components of the EP (general training cycle)

	ZO 1	ZO 2	ZO 3	ZO 4.1/ ZO 4.2	ZO 5	ZO 6	ZO 7.1/ ZO 7.2	ZO 8	ZO 9.1/ ZO 9.2	ZO 10	ZO 11.1/ ZO 11.2	ZO 12	ZO 13	ZO 14
ZK 1						+								
ZK 2		+	+		+									
ZK 3								+						+
ZK 4									+					+
ZK 5	+													
ZK 6				+			+							
ZK 7											+			
ZK 8									+	+				
ZK 9						+								
ZK 10								+						
ZK 11												+		+
ZK 12	+		+				+							
ZK 13													+	

5.2. Compulsory educational components of the EP (Vocational training cycle from ПО 1-16)

	ПО 1	ПО 2	ПО 3	ПО 4	ПО 5	ПО 6	ПО 7	ПО 8	ПО 9	ПО 10	ПО 11	ПО 12	ПО 13	ПО 14	ПО 15	ПО 16
FK 1	+			+	+		+					+	+	+	+	
FK 2											+				+	
FK 3	+															
FK 4	+					+	+	+								
FK 5				+								+	+	+	+	
FK 6						+			+							+
FK 7						+			+							
FK 8		+								+	+					
FK 9						+			+							
FK 10								+		+					+	+
FK 11													+			+
FK 12			+										+			
FK 13			+				+	+							+	+
FK 14														+	+	
FK 15																
FK 16																
FK 17																
FK 18																
FK 19																

5.3. Compulsory educational components of the EP (Vocational training cycle from ПО 17-32)

	ПО 17	ПО 18	ПО 19	ПО 20	ПО 21	ПО 22	ПО 23	ПО 24	ПО 25	ПО 26.1/ ПО 26.2	ПО 27	ПО 28	ПО 29	ПО 30	ПО 31
FK 1														+	+
FK 2														+	+
FK 3								+	+						
FK 4								+	+						
FK 5				+	+			+	+					+	+
FK 6	+														
FK 7															
FK 8															
FK 9														+	+
FK 10	+		+		+										
FK 11	+			+	+	+	+								
FK 12						+	+							+	+
FK 13	+					+	+			+	+				
FK 14														+	+
FK 15		+													
FK 16										+	+	+	+	+	+
FK 17															
FK 18															
FK 19															

6. MATRIX OF PROVIDING PROGRAM LEARNING RESULTS BY RELEVANT COMPONENTS OF THE EDUCATIONAL PROGRAM

6.1. Compulsory educational components of the EP (general training cycle)

	ZO 1	ZO 2	ZO 3	ZO 4.1/ ZO 4.2	ZO 5	ZO 6	ZO 7.1/ ZO 7.2	ZO 8	ZO 9.1/ ZO 9.2	ZO 10	ZO 11.1/ ZO 11.2	ZO 12	ZO 13	ZO 14
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	+		+			+	+	+	+					+

	ZO 1	ZO 2	ZO 3	ZO 4.1/ZO 4.2	ZO 5	ZO 6	ZO 7.1/ ZO 7.2	ZO 8	ZO 9.1/ ZO 9.2	ZO 10	ZO 11.1/ ZO 11.2	ZO 12	ZO 13	ZO 14
PLO 17	+	+	+	+	+	+	+		+	+				
PLO 18	+	+	+		+	+	+							
PLO 19	+			+		+	+		+	+	+			
PLO 20	+		+	+		+	+	+	+					
PLO 21		+				+		+	+	+	+			+
PLO 22	+	+	+		+	+	+							
PLO 23		+	+		+			+				+	+	+
PLO 24	+	+	+		+	+	+	+		+	+	+	+	+
PLO 25														
PLO 26														
PLO 27														
PLO 28														+
PLO 29														
PLO 30														
PLO 31														+
PLO 32														

6.2. Compulsory educational components of the EP (Vocational training cycle from PO 1-16)

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PO 13	PO 14	PO 15	PO 16
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	+					+	+	+		+				+	+	+
PLO 17	+			+	+	+	+	+		+		+	+	+	+	+
PLO 18								+		+	+			+	+	+
PLO 19						+		+	+	+					+	+

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PO 13	PO 14	PO 15	PO 16
PLO 20				+								+	+	+	+	
PLO 21	+		+	+	+	+	+	+				+	+	+	+	+
PLO 22			+				+	+					+	+	+	+
PLO 23	+		+			+	+	+					+			
PLO 24				+								+	+	+	+	
PLO 25							+						+		+	
PLO 26													+			
PLO 27																
PLO 28										+						
PLO 29							+			+				+	+	
PLO 30										+					+	
PLO 31							+								+	
PLO 32																

6.3. Compulsory educational components of the EP (Vocational training cycle from ПО 17-32)

	ПО 17	ПО 18	ПО 19	ПО 20	ПО 21	ПО 22	ПО 23	ПО 24	ПО 25	ПО 26.1/ ПО 26.2	ПО 27	ПО 28	ПО 29	ПО 30	ПО 31
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	+		+	+	+			+	+			+	+		
PLO 17	+		+	+	+			+	+			+	+	+	+

	PO 17	PO 18	PO 19	PO 20	PO 21	PO 22	PO 23	PO 24	PO 25	PO 26.1/ PO 26.2	PO 27	PO 28	PO 29	PO 30	PO 31
PLO 18			+	+	+					+	+			+	+
PLO 19	+		+	+	+										
PLO 20				+	+			+	+					+	+
PLO 21	+			+	+	+	+	+	+			+	+	+	+
PLO 22	+			+	+	+	+			+	+			+	+
PLO 23				+	+	+	+	+	+	+	+			+	+
PLO 24				+	+			+	+			+	+	+	+
PLO 25			+					+	+	+	+				
PLO 26			+							+	+				
PLO 27		+		+	+	+	+	+	+						
PLO 28								+	+						
PLO 29						+	+	+	+	+	+				
PLO 30								+	+	+	+				
PLO 31						+	+			+	+				
PLO 32		+													