MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE Lviv Polytechnic National University

LEVEL OF HIGHER EDUCATION

FIELD OF KNOWLEDGE

SPECIALTY

DEGREE OF HIGHER EDUCATION

	"SOLIDIFY"
	Rector
	the Lviv Polytechnic National University/ Yuriy Bobalo/
	«»2022
EDUCATIONAL AND	SCIENTIFIC PROGRAM
IER EDUCATION	Third (educational and scientific) level
GHER EDUCATION	Ph.D.
VLEDGE	07 Management and Administration
	076 Entrepreneurship, trade and
	exchange activities

LETTER OF AGREEMENT

the Educational and Scientific Program

LEVEL OF HIGHER EDUCATION	Third (educational and scientific) level
DEGREE OF HIGHER EDUCATION	Ph.D.
FIELD OF KNOWLEDGE	07 Management and Administration
SPECIALTY	076 Entrepreneurship, trade and
QUALIFICATION	exchange activities Ph.D. in Entrepreneurship, Trade and Exchange Activities
DEVELOPED AND APPROVED Scientific and methodological commission specialty 076 Entrepreneurship, trade and exchange activity Protocol No from "" 202_	AGREED Vice-Rector the National University "Lviv Polytechnic" Oleg Davydchak "" 202_
Chairman of the Scientific and Methodological Council specialty 076 Entrepreneurship, Trade and Exchange Activities Sviatoslav Kniaz	Head of Training and Methodological Department Valery Sviridov «» 202_
RECOMMENDED the Scientific and Methodological Council of the University Protocol No from "" 202_ Chairman of the Scientific and Methodological Council Anatoly Zagorodny	Director of the Educational and Scientific Institute of Sustainable Development named after V.Cornovola Oleksandr Moroz «» 202_ p.

PREFACE

Developed in accordance with the Standard of Higher Education of Ukraine of the current (educational and scientific) level, the field of knowledge 07 Management and administration, specialty - 076 Entrepreneurship, trade and exchange activity. Approved and put into effect by order of the Ministry of Education and Science of Ukraine dated 20.07.2022. № 645.

Developed by the working group of the scientific and methodological commission of specialty 076 "Entrepreneurship, trade and exchange activity" of the National University "Lviv Polytechnic" consisting of:

Polytechnic" consisting	g of:
Kniaz Sviatoslav	— Doctor of Economics, Professor, Head of the
Slavyuk Rostyslav	Department of Entrepreneurship and Environmental Expertise of Goods — Doctor of Economics, Professor of the Department of Entrepreneurship and Environmental Expertise of Goods
Farat Alexandra	 Doctor of Economics, Professor of the Department of Entrepreneurship and Environmental Expertise of Goods
Shevchenko Serhiy	 PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Danko Tatyana	 — PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Yavorska Nadia	 — PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Shayda Oksana	 — PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Kosovska Vira	 — PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Rusin-Grynyk Roman	 — PhD in Economics, Associate Professor of the Department of Entrepreneurship and Environmental Expertise of
Tyrkalo Yuri	 postgraduate student of the Department of Entrepreneurship and Environmental Examination of Goods
Konovalyuk Irina	 postgraduate student of the Department of Entrepreneurship and Environmental Examination of Goods
Linda Andrii	— Ph.D., Director of Consulting Company "VIADUK";
Galavko Nazar	— Ph.D., Associate Professor, Chairman of the Board of

the Credit Union "Galicia"; chief specialist in the

Galayko Nazar

development and analysis of sales of products of Sony UA; — Director of the Lviv branch of the Insurance Group **Bahor Ostap** "TAS"; — director of Laser-house; **Ulgursky Nazar** — Ph.D., Chairman of the Scientific Society of Students, Tymchuk Ivan Graduate Students, Doctoral Students and Young Scientists of the Institute of Sustainable Development named after V. Chornovola — Chairman of the Trade Union Committee of Students Sledzjona and Young Scientists of the Institute of Sustainable Solomiya Development named after V. Chornovola Sviatoslav Kniaz

Guarantor of the educational program

meeting of the Academic Council of the Educational and Scientific Institute of Sustainabl Development named after V.Cornovol Protocol No from "" 202
Chairman of the Scientific Council of Institute of Sustainable Development named after V.Cornovol Alexander Moroz (signature) (surname, initials)
The draft educational and scientific program was discussed and approved at the meeting of the Scientific and Methodological Council of the Educational and Scientific Institute of Sustainable Development named after V.Cornovola Protocol No from "" 202
Chairman of the Scientific and Methodological Council of the Institute of Sustainable Development named after Vyacheslav Chornovla Tatyana Danko (signature) (surname, initials)
APPROVED AND GRANTED IN FORCE
by order of the Rector of Lviv Polytechnic National University from "" 202 No

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I. EDUCATIONAL COMPONENT OF EDUCATIONAL AND SCIENTIFIC PROGRAM

1. PhD program profile

specialty 076 "Entrepreneurship, trade and exchange activity"

	1 – General information
Full name of higher	Lviv Polytechnic National University, Department of Entrepreneurship and
education institution and	Environmental Expertise of Goods, V. Chornovil Institute for Sustainable
structural subdivision	Development
Level of higher education	Third (educational and scientific) level
Degree of higher education	Doctor of Philosophy
Field of knowledge	07 Management and administration
Specialty	076 Entrepreneurship, trade and exchange activities
Name of the educational	Entrepreneurship, trade and stock exchange activities
program	Business, trade and exchange activities
Internet address of the	https://lpnu.ua/osvita/pro-osvitni-programy/tretii-riven-vyshchoi-osvity
educational program	NT.
Restrictions on forms of	No.
education	Destan of Philosophy in Entrangenessahin, Trade and Evaluate Activities
Educational qualification	Doctor of Philosophy in Entrepreneurship, Trade and Exchange Activities Scientific degree Doctor of Philosophy
Qualification in the	
diploma	Field of knowledge 07 Management and administration Specialty 076 Entrepreneurship, trade and exchange activities
	Educational program «Entrepreneurship, trade and exchange activities»
Description of the subject	Object of study: activities of business entities of entrepreneurial, trade and
area	exchange structures with a focus on innovative scientific (research) and
arca	pedagogical activities
	Learning objectives: training of highly qualified specialists for
	entrepreneurial, trading and stock exchange structures that require a PhD
	degree, who are able to produce new ideas, solve complex problems, conduct
	their own fundamental and/or applied research, which involves a profound
	rethinking of existing and creation of new holistic knowledge and
	professional practices, carry out scientific and pedagogical activities.
	Theoretical content of the subject area: theoretical and methodological,
	scientific and methodological, fundamental and applied foundations of
	entrepreneurial, trading and exchange activities, which ensure the adoption
	of sound professional decisions on its development.
	Methods, techniques and technologies: a system of general scientific and
	special methods, techniques and technologies for research and/or innovation
	activities in business, trade and exchange structures
	Tools and equipment: modern information systems 5 (cloud technologies,
	communication technologies for the transmission and exchange of
	information), specialized software, devices and equipment necessary for the
	implementation of innovative research, pedagogical, professional activities
A 1	in business, trade and exchange structures.
Academic rights of	Obtaining a doctoral degree and additional qualifications in the adult
graduates The amount of avadita	education system
The amount of credits	- on the basis of the second (master's) level of higher education, the
under the European Credit	volume of ECTS credits - 240.
Transfer System is	
necessary to obtain the	
appropriate degree of	

higher education	
Availability of accreditation	NQF of Ukraine - level 8, FQ-EHEA - third cycle,
Transfer of accreatation	EQF-LLL - level 8.
Cycle/level	Level of higher education "Master"
Prerequisites	Mastery of the Ukrainian language
Language(s) of instruction	The educational and scientific program uses the basic concepts and their
	definitions in accordance with the Law of Ukraine "On Higher Education"
	dated 01.07.2014 No. 1556-VII as amended, the Law of Ukraine "On
	Scientific and Scientific-Technical Activity" dated 26.11.2015 No. 848-VIII
	with amendments and additions, the Procedure for the training of applicants
	for the degree of Doctor of Philosophy and Doctor of Science in higher
	education institutions (scientific institutions), approved by the Resolution of
	the Cabinet of Ministers of 23.03.2016 No. 261, Methodological
	recommendations for the development of higher education standards
	approved by the higher education sector of the Scientific and Methodological
	Council of the Ministry of Education and Science of Ukraine (Minutes of
	29.03.2016 No. 3) The purpose of the educational program
	2 - The purpose of the educational program To deepen theoretical knowledge and practical skills in the field of
	Management and Administration in the specialty "Entrepreneurship, Trade
	and Exchange Activities", to develop philosophical and linguistic
	competencies, to form universal skills of a researcher sufficient for
	conducting and successful completion of scientific research and further
	professional and scientific activities
	3 - Characteristics of the educational program
Orientation of the	The educational and scientific program is based on the fundamental theories of
educational and	management and administration and the results of modern scientific research. It is
professional program	aimed at the development of the theoretical, methodological and methodological-
	applied base of entrepreneurship, trade and exchange activities with emphasis on
	the latest trends in the development of management and administration, which
	deepens the professional scientific outlook and provides the basis for research and
	further professional and scientific activities, as well as relevant aspects of the
TILL	specialty, within which further scientific and teaching career is possible.
The main focus of the	The educational and scientific program implements the provisions of the concept of sustainable development in the practice of training doctors of
educational program and specialization	philosophy, which forms certain social values, humanistic beliefs and the
specianzation	necessary research skills for a scientific career and teaching special
	disciplines in entrepreneurship, trade and exchange activities.
	There are no specializations of the program.
4 - Suitability of gradu	lates of the educational program for employment and further study
Suitability for employment	Employment in positions of scientific and scientific-pedagogical workers in
	scientific institutions and higher education institutions, other positions
	requiring qualification of level 8 of the NQF
Further training	Implementation of the scientific program of the fourth (scientific) level of higher
	education for obtaining the degree of Doctor of Science
m 11 11	5 - Teaching and assessment
Teaching and learning	Lectures, practical classes, research in laboratories, processing of
	publications in leading business and trade publications, consultations with
Evaluation	teachers, writing essays, preparation of dissertations.
บงสเนสเเบม	Written and oral exams, laboratory reports, oral presentations, current control, thesis defense.
Integral commeter - (INTI)	6 - Program competencies Ability to produce new ideas solve complex problems in the field of
Integral competence (INT)	Ability to produce new ideas, solve complex problems in the field of
	entrepreneurship, trade and exchange activities, which involves a deep

rethinking of existing and creation of new holistic knowledge and / or professional practices, to apply the latest methodologies of scientific, pedagogical, professional activities, to carry out their own scientific research, the results of which have scientific novelty, theoretical and practical significance.

General competences (GC)

- GC 1: Mastering general scientific (philosophical) competencies aimed at forming a systematic scientific worldview, professional ethics and general cultural outlook.
- GC 2. Application of modern information technologies in scientific activities (work with NMBD, automatic generation of references to literature sources,
- GC 3. Acquisition of language competencies sufficient to present and discuss the results of their scientific work in a foreign language in oral and written form, as well as to fully understand foreign scientific texts in the relevant specialty, the use of modern information technologies (work with VNS, Microsoft Teams, Zoom, etc.).
- GC 4. Acquisition of universal research skills, in particular, organization and conduct of training sessions, application of modern information technologies (work with VNS, Microsoft Teams, Zoom, etc.).
- GC 5. Acquisition of universal skills of a researcher, in particular, oral and written presentation of the results of own research in Ukrainian, management of scientific projects and / or preparation of proposals for funding research, registration of intellectual property rights, application of modern information technologies.
- GC 6. Acquisition of universal research skills, in particular, organization and conduct of training sessions, application of modern information technologies (work with VNS, Microsoft Teams, Zoom, etc.)
- GC 7. Ability to solve complex problems in the field of business, trade and exchange activities on the basis of a systematic scientific outlook and general cultural outlook in compliance with the principles of professional ethics and academic integrity.
- GC 8. Ability to work in an international context.
- GC 9. Ability to work autonomously.
- GC 10. Ability to interpersonal interaction.
- GC 11. Ability to develop and manage projects.

Special (professional, subject competencies) (CS)

- CS 1. Acquisition of in-depth knowledge of the specialty in which the graduate student conducts research, in particular, basic concepts, understanding of theoretical and practical problems, history of development and current state of scientific knowledge in the chosen specialty, mastering the terminology of the studied scientific direction in the amount of ECTS credits in accordance with higher education standards.
- CS 2. Ability to critically rethink and develop modern theories, methodologies, objects of research and practice, using a systematic approach to taking into account non-economic aspects from various fields of knowledge, in business, trading and exchange activities.
- CS 3. Ability to orally and/or in writing present, discuss, test the results of research, development, projects in Ukrainian and foreign languages.
- CS 4. Ability to plan and carry out original research at the appropriate level, to achieve scientific results that can be published in leading scientific journals, implemented in practice, creating new knowledge in business, trade and exchange structures and / or related interdisciplinary areas.

- CS 5. Ability to produce, substantiate new ideas, hypotheses and models and make scientifically sound decisions in business, trading and exchange activities.
- CS 6. Ability to carry out scientific and pedagogical activities in higher education.
- CS 7. Ability to apply modern theoretical and methodological provisions in the field of economic development of entrepreneurship, taking into account the provisions of the concept of sustainable development.
- CS 8. Ability to apply modern information and communication technologies (information systems, cloud technologies, communication technologies for the transmission and exchange of information), devices and equipment (including computer equipment, hardware and software) necessary for innovative research, pedagogical, professional activities in business, trade and exchange structures. Ability to identify and interpret current trends in the implementation of e-commerce and ensuring the safety and comfort of consumption, awareness of virtual economy technologies and methods of searching and researching information on the implementation of e-commerce.
- CS 9. Ability to analyze the phenomena of pricing in stock markets, to identify manifestations of reflexivity and its role in forecasting price dynamics in stock markets.
- CS 10. Ability to practically apply the basic principles and methods of heuristics.
- CS 11. Ability to generate ideas based on the use of synectics and make decisions on positioning and promotion of goods.
- CS 12. Ability to optimize the organizational development of business structures based on ZFC tools.
- CS 13. Ability to assess intellectual potential and identify its impact on the development of the organization in the implementation of crisis management.
- CS 14. Ability to make decisions on the development of trade entrepreneurship based on the provisions of international regulations governing offshore business.
- CS 15. Ability to transform management systems into those that meet European integration challenges.

7 - Program learning outcomes

Knowledge (PH)

- PH 01. Have advanced conceptual, methodological knowledge in the field of entrepreneurship, trade and exchange activities and/or on the border of subject areas, as well as research skills that are sufficient to conduct scientific, applied research at the level of current world achievements, obtain new knowledge and/or carry out innovative professional activities
- PH 02. Deeply understand the general principles and methods of economic sciences, methodology of scientific research, apply them in the process of conducting their own research in the field of entrepreneurship, trade and exchange activities, as well as in teaching practice
- PH 03. Apply modern tools and technologies for searching, processing and analyzing information, in particular, statistical, economic and mathematical methods of data analysis of large volume and/or complex structure, specialized databases and information and communication technologies, devices and equipment
- PH 04. Develop and research conceptual, mathematical, computer models of processes and systems, effectively use them to obtain new knowledge and/or create innovative products in the field of entrepreneurship, trade and exchange activities, as well as in related interdisciplinary areas
- PH 05: Apply modern methods and tools of scientific research and innovation to obtain new knowledge and/or solve complex problems in the field of entrepreneurship, trade and exchange activities, as well as in related

interdisciplinary areas.

PH 06: Make effective, ethical and socially responsible decisions, provide leadership, autonomy and interpersonal interaction in their implementation in professional activities.

PH 07. Analyze and evaluate the state, trends in the development of entrepreneurship, trade, exchange activities, apply modern methodologies, methods and tools to solve current problems in professional practice.

PH 08. Formulate and test hypotheses, use appropriate evidence to substantiate conclusions, in particular, relevant literature and information sources, results of theoretical analysis, modeling, experimental studies.

PH 09: Plan and carry out theoretical and/or empirical research using modern methods and tools, critically analyze the results of own or third-party research in the context of the whole complex of modern knowledge on problems in the field of entrepreneurship, trade, stock exchange activities and related interdisciplinary areas, in compliance with the norms of academic and professional ethics.

PH 10. Initiate, develop, implement scientific and/or innovative projects that make it possible to rethink existing and/or obtain new holistic knowledge, solve problems of entrepreneurship, trade and exchange activities, taking into account ethical, social, economic, environmental and legal aspects.

PH 11. freely present, discuss in the state and foreign languages the results of research, scientific and/or applied problems of entrepreneurship, trade, exchange activities, publish them in scientific publications of leading international publications or implement them in practice

PH 12. Organize and implement the educational process in educational institutions, develop and implement special educational components in the field of entrepreneurship, trade and exchange activities.

PH 13. Knowledge of modern theoretical and methodological concepts in the management of economic development of entrepreneurship, awareness of the experience of enterprises in the implementation of the concept of sustainable development.

PH 14. Knowledge of modern e-commerce technologies, awareness of information security methods in virtual trade and ensuring the necessary level of comfort of consumption of products distributed using e-commerce.

PH 15. Knowledge of the mechanism of pricing in stock markets and methods of modeling its dynamics based on the concept of reflexivity.

PH 16. Knowledge of heuristics methods, their theoretical and applied basis, awareness of the basic principles of enterprise management under uncertainty.

PH 17. Knowledge of the mechanism of generating ideas using synectics, understanding of theoretical and applied provisions in the field of positioning and promotion of goods.

PH 18. Knowledge of ZFC tools and theoretical and applied provisions of its use in optimizing the organizational development of business structures.

PH 19. Knowledge of modern theoretical approaches to the interpretation of the essence of intellectual potential, determining its level and measuring the impact on the development of the organization.

PH 20. Knowledge of modern features of international legal regulation of offshore business and its role in trade business.

PH 21. Knowledge of theoretical and methodological provisions in the field of management approaches, directions of their transformation in the context of intensification of European integration processes

Skills (UM)

UM 1. Ability to critically analyze, evaluate and synthesize new and complex ideas.

UM 2. Specialized abilities / skills and methods necessary to solve significant problems in the field of professional activity, science and/or innovation,

UM 11. ability to manage the development of trade entrepreneurship taking into account offshore opportunities. UM 12. Ability to implement and improve the process of clustering entrepreneurship based on modern theoretical concepts and experience of economically developed countries. UM 13. Ability to adapt and improve management processes based on the transformation of management approaches caused by European integration processes. Communication (COM) COM 1. free communication on issues related to the field of scientific and expert knowledge with colleagues, the wider scientific community, society as a whole. COM 2. use of academic Ukrainian and foreign languages in professional activities and research. Autonomy Autonomy		expansion and reassessment of existing knowledge and professional practice. UM 3. Ability to initiate, plan, implement and adjust a coherent process of thorough scientific research with due academic integrity. UM 4. Ability to analyze the theoretical provisions and experience of enterprises in the practical implementation of the concept of sustainable development in order to generalize and identify basic trends. UM 5. Ability to analyze modern theoretical and applied provisions in the field of electronic commerce, to study the experience of implementing virtual commerce in practice, to determine and improve the level of information security in the field of electronic commerce. UM 6. Ability to model price dynamics in stock markets based on the use of the concept of reflexivity. UM 7. Ability to use heuristic methods in enterprise management in the implementation of management functions and management decision-making. UM 8. Ability to use synectics when generating ideas for determining strategic and tactical guidelines for positioning and promoting goods. UM 9. Ability to implement and improve the process of optimizing the organizational development of business structures based on the use of ZFC tools. UM 10. Ability to carry out anti-crisis management of the organization based
economically developed countries. UM 13. Ability to adapt and improve management processes based on the transformation of management approaches caused by European integration processes. COM 1. free communication on issues related to the field of scientific and expert knowledge with colleagues, the wider scientific community, society as a whole. COM 2. use of academic Ukrainian and foreign languages in professional activities and research. Autonomy and responsibility (A&R) A&R 1. initiation of innovative complex projects, leadership and full autonomy during their implementation. A&R 2. Social responsibility for the results of strategic decision-making. A&R 3. Ability to continuous self-development and self-improvement. A&R 4. Demonstration of significant credibility, innovation, a high degree of independence, academic and professional integrity, and a sustained commitment to the development of new ideas or processes in advanced contexts of professional and scientific activity. 8 - Resource support for the implementation of the educational program Specific characteristics of personnel provision Specific characteristics of logistical support The program is provided with classrooms, educational and scientific laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet. Specific characteristics of information and methodological support Use of the virtual learning environment of Lviv Polytechnic National University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University. 9 - Academic mobility		into account offshore opportunities. UM 12. Ability to implement and improve the process of clustering
expert knowledge with colleagues, the wider scientific community, society as a whole. COM 2. use of academic Ukrainian and foreign languages in professional activities and research. Autonomy and responsibility (A&R) A&R 1. initiation of innovative complex projects, leadership and full autonomy during their implementation. A&R 2. Social responsibility for the results of strategic decision-making. A&R 3. Ability to continuous self-development and self-improvement. A&R 4. Demonstration of significant credibility, innovation, a high degree of independence, academic and professional integrity, and a sustained commitment to the development of new ideas or processes in advanced contexts of professional and scientific activity. 8 - Resource support for the implementation of the educational program Specific characteristics of personnel disciplines in the specialty 076 «Entrepreneurship, Trade and Exchange Activities» have academic degrees and academic titles. Specific characteristics of laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet. Specific characteristics of information and methodological support Specific characteristics of Luiv Polytechnic National University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University.		economically developed countries. UM 13. Ability to adapt and improve management processes based on the transformation of management approaches caused by European integration
autonomy during their implementation. A&R 2. Social responsibility for the results of strategic decision-making. A&R 3. Ability to continuous self-development and self-improvement. A&R 4. Demonstration of significant credibility, innovation, a high degree of independence, academic and professional integrity, and a sustained commitment to the development of new ideas or processes in advanced contexts of professional and scientific activity. 8 - Resource support for the implementation of the educational program Specific characteristics of personnel provision Specific characteristics of logistical support The program is provided with classrooms, educational and scientific laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet. Specific characteristics of information and methodological support We of the virtual learning environment of Lviv Polytechnic National University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University. 9 - Academic mobility	Communication (COM)	expert knowledge with colleagues, the wider scientific community, society as a whole. COM 2. use of academic Ukrainian and foreign languages in professional
100% of the academic staff involved in teaching professionally oriented disciplines in the specialty 076 «Entrepreneurship, Trade and Exchange Activities» have academic degrees and academic titles. Specific characteristics of logistical support The program is provided with classrooms, educational and scientific laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet. Specific characteristics of information and methodological support Use of the virtual learning environment of Lviv Polytechnic National University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University. 9 - Academic mobility Polytechnic National University. Polytechnic National University Polytechnic National University Polytechnic National University Polyt	Autonomy and responsibility (A&R)	autonomy during their implementation. A&R 2. Social responsibility for the results of strategic decision-making. A&R 3. Ability to continuous self-development and self-improvement. A&R 4. Demonstration of significant credibility, innovation, a high degree of independence, academic and professional integrity, and a sustained commitment to the development of new ideas or processes in advanced contexts of professional and scientific activity.
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laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet. Specific characteristics of information and information and methodological support Methodological support Specific characteristics of the virtual learning environment of Lviv Polytechnic National University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University. 9 - Academic mobility	personnel provision	disciplines in the specialty 076 «Entrepreneurship, Trade and Exchange Activities» have academic degrees and academic titles.
information and methodological support University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University. 9 - Academic mobility	logistical support	laboratories with the necessary equipment, multimedia equipment, computer workstations, access to the Internet.
· · · · · · · · · · · · · · · · · · ·	information and	University and author's developments of scientific and pedagogical staff, namely: textbooks and manuals with the stamp of the Academic Council of Lviv Polytechnic National University.
	National credit mobility	

	University and technical universities of Ukraine.
International credit	Within the framework of the EU Erasmus+ program on the basis of bilateral
mobility	agreements between Lviv Polytechnic National University and educational
-	institutions of partner countries.
Training of foreign	Maybe.
postgraduate students	

2. Distribution of the content of the educational component of the educational and scientific program by groups of components and training cycles

		Volume of postgraduate student's workload (credits/)									
No. s/n	Preparation cycles	Mandatory components of the educational component	Selected components of the educational component	Total for the entire period of study							
1.	The cycle of disciplines that form general scientific competencies and universal skills of the researcher	21/49	3/7	24/56							
2.	The cycle of disciplines that form professional competencies	10/23	6/14	16/37							
3.	The cycle of disciplines of the general choice of the graduate student	-	3/7	3/7							
Total	for the entire period of study	31/72	12/28	43/100							

3. List of components of the educational component of the educational and scientific program

	program					
Code n/a	Components of the educational component	Number of	The form			
1	2.	credits 3	final control			
1	1. Mandatory components of the educational compo	_	4			
	1.1 The cycle of disciplines that form general scientific competencies and unive		researcher			
OC1.1	Philosophy and methodology of science	3	examination			
OC1.2	Professional pedagogy	3	offset			
OC1.3	Pedagogical practice	3	offset			
OC1.4	Academic entrepreneurship	4	offset			
OC1.5	Foreign language for academic purposes, part 1	4	offset			
OC1.6	Foreign language for academic purposes, part 2	4	examination			
Total per cy		21	CAMIIIIation			
Total per cy	1.2 The cycle of disciplines that form professional competencial					
OC2.1.	Heuristics and synectics	4	examination			
OC2.2.	Research seminar in the field of management and administration	3	offset			
OC2.3.	Research methods in business, trade and exchange activities	3	offset			
Total per cy		10	Offset			
Total per cy	2. Selected components of the educational components					
	2.1. The cycle of disciplines that form general scientific competencies and unive		researcher			
WB1.1	Business foreign language	3	offset			
WB1.2	Psychology of creativity and invention	3	offset			
WB1.3	Management of scientific projects	3	offset			
WB1.4	Technology of grant applications and patent rights	3	offset			
WB1.5	Rhetoric	3	offset			
WB1.6	Modern inventory in research activities	3	offset			
WB1.7	Open scientific practices	3	offset			
WB1.8	Academic integrity and quality of education	3	offset			
WB1.9	Methodology of preparation of scientific publications	3	offset			
WB1.10	Quality of higher education (formation of internal quality assurance systems)	3	offset			
Total per cy		3	onser			
	2.2.Cycle of disciplines that form professional competencies					
WB2.1	Business management on the basis of heuristics methods	3	examination			
WB2.2	Synectics in the management system of positioning and promotion of goods to	3	examination			
	the consumer					
WB2.3	Modeling of stock exchange dynamics based on the concept of reflexivity	3	examination			
WB2.4	Optimization of organizational development of entrepreneurial structures on the basis of ZFC tools	3	examination			
WB2.5	Intellectual potential in the system of anti-crisis management of the enterprise	3	examination			
WB2.6	Transformation of management approaches in the context of intensification of European integration processes	3	examination			
WB2.7	Business management on the basis of sustainable development	3	examination			
WB2.8	Consumer security and comfort in the field of e-commerce	3	examination			
WB2.9	Entrepreneurship in the field of nature conservation and environmental protection	3	examination			
WB2.10	Development of trade entrepreneurship taking into account offshore opportunities	3	examination			
Total per cy	cle:	6				
	2.3.Disciplines at the free choice of the graduate student					
WB3.1	Discipline of free choice of a graduate student **	3	offset			
Total per cy		3				
TOGETHE	CR CONTRACTOR OF THE CONTRACTO	43				

4. Form of certification of applicants for higher education

Forms of certification of	Certification of applicants for the educational level of Doctor of
higher education	Philosophy is carried out in the form of a public defense of the
applicants	dissertation.
Requirements for qualification work	The dissertation for the degree of Doctor of Philosophy is an independent detailed study that offers a solution to a specific complex problem in the field of entrepreneurial, trading and exchange activities or on its border with other specialties, the results of which have scientific novelty, theoretical and practical significance. The dissertation should not contain academic plagiarism, falsification, fabrication. The dissertation must be posted on the website of the higher education institution (scientific institution).

5. Matrix of compliance of program competencies with educational components of the educational and scientific program of Doctor of Philosophy in specialty 076 «Entrepreneurship, Trade and Exchange Activities!»

		1	1	т	1			7 0 P -		WB	WD	WB	WB	WD.	WB	WB	WB	WB	WD	WD	WD	WB	WB	WB	WD	WD	WD	WD	WD
	OC1.1	OC1.2	OC1.3	OC1.4	OC1.5	OC1.6	OC2.1	OC2.2	OC2.3	1.1	WB 1.2	1.3	1.4	WB 1.5	1.6	1.7	1.8	1.9	WB 1.10	WB 2.1	WB 2.2	2.3	2.4	2.5	WB 2.6	WB 2.7	WB 2.8	WB 2.9	WB 2.10
INT	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ZK1	*																*	*	*						*	*	*		
ZK2	*							*	*						*	*	*	*	*	*	*	*	*	*	*		*	*	
ZK3					*	*				*					*	*	*	*	*										
ZK4		*	*											*															
ZK5				*											*	*	*	*	*	*	*								
ZK6		*	*				*	*	*		*																		
ZK7					*	*	*						*		*	*	*	*	*			*							
ZK8							*						*		*	*	*	*	*										
ZK9								*	*				*					*	*		*		*	*					*
ZK10				*			*	*	*			*				*	*	*	*				*	*					*
ZK11				*			*								*	*													
KS1				*			*	*	*															*	*	*	*		*
KS2				*			*	*	*																*	*	*	*	*
KS3				*			*	*	*														*			*		*	*
KS4				*			*	*	*														*	*					
KS5				*			*	*	*											*	*								
KS6	*	*	*	*	*	*	*	*	*					*															
KS7				*			*	*	*																	*			
KS8				*			*	*	*																		*		
KS9				*			*	*	*													*						<u> </u>	
KS10				*			*	*	*												*								
KS11				*		-	*	*	*	-											*	-	<u> </u>						
KS12				*			*	*	*														*	*					
KS13				*			*	*	*															*					*
KS14				*			*	*	*																*				*
KS15																									*			<u> </u>	

• Conventional notation: OCi – compulsory discipline, WBi – selective discipline, i – discipline number in the list of components of the educational component, INT – integral competence, ZKj – general competence, KSj – professional (special) competence, j – competence number in the list of competences of the educational component.

	OC1 1	OC 1.2	OC 1.3	OC 1.4	OC 1.5	OC 1.6	OC 2.1	OC 2.2	OC 2.3	WB 1.1	WB 1.2	WB 1.3	WB 1.4	WB 1.5	WB 1.6	WB 1.7	WB 1.8	WB 1.9	WB 1.10	WB 2.1	WB 2.2	WB 2.3	WB 2.4	WB 2.5	WB 2.6	WB 2.7	WB 2.8	WB 2.9	WB 2.10
PH01				*	*	*	*	*	*		*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*
PH02	*	*	*		*	*										*	*		*										
PH03							*		*						*														
PH04							*		*			*																	
PH05								*				*			*														
PH06				*							*																		
PH07								*					*																
PH08							*											*											
PH09							*	*	*									*											
PH10							*	*				*																	
PH11		*			*	*				*				*															
PH12			*											*			*		*									l	
PH13				*					*						*	*	*	*	*							*			
PH14				*																	*		*		*		*		*
PH15				*																		*							
PH16				*			*	*	*											*								ļ	
PH17				*			*	*	*												*								
PH18				*			*	*	*														*						
PH19				*			*	*	*															*					
PH20				*			*	*	*													*			*		*		*
PH21				*			*	*	*																*				
UM1				*		*	*	*	*		*		*		*	*	*	*	*			*		*	*	*	*	*	
UM2				*			*	*	*			*	*	*	*	*	*	*	*	*	*		*	*					*
UM3		*	*	*			*	*	*								*		*										
UM4				*			*	*	*						*	*	*	*	*							*			
UM5				*			*	*	*											*	*	*		*			*		
UM6				*			*	*	*													*		*					
UM7				*			*	*	*											*									
UM8				*			*	*	*												*								
UM9				*			*	*	*														*						
UM10				*			*	*	*															*					
UM11				*			*	*	*											*	*		*			*			*
UM12				*			*	*	*											*			*				*	*	
UM13				*			*	*	*											*			*		*	*			*
COM1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*
	·	1	l	1	1	1	1	1	1			1		·	·	l		·	1		1					L	1		

COM2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A&R 1				*			*	*	*	*		*	*		*	*	*	*	*				*	*					*
A&R 2				*			*	*	*				*		*	*	*	*	*	*	*	*	*	*					*
A&R 3	*		*	*			*	*	*		*			*	*	*	*	*	*					*	*	*	*	*	
A&R 4	*	*	*	*			*	*	*		*	*	*	*	*	*	*	*	*										

Conventional notation: OCi – compulsory discipline, WBi – selective discipline, i – discipline number in the list of components of the educational component, PHm – program results (knowledge), UMm – program results (skills), m – program result number in the list of program results of the educational component.

II. Scientific component of the educational and scientific program

The scientific component of the educational and scientific program involves conducting a postgraduate student's own scientific research under the guidance of one or two supervisors and drawing up its results in the form of a dissertation.

The dissertation for the degree of Doctor of Philosophy is an independent detailed study that offers a solution to the actual scientific and applied problem in the specialty 076 «Entrepreneurship, trade and exchange activities», the results of which are characterized by scientific novelty and practical value and published in relevant publications.

The scientific component of the educational and scientific program is drawn up in the form of an individual plan of scientific work of a graduate student and is an integral part of the postgraduate curriculum.

An integral part of the scientific component of the educational and scientific program of postgraduate studies is the preparation and publication of scientific articles, speeches at scientific conferences, scientific professional seminars, round tables, symposia.

Topics of scientific research in the specialty 076 «Entrepreneurship, trade and exchange activities»

- 1. Development of startup entrepreneurship mechanisms based on the provisions of the concept of sustainable development.
- 2. Implementation of international environmental and economic instruments in the context of improving the quality of international trade objects.
- 3. Modeling the impact of business projects on local ecosystems.
- 4. Modeling the impact of entrepreneurial activity in the region on the parameters that characterize the balance of sustainable development indicators.
- 5. Business planning and organizational support of investments in ecotechnologies.
- 6. Organizational and legal regulation of international trade development vectors taking into account the goals of the sustainable development concept.
- 7. Development of trade in services of gas stations based on the strategy of public utility.
- 8. Formation and use of the mechanism of social responsibility of trade business entities.
- 9. Development of methodological provisions for improving the HACCP system taking into account changes in environmental safety indicators.
- 10. Formation and implementation of innovative strategies in the energy trade market taking into account climate change and environmental threats.
- 11. Formation and application of environmentally friendly technologies in industrial enterprise.
- 12. Application of e-commerce technologies as tools for harmonization of public and business instruments.
- 13. Modeling of eco-entrepreneurship taking into account clustering trends.

- 14. Formation of mechanisms for the development of creative industries in the system of sustainable development modes.
- 15.Development of strategy and tactics of eco-goods trading on exchange markets.
- 16. Formation of trade and tourism complexes in the system of sustainable development models.
- 17.Development of a system of balanced assessment of business performance.

II. Certification of postgraduate students

Attestation of higher education applicants is the establishment of compliance of the level and scope of knowledge, skills and competencies of a higher education applicant studying under the educational program with the requirements of higher education standards. Certification of higher education applicants for the degree of Doctor of Philosophy is carried out by a specialized academic council, permanently operating or formed for a one-time defense, on the basis of public defense of scientific achievements in the form of a dissertation. The volume of the dissertation is 6.5-9 auth. pages (156-216 pages).

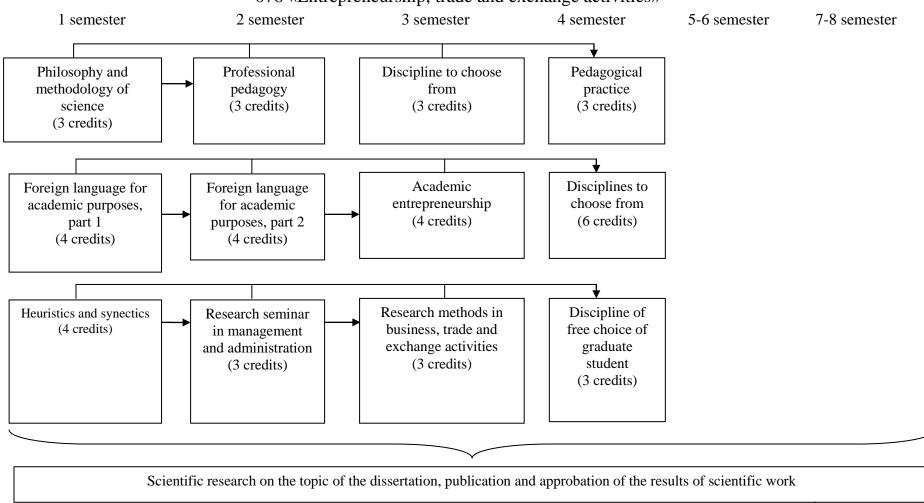
A prerequisite for admission to the defense is the successful completion of the postgraduate student's individual curriculum.

Applicants for higher education of the degree of Doctor of Philosophy defend their dissertations, as a rule, in a permanent specialized academic council in the relevant specialty, which functions in the higher educational institution where the postgraduate student was trained. The Academic Council of a higher education institution has the right to submit to the National Agency for Quality Assurance in Higher Education documents for accreditation of a specialized academic council established for a one-time defense, or to apply to another higher education institution where a permanent specialized academic council in the relevant specialty functions.

Attestation of graduates of the specialty 076 «Entrepreneurship, Trade and Exchange Activities» is carried out in the form of defending a dissertation for the degree of Doctor of Philosophy and ends with the issuance of documents of the established sample on the award of the degree of Doctor of Philosophy with the qualification — Doctor of Philosophy in Entrepreneurship, Trade and Exchange Activities.

Attestation is carried out openly and publicly.

Structural and logical scheme of the educational and scientific program of Doctor of Philosophy in specialty 076 «Entrepreneurship, trade and exchange activities»



Preparation of the dissertation work

Defence (submission of the thesis to the SVR)