

Lviv Institute
PRIVATE JOINT-STOCK COMPANY "HIGHER EDUCATIONAL INSTITUTION
"INTERREGIONAL ACADEMY OF PERSONNEL MANAGEMENT"

APPROVED:

The Academic Council
Private joint-stock company
«Higher education institution
«Interregional Academy of Personnel
Management»
Minutes No.6 of 18.07.2025
President _____ Rostyslav
Shchokin

STUDY PROGRAM
"PSYCHOLOGY"

Level of higher education:	first (bachelor's) level
Field of knowledge:	C Social sciences, journalism, information and international relations
Specialty:	C4 Psychology
Educational qualifications:	<u>Bachelor's degree in psychology</u>

1 September 2025 Order No. __ dated
____ 2025 p.

Lviv -2025

APPROVAL LETTER

<p>DEVELOPED BY Working (project) group Lviv Institute PJSC «Higher Educational Institution «Interregional Academy of Personnel Management» Head of the working (project) group _____Mykola Hnatko 25.06.2025 p.</p>	<p>APPROVED Rector PJSC «Higher Educational Institution «Interregional Academy of Personnel Management» _____ Kyrylo Muraviov 18.07.2025 p.</p>
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<p>APPROVED Scientific and Methodological Council of PJSC «Higher Educational Institution «Interregional Academy of Personnel Management» Minutes no.6 from 26.06.2025 Chairman _____Mykhailo Goncharenko (instead of the scientific and methodological commission)</p>	<p>APPROVED Academic Council of PJSC "IAPM" Minutes no. 6 from 18.07.2025 p. Chairman of the Academic Council of PJSC «Higher Educational Institution «Interregional Academy of Personnel Management» _____ Rostyslav Shchokin</p>
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1. PREFACE

The study program has been developed in accordance with the requirements of the Law of Ukraine “On Higher Education” and taking into account the Higher Education Standard for specialty 053 Psychology at the first (bachelor’s) level of higher education, approved by the Order of the Ministry of Education and Science of Ukraine dated April 24, 2019, No. 557 (with amendments), the Order of the Ministry of Education and Science of Ukraine dated December 29, 2023, No. 1583 “On Amendments to Certain Higher Education Standards,” and the Order of the Ministry of Education and Science of Ukraine No. 842 dated June 13, 2024, with consideration of the requirements of the Resolution of the Cabinet of Ministers of Ukraine dated August 30, 2024, No. 1021 “On Amendments to the List of Fields of Knowledge and Specialties for which Higher and Professional Pre-Higher Education Applicants Are Trained,” the Law of Ukraine “On Amendments to Certain Legislative Acts of Ukraine Regarding Certain Issues of Military Service, Mobilization, and Military Registration” (No. 3633-IX), which entered into force on May 18, 2024, and the Procedure for Conducting Basic General Military Training for Citizens of Ukraine Pursuing Higher Education and for Police Officers, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 734 dated June 21, 2024.

Developed by the working (project) group consisting of:

Head of the working (project) group:

Hnatko Mykola Mytrofanovych – Candidate of Psychological Sciences, Associate Professor, Associate Professor of the Department of Psychology and Social and Human Sciences of the Lviv Institute of PrJSC “VNI “MAUP”, guarantor of the program.

Members of the working group from stakeholders and employers:

1. Kompanovich Marianna Stanislavivna – Candidate of Psychological Sciences, Head of the Department of Psychology and Social and Human Sciences of the Lviv Institute of PrJSC “VNI “MAUP”.

2. Marcyniak-Dorosh Oksana Mykhailivna – Candidate of Psychological Sciences, Associate Professor, Associate Professor of the Department of Psychology and Social and Human Sciences of the Lviv Institute PJSC “Higher Education Institution “MAUP”.

3. Shopsha Olena Leonidivna – Associate Professor, Candidate of Psychological Sciences, Associate Professor of the Department of Psychology;

4. Melnychuk Oksana Bogdanivna – Associate Professor, Candidate of Psychological Sciences, Associate Professor of the Department of Psychology;

5. Mykhailiuk Inna Volodymyrivna – Associate Professor, Candidate of Psychological Sciences, Associate Professor of the Department of Psychology.

Members of the working group from among stakeholders and employers:

1. Palienko Oleg Igorovich – Director of the RELUX Rehabilitation Center.

2. Cherchyk Oleksandr is a graduate of the second (master's) level of higher education in the field of Psychology at the Lviv Institute of the PJSC "Higher Education Institution "MAUP".

3. Karpinsky Taras is a graduate of the second (master's) level of higher education in the field of Psychology of the Lviv Institute of the PJSC "Higher Education Institution "MAUP".

Reviews and feedback from external stakeholders:

1. Galyna Viktorivna Katolyk – Doctor of Psychological Sciences, Associate Professor, Professor of the Department of Psychology of the Lviv State University of Internal Affairs.

2. Nataliya Ihorivna Zhygaylo – Doctor of Psychological Sciences, Professor, Professor of the Department of Theory and History of Political Science of the Ivan Franko National University of Lviv.

3. Yavorsky Mykhailo Stepanovych – Candidate of Technical Sciences, Executive Director of the Lviv Regional Association of Employers' Organizations.

4. Tomov Vitaliy Viktorovych — Director of the CHOICE Mental Health Center.

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I. Profile of the Study program
 "Psychology"
 specialty C4 Psychology

1 - General information			
Full name of the higher education institution and structural unit		Lviv Institute Private Joint-Stock Company Higher Educational Institution Interregional Academy of Personnel Management (PJSC HEI IAPM). Department of Psychology and Social and Human Sciences	
Level of higher education		First (bachelor's) level	
Degree of higher education		Bachelor's degree	
Field of knowledge		C Social sciences, journalism, information and international relations	
Specialty		C4 Psychology	
Qualifications		Bachelor's degree in psychology	
Qualification in the diploma		Degree of higher education: Bachelor's degree Specialty: C4 Psychology Study program: Psychology	
Form of study		Institutional (full-time / part-time)	
Language of instruction		Ukrainian language	
Cycle/level		NQF of Ukraine - level 6 FQ-EHEA - first cycle, EQF-LLL - level 6	
Type of diploma and scope of the study program		Bachelor's degree, single, 240 ECTS credits, duration of study 3 years and 10 months. Scope of the study program: On the basis of complete general secondary education – 240 ECTS credits. On the basis of the degree of “professional junior bachelor,” “junior bachelor” (educational and qualification level “junior specialist”), the higher education institution has the right to recognize and re-credit no more than 60 ECTS credits obtained within the previous educational program of training for a professional junior bachelor, junior bachelor (junior specialist). Admission on the basis of the degrees “junior bachelor,” “professional junior	

		bachelor,” or the educational and qualification level “junior specialist” is carried out based on the results of external independent testing in the manner prescribed by law.	
Accreditation status		Accredited until 14.05.2026	
Prerequisites		Applicants must hold a complete secondary education.	
Internet address of the permanent placement of the description of the Study program		https://limaup.edu.lviv.ua/kafedry/kafedra-psykholohiyi/osvitno-profesiyni-prohramy/	
2 – Aim of the study program			
To train competent competitive specialists, in accordance with the needs of civil society and trends in the global labor market, capable of solving complex specialized tasks and practical problems in the field of psychology, involving the application of basic psychological theories and methods and characterized by complexity and uncertainty of conditions in accordance with the mission and values of the PJSC "Higher Educational Institution" Interregional Academy of Personnel Management.			

<p align="center">3 - Characteristics of the Study program</p>			
<p>Description of the subject area</p>	<p>The object of study: mental phenomena, patterns of their occurrence, functioning and development, behavior, activities, actions; interaction of people in small and large social groups; psychophysiological processes and mechanisms underlying various forms of mental activity.</p> <p>Learning objectives: to develop in students a scientific understanding of the nature of the psyche, the methods and results of studying mental phenomena; to foster the ability to apply psychological knowledge in professional practice.</p> <p>Theoretical content of the subject area: the system of psychological knowledge, basic categories and concepts, regularities, mechanisms, methodological approaches, explanatory principles, and applied scientific tasks.</p> <p>Methods, techniques and technologies: methods of theoretical and empirical research, valid, standardized psychodiagnostics methods, methods of data analysis, technologies of psychological assistance.</p> <p>Tools and equipment: psychological instruments, computer equipment, modern information and</p>		

	communication technologies.		
Orientation of the study program	Educational, professional, applied		
Focus of the study program	<p>The program combines general and specialized education in the field of psychology and is aimed at developing in future professionals the competencies necessary for organizing and providing psychological assistance, designing and conducting psychological research, delivering training (developmental) and counseling services with the goal of preserving the psychological health of the population and fostering the development of civil society potential under conditions of uncertainty.</p> <p>Keywords: bachelor in psychology, competitive personality of a psychologist; psychological assistance to the individual: psychological diagnostics, developmental work, psychoeducation, psychological counseling, psychotherapeutic methods, psychological correction, psychological rehabilitation, psychological support.</p>		
Program features	The study program is aimed at developing in students both the mandatory competencies and program learning outcomes defined by the higher education standard, as well as unique learning outcomes that ensure the training of specialists capable of creating,		

	<p>adapting, and implementing effective socio-psychological programs and technologies for providing psychological assistance to broad segments of the population. This approach makes it possible to combine academic training with practice-oriented skills relevant in the context of contemporary social challenges. A significant emphasis within the program is placed on the practical skills of future professionals, enabling students to acquire not only theoretical knowledge but also the ability to apply it in practice. The educational process is built on the integration of the best national and international practices and involves the active participation of leading practitioners in psychology, who share their experience and expertise with students.</p>		
4 - Employability and further study			
Employability	<p>Primary positions (according to the Catalogue of Standard Civil Service Positions (Ukraine): 2445.2 - psychologist, 2445.2 - practical psychologist, 2445.2 - practical psychologist of an educational institution, 2412.2 - staff development professional,</p>		
Academic rights	<p>Possibility to continue studying at the second (master's) level of higher education. Acquisition of additional</p>		

	qualifications in the system of postgraduate education.		
5 - Teaching and assessment			
Teaching and learning	<p>The educational process is based on the principles of student-centered, competency-based, and practice-oriented learning. Teaching is carried out in the form of lectures, seminars, and practical classes. Lectures and seminars are interactive in nature. Practical classes are conducted in small groups, where situational tasks are solved, business games are held, and presentations are prepared. The focus of learning is placed on personal self-development and group work. Independent learning is encouraged through the use of the Moodle distance learning platform, problem-based learning, learning through academic and industrial internships, and participation in training sessions.</p> <p>Learning technologies: problem-based and differentiated learning technologies, individualized learning technology, programmed learning technology, information technology, developmental learning technology, credit transfer system of study organization, e-learning, and research-based self-learning.</p> <p>Elements of non-formal education are used during the study of individual course modules on</p>		

	educational online platforms, as well as through participation in scientific events, workshops, and professionally oriented activities.		
Assessment	<p>A cumulative point-rating system that provides for the assessment of students for all types of classroom and extracurricular educational activities in the form of entrance, intermediate, final (semester) control, as well as certification. Assessment of academic achievements is carried out on a 100-point (rating) scale of ECTS.</p> <p>Types of assessment: ongoing, intermediate, final.</p> <p>Forms of assessment: ongoing control (oral and written questioning, test tasks including computer-based testing), interim control (oral questioning, written express control/computer-based testing, colloquium, module test), final semester control (tests, examinations), defense of internship reports, defense of research projects, certification (in the form of a public defense of the qualification work and certification examination).</p> <p>Assessment of higher education students is carried out in accordance with the " Regulation on the Procedure for Assessing the Knowledge of Students ".</p>		
6 - Program competences			

	<p>understanding of the 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, technology to use various types and forms of physical activity for active recreation and healthy lifestyle.</p> <p>GC12. Ability to make decisions and act in accordance with the principle of inadmissibility of corruption and any other manifestations of dishonesty.</p>		
<p>Special (professional, subject) competences (SC)</p>	<p>SC1. Ability to operate the categorical and conceptual apparatus of psychology</p> <p>SC2. Ability to retrospectively analyze domestic and foreign experience in understanding the nature of the emergence, functioning and development of mental phenomena.</p> <p>SC3. Ability to understand the nature of behavior, activity and actions.</p> <p>SC4. Ability to independently collect and critically process, analyze and summarize psychological information from various sources.</p> <p>GC5. Ability to use valid and reliable psychodiagnostics tools.</p> <p>GC6. Ability to independently plan, organize and conduct psychological research.</p> <p>SC7. Ability to analyze and systematize the results obtained, formulate</p>		

	<p>reasoned conclusions and recommendations.</p> <p>SC8: Ability to organize and provide psychological assistance (individual and group).</p> <p>SC9. Ability to carry out educational and psychoprophylactic activities in accordance with the request.</p> <p>SC10. Ability to comply with professional ethics.</p> <p>SC11. Ability to personal and professional self-improvement, learning and self-development.</p> <p>SC12. Ability to understand the social conditionality of the individual and the life path of the individual, as well as the role of the individual in the life of social organizations and communities.</p> <p>SC13. Ability to apply socio-psychological concepts, concepts and theories to interpret socio-psychological phenomena and processes.</p> <p>SC14. Ability to understand the patterns of interaction of individuals, social groups, communities.</p>		
<p>7 - Intended learning outcomes</p>			
<p>ILO 1 Analyze and explain mental phenomena, identify psychological problems and propose ways to</p>			

<p>solve them.</p> <p>ILO2 Understand the patterns and features of the development and functioning of mental phenomena in the context of professional tasks.</p> <p>ILO3 Search for information from various sources, including using information and communication technologies, to solve professional problems.</p> <p>ILO4 Justify own position, draw independent conclusions based on the results of their own research and analysis of literary sources.</p> <p>IPO5 Choose and apply valid and reliable psychodiagnostic tools (tests, questionnaires, projective techniques, etc.) for psychological research and psychological assistance technologies.</p> <p>ILO6 Formulate</p>			
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<p>the purpose, objectives of the study, have the skills to collect primary material, follow the research procedure.</p> <p>ILO7 Reflect and critically evaluate the reliability of the results of psychological research, formulate reasoned conclusions.</p> <p>ILO8 Present the results of own research orally/written for specialists and non-specialists.</p> <p>ILO9 Propose own ways of solving psychological problems and tasks in the course of professional activity, make and justify own decisions on their solution.</p> <p>ILO10 Formulate an opinion logically, clearly, debate, defend one's own position, modify statements in accordance with</p>			
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<p>the cultural characteristics of the interlocutor.</p> <p>ILO11 Draw up and implement a plan of the counselling process, taking into account the specifics of the request and individual characteristics of the client, ensure the effectiveness of their own actions.</p> <p>ILO12 Develop and implement a program of psycho-preventive and educational activities, psychological assistance measures in the form of lectures, discussions, round tables, games, trainings, etc. in accordance with the requirements of the client.</p> <p>ILO13 Interact, communicate, be understood, and be tolerant of people with different cultural or gender-age differences.</p>			
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<p>ILO 14 Effectively perform different roles in a team in the process of solving professional problems, including demonstrating leadership skills.</p> <p>ILO15 Take a responsible attitude to professional self-improvement, training and self-development</p> <p>ILO16 To know, understand and adhere to the ethical principles of professional activity of a psychologist.</p> <p>ILO17 Demonstrate socially responsible and conscious behavior, follow humanistic and democratic values in professional and social activities.</p> <p>ILO18 Take effective measures to preserve health (own and others) and, if necessary, determine the</p>			
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<p>content of the request for supervision.</p> <p>ILO 19 Analyze the social and psychological characteristics of a person and make a social and psychological portrait of a person.</p> <p>ILO20 Present and justify determinism and hypotheses about the emergence and development of socio-psychological phenomena.</p> <p>ILO21. Implement programs on interpersonal and intergroup interaction that would contribute to a positive psychological microclimate in teams.</p>			
<p>8 - Resource support for the program implementation</p>			
<p>Teaching staff</p>	<p>All academic staff involved in the implementation of the study program possess qualifications corresponding to the program profile and the field of the courses they teach, as well as relevant experience in academic and</p>		

	<p>teaching work and research outcomes that meet the requirements of current licensing conditions. In line with the schedule, faculty members regularly enhance their skills through training at higher education institutions, professional courses on online platforms (such as Coursera, Prometheus, Diya. Digital Education, Edera, and others). Both academic researchers and industry practitioners are also engaged in teaching.</p>		
<p>Infrastructure</p>	<p>The area of the premises used for the implementation of the educational process under the program, the level of provision with hardware and software, visual and didactic materials, computer workstations and multimedia equipment, as well as the social and household infrastructure, meet the requirements established by the Licensing Conditions for the provision of educational activities.</p> <p>The classrooms and laboratories for lectures and seminar-practical sessions comply with fire safety regulations and sanitary standards. The material and technical base ensures the delivery of all types of educational activities for higher education students. There are specially equipped rooms for conducting training sessions, a psychological laboratory, a psychological</p>		

	<p>counseling center, multimedia equipment, the necessary software, and unlimited Internet access. All necessary social and household infrastructure is available: library, catering facilities, lounge areas for participants of the educational process, medical center, and dormitory.</p>		
<p>Information and methodological support</p>	<p>The official website http://maup.km.ua/ contains information about study programs, academic, research, and extracurricular activities, structural units, admission rules, contacts, and more.</p> <p>Classrooms and laboratories:</p> <ul style="list-style-type: none"> ● equipped with modern furniture, multimedia equipment (projectors, interactive panels, computers); ● specialized rooms for psychology, pedagogy, conflict studies, and social work; ● training halls for practical classes, role-playing, training sessions, and counseling. <p>Computer classrooms and IT infrastructure:</p> <ul style="list-style-type: none"> ● equipped with modern computers with 		

	<p>Internet access;</p> <ul style="list-style-type: none"> ● installed software for psychodiagnostics and statistical analysis (SPSS, STATISTICA, OpenPsychometrics, PsyToolkit). <p>IAPM distance learning platform:</p> <ul style="list-style-type: none"> ● training can be delivered partly or fully in an online environment; ● access to video lectures, courses, e-journals, forums, and testing; ● support for synchronous (Zoom, Google Meet) and asynchronous learning. <p>Psychodiagnostics and psychocorrectional tools:</p> <ul style="list-style-type: none"> ● test sets (MMPI, 16PF, Luscher, Spielberger-Khanin, Beck, etc.); ● methods for diagnosing personality, intelligence, emotional state, and career orientation; ● materials for projective methods, art therapy, and coaching techniques. 	
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	<p>Library and information resources:</p> <ul style="list-style-type: none"> ● a library with sufficient professional literature in psychology, pedagogy, sociology, and research methodology; ● access to the IAPM electronic library and international information resources (Google Scholar, Scopus, Web of Science, APA PsycNet); ● reading rooms with Wi-Fi access. <p>Internship bases:</p> <ul style="list-style-type: none"> ● educational, healthcare, social protection institutions, and business organizations where students undergo internships; ● agreements with partner institutions that ensure real conditions of professional activity. <p>Safety and accessibility of the educational environment:</p> <ul style="list-style-type: none"> ● premises equipped with fire safety systems, security, and 		
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	<p>video surveillance;</p> <ul style="list-style-type: none"> ● access to classrooms for persons with disabilities (in compliance with inclusive requirements); ● compliance with sanitary and hygiene standards. ● for learning, self-development, and support, distance learning platforms Prometheus and EdEra (Education Era) are also used. 		
9 - Academic mobility			
National credit mobility	<p>The right to national credit mobility is exercised on the basis of the Law of Ukraine “On Higher Education” and the Resolution of the Cabinet of Ministers of Ukraine of August 12, 2015, No. 579 (as amended by the Resolution of the Cabinet of Ministers of Ukraine of May 13, 2022, No. 599) “On Approval of the Procedure for Exercising the Right to Academic Mobility.” This provides all participants in the educational process with the right to participate in academic mobility programs with a clear definition of its types and forms, as well as the principle of credit transfer based on the European</p>		

	<p>Credit Transfer and Accumulation System (ECTS).</p> <p>ECTS credits obtained at other higher education institutions of Ukraine, provided that agreements exist between higher education institutions (research institutions of Ukraine or their main structural units), are transferred in accordance with the “Regulations on the Organization of the Educational Process at PJSC ‘HEI ‘IAPM’” and internal documents regulating the internationalization strategy, in particular:</p> <ul style="list-style-type: none"> • Regulations on the Organization of the Educational Process at IAPM. • Regulations on the Academic Mobility at IAPM. 		
International credit mobility	<p>The participation of students and staff in academic mobility is regulated by the Regulations on the Academic Mobility.</p> <p>International credit mobility may be implemented on the basis of relevant agreements between the university and foreign higher education institutions.</p> <p>IAPM operates a Center for International Academic Mobility, which facilitates participation in bilateral and multilateral interstate and interuniversity academic mobility programs for both students and academic staff.</p>		

Training of foreign students	The education of international students is carried out under general conditions with additional language training.		
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II. List of courses of the study program and their logical sequence

2.1. List of courses

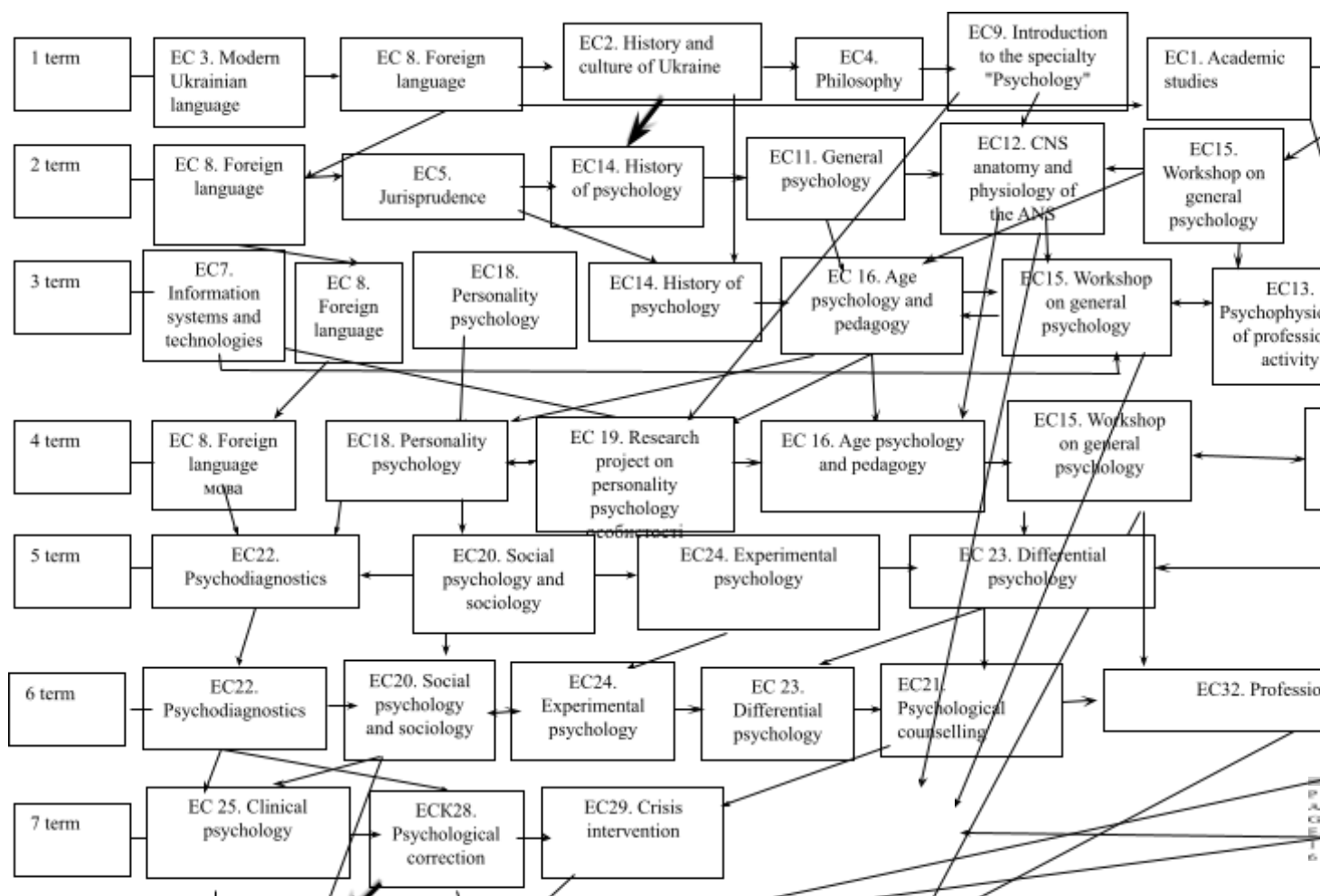
Component code	Components of the Study program (academic disciplines, research projects, internships, thesis)	Number of credits	Form of control
1	2	3	4
Compulsory courses			
CC 1	Academic studies	3	pass/fail
CC 2	History and culture of Ukraine	4	exam
CC 3	Modern Ukrainian language	4	exam
CC 4	Philosophy	4	exam
CC 5	Jurisprudence	4	exam
CC 6	Physical education	3	pass/fail
CC 7	Information systems and technologies	4	pass/fail
CC 8	Foreign language	12	pass/fail, exam
CC 9	Introduction to the specialty "Psychology"	4	exam
CC10	Fundamentals of biology, human genetics and anthropology	4	exam
CC11	General psychology	9	pass/fail, exam
CC12	CNS anatomy and physiology of the ANS	5	exam
CC13	Psychophysiology of professional activity	5	exam
CC14	History of psychology	7	pass/fail, exam
CC15	Workshop on general psychology	12	pass/fail, exam
CC16	Age psychology and pedagogy	4	exam
CC17	Theory and practice of psycho-training	4	exam
CC18	Personality psychology	4	exam
CC19	Research project on personality psychology	3	defense
CC20	Social psychology and sociology	7	pass/fail, exam
CC21	Psychological counselling	5	exam
CC22	Psychodiagnostics	8	pass/fail, exam
CC23	Differential psychology	7	pass/fail, exam
CC24	Experimental psychology	7	pass/fail, exam
CC25	Clinical psychology	3	pass/fail
CC26	Pathological psychology	4	exam
CC27	Psychological special workshop on special courses	4	exam
CC28	Psychological correction	3	exam
CC29	Crisis intervention	3	exam
CC30	Basics of mediation	4	exam
CC31	Internship	4	pass/fail
CC32	Professional internship	8	pass/fail

CC33	Research internship	5	pass/fail
CC34	Bachelor's thesis	6	defense
CC35	Certification exam	0	exam
Total amount of compulsory educational components		177	
Elective courses			
EC.01	*Basic general military training (theoretical training) / **Additional elective course from the course catalogue	3	pass/fail
EC.02-31.	Elective courses from the course catalogue for the appropriate number of credits	60	pass/fail
Total volume of elective components:		63	
The total volume of the study program:		240	

* - the educational component is mandatory for inclusion in the individual study plans of students for whom it is required by law.

** - An elective educational component for students who are not required to undergo basic general military training.

2.2 Structural and logical scheme of the study program



III. Forms of certification

EC26.
Pathological
psychology

Forms of certification	The certification is carried out in a form: public defense (demonstration) of bachelor's thesis and certification examination.
Requirements for certification exam	The certification examination must assess the achievement of the learning outcomes defined by the Higher Education Standard for specialty Psychology at the first (bachelor's) level of higher education and by the study program.
Requirements for bachelor's thesis	The bachelor's thesis must involve solving a complex specialized task or practical problem in the field of psychology, which requires the application of fundamental psychological theories and methods and is characterized by complexity and uncertainty of conditions. The bachelor's thesis must not contain academic plagiarism, falsification, or fabrication. The bachelor's thesis must be published on the official website or in the Academy's repository.

4. Matrix of compliance of program competences with the educational components of the study program

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
GC 1	+				+		+			+	+	+	+		+	+	+	+			+		+	+	+	+	+	+	+	+	+	+
GC 2									+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC 3							+												+			+					+					
GC 4	+				+		+	+	+		+						+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
GC 5				+									+						+							+			+	+	+	+
GC 6	+				+				+	+	+	+	+		+	+	+			+	+	+	+	+		+	+	+	+	+	+	+
GC 7	+								+				+				+		+								+					+
GC 8			+						+				+								+	+	+	+		+			+	+	+	+
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