#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE Ivan Franko National University of Lviv

Approved by the Academic Board of the Ivan Franko National University of Lviv Chair of the Academic Board Nolodymyr MELNYK Minutes No 86/5 as of 01.05. 2025 The study program is enacted since September 1, 2025 H 3KTIO 0201 N

Study program Postwar landscape reconstruction Master degree Specialty "C6 Geography and Regional Studies",

Filed "C Social Sciences, Journalism, Information and International Affairs"

Lviv - 2025

Developed by the work group:

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Reviews are provided by external stakeholders:

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Chair of the work group (Study program guarantor)

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Anatoliy SMALIYCHUK

APPROVED by

the Academic Board of the Faculty of Geography

Minutes No 11 of November 26, 2024

Dean of the Faculty of Geography

Volodymyr BILANYUK fou

### 1. Study Program Profile "Postwar Landscape Reconstruction"

	1.1. General information									
Full name of the higher educational institution and the structural unit	Ivan Franko National University of Lviv, Faculty of Geography									
Obtained qualification and the title of the program	Master. Master of Geography and Regional Studies									
Official title of the study program	Postwar landscape reconstruction									
Diploma type and scope of the program										
Accreditation	_									
Cycle / level	National Qualifications Framework – 7 level, FQ-EHEA –second cycle, EQF LLL – 7 level									
Preconditions	Availability of the first level of higher education – a bachelor or "Specialist" diploma in any field of study									
Language of instruction	English									
Validity term of the study program	Till the next update									
Permanent Internet address for the program description	https://geography.lnu.edu.ua									
	1.2. Goal of the study program									

The goal is to train professionals capable of realizing projects in reconstruction of areas as socialecological systems (landscapes), which suffered, directly or indirectly, from the consequences of warfare, and considering new political, social, economic, and environmental factors – geopolitical reformatting, population migration, economy and land use transformation, climate change and others with extensive involvement of international experience in this field and interaction with foreign institutions.

	1.3. Study program characteristics
Subject domain	<ul> <li>Field: C Social sciences, journalism, and information.</li> <li>Specialty: C6 Geography and Regional Studies.</li> <li>Study object: the Earth's geographical sphere, its spatial natural and socioeconomic diversity, connections between the natural environment and human activities, natural and social landscape systems.</li> <li>Study objectives: training of experts capable of: studying natural and social components of the landscape sphere; solving complex tasks of scientific and innovative character; pursuing project and applied activities in the domains of nature use, urban and regional development, and spatial planning.</li> <li>Theoretical contents of subject domain: the main theories and concepts of spatial organization of the Earth's geographical sphere, natural and socioeconomic peculiarities of its evolution and functioning.</li> <li>Methods and techniques: techniques of acquisition, processing, and propagation of geospatial information; methods of filed, laboratory, and statistical methods of natural- and social-geographic studies, mapping, GIS-analysis and modeling, retrospective analysis, and geographic forecasting.</li> <li>Instruments and equipment: hardware and software necessary for field, statistical, and analytical studies of natural and social properties of the Earth's sphere and its components (with regard to the specialty), and other geographic systems.</li> </ul>
Study program orientation Major focus of the study program and specialization	Master study program Comprehensive education in the filed C Sociology, Journalism, and Information and specialty C6 Geography and Regional Studies with an emphasis on landscape studies and reconstruction of areas subjected to direct or indirect warfare. Key words: landscape, social-ecological system, post-war reconstruction, land use, change, adaptation.
Special features of the program	The program concentrates on the management (planning) of the landscape as a social-ecological system considering new circumstances caused by the war, geopolitical reformation, and climate change. The program is student-centered with opportunities to find out about international approaches in the field of landscape reconstruction from foreign guest lecturers invited to this study programme. The program is based on advanced scientific and practical experience – the program developers and professors are experts participating in international applied projects on landscape management, including war zones.

1.4. Graduate	1.4. Graduate employability and readiness for further education								
Employability	In public, municipal, and private organizations engaged in research, project, and economic activities in the fields of land use, spatial planning, and regional and local governance. Fluency in professional English in this field allows graduates to work both in Ukraine in organizations and institutions that already have or seek to build cooperation with foreign partners and at the same time easily to be integrated into the professional international environment in case of employment abroad. According to the Classification of Occupations DK 003:2010, the following qualifications apply: 2442.2 Geographer; 2442.2 Specialist in Urban and Regional Planning; 2442.1 Researcher (Geography); 2442.1 Junior Researcher (Geography).								
Further education	The opportunity to pursue third-level (educational-research) higher education.								
	1.5. Teaching and assessment								
Teaching and learning	Individual, student-centered, project-based learning centered on qualification research topics, with a strong emphasis on self- directed learning and practical/seminar activities.								
Assessment	Assessment of academic performance is carried out according to both the European Credit Transfer and Accumulation System (ECTS) and the national grading system. Ongoing assessment includes the completion of practical and laboratory work, presentations, participation in seminar discussions, internships, and the development of a term paper. Final assessment is conducted through credits, oral and written exams, as well as the defense of internships and the term paper. Final certification involves the preparation and public defense of a qualification (master's) thesis before an examination committee. This thesis addresses a complex, original scientific or practical problem, thereby generating new knowledge about landscape management as a socio-ecological system in the context of post-war recovery.								
	1.6. Program competences								
Integral competence	The ability to solve complex tasks and applied problems, as well as to make analytical and managerial decisions in the fields of geography, natural resource management, and urban and regional development. This involves conducting research and/or implementing innovations under uncertain conditions and requirements.								
General competences (GC)	<ul> <li>GC01. Ability to search for, process, and analyze information from various sources.</li> <li>GC02. Ability to learn and acquire modern knowledge.</li> <li>GC03. Ability to identify, formulate, and solve problems.</li> <li>GC04. Ability to make well-founded decisions.</li> <li>GC05. Ability to work in a team.</li> <li>GC06. Ability to communicate in a foreign language.</li> </ul>								

Professional (special)	PC01. Ability to apply theories, concepts, and paradigms of
competences (PC)	contemporary geography, as well as the history of geographical
-	research and ideas, for studying natural and socio-territorial
	systems at various levels of spatial organization.
	<b>PC02.</b> Ability to conduct scientific analysis of contemporary issues
	and the specific features of nature-society interactions,
	utilizing principles of rational territorial resource use, basic
	environmental legislation, urban and regional development
	planning, to develop proposals for optimizing resource use and
	ensuring sustainable regional development.
	PC03. Ability to employ specialized geographical methods and
	approaches, as well as geoinformation technologies, to solve
	specific scientific and applied problems in the fields of
	geography, resource management, urban, and regional
	development.
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	PC04. Ability to develop and support the implementation of
	regional sustainable development programs and conduct
	territorial planning across different hierarchical levels.
	PC05. Ability to professionally evaluate programs, strategies, and
	plans for territorial development, global processes of
	globalization, regionalization, and urbanization, and perform
	geo-ecological and socio-geographical expertise and
	monitoring of these processes.
	<b>PC06.</b> Ability to apply theoretical knowledge and practical skills in
	systemic analysis and synthesis, geographical modeling, and
	forecasting in professional activities.
	<b>PC07.</b> Ability to employ interdisciplinary approaches in critically
	analyzing issues of resource management, geo-planning,
	urban, and regional development, recreation, and tourism, and
	to assess potential risks, as well as the socio-economic and
	environmental impacts of management decisions in these
	areas.
	<b>PC08.</b> Ability to plan, conduct, and publicly present the results of
	scientific research, ensuring effective communication of
	personal knowledge, conclusions, and arguments to both
	specialists and non-specialists.
	<b>PC09.</b> Ability to engage in scientific and pedagogical activities in
	higher education institutions based on a competence-oriented
	approach.
	<b>PC10.</b> Ability to study the landscape as a complex socio-natural
	geographical system.
	PC11. Ability to conduct landscape management in the context of
	post-war reconstruction, population migration, transformation
	of economic structures, and climate change.

	1.7. Study program results
Study program results (PR)	PR01. To apply gained theoretical knowledge and practical skills for the research of natural and social territorial systems at the different levels of spatial organization.
	PR02. Evaluate results of own work, to demonstrate an ability of team work.
	PR03. To communicate fluently on professional and scientific topics in foreign language.
	PR04. To conduct research and/or innovative activity aimed at the gaining new knowledge, development of new methods and
	procedures in Geography and interdisciplinary contexts. PR05. Be able to identify, formulate and solve scientific and applied
	problems, critically evaluate decisions made.
	PR06. To apply modern models and information technologies for conducting research and development in the field of geography, natural resource use, urban and regional development.
	PR07. To participate in development of programs and strategies for urban
	and regional, territorial planning at different hierarchical levels. PR08. To conduct research of natural and social geographical
	manifestations of geosystems' development in complex and unpredictable circumstances, predict their development, analyze alternatives, to evaluate risks and possible consequences.
	PR09. To perform qualified evaluation of programs, strategies and development plans of the area, to conducts their geoecological and socio-economic examination and monitoring.
	PR10. To apply GIS technologies, create and research models of natural and social geographical manifestations of geosystems' development, to define the capabilities and limits of their application.
	PR11. To estimate possible risks, socio-economic and geoecological consequences of implementation of managerial decisions in the field of land and nature resource use, urban and regional development,
	recreation and tourism. PR12. To plan and conduct theoretical and applied research, make
	grounded inferences, analyze and present research results. PR13. To carry out scientific and pedagogical activities in higher
	education institutions, to develop the necessary educational, methodological and informational provision for this.
	PR14. To apply methods of integrated nature-social geographical studies for the purpose of landscape management.
	PR15. To develop recommendations for the use of landscape in
	conditions of post-war reconstruction, population migration, transformations in the structure of the economy and climate change.

1.8. I	Resource provisions for the program implementation
Staff provisions	The study program's academic disciplines are taught by highly qualified scientific and pedagogical staff, including 2 doctors of sciences and professors, and about 10 candidates of sciences and associate professors. All faculty members involved in teaching have the necessary level of pedagogical, professional competence and real-life experience, in particular, due to participation in international applied geographical projects. All teachers undergo advanced training once every 5 years.
Material and technical provisions	Master students have access to the educational laboratories «Safety of landscape» and «Geoinformation technologies and landscape planning», Chornohora geographical and Roztochia landscape-geophysical research stations as well as, if necessary, other educational and educational- scientific laboratories of the Faculty of Geography.
Information and methodological provisions	All master students are provided with corporate accounts within university information system, which ensure an access to MS Office 365 cloud applications. There are perpetual licenses for GIS software ArcGIS provided by developer. Students can use classrooms equipped with PC as well as own laptops with MS Windows operation system. Publications (monographies, articles and tutorial), geo-data and other materials (syllabi, lecture presentations, practical and seminar tasks, etc.), which are used in the study process are in digital format and constantly available via corporate platforms MS Teams and E-learning / Moodle. By using corporate accounts Master students have access to the Web of Science database of scientific publications.
	1.9. Academic mobility
National credit mobility	Study based on bilateral agreements between Ivan Franko National University of Lviv and higher education institutions of Ukraine: Taras Shevchenko National University of Kyiv, Vasyl Karazin National University of Kharkiv, other higher education institutions.
International credit mobility	Study in the frame of Erasmus+ EU program based on bilateral agreements between Ivan Franko National University of Lviv and higher education institutions of the partner countries: Jagiellonian University (Krakow, Poland); Maria Curie-Sklodowska University (Lublin, Poland); University of Wrocław (Wroclaw, Poland); University of Wrocław (Wroclaw, Poland); Eberhard Karls University of Tübingen (Tubingen, Germany); University of Versailles Saint-Quentin-en-Yvelines (Versailles, France).
Study of international students	The terms of study are determined by the "Rules of Admission of Ivan Franko National University of Lviv".

# 2. List of the study program components, and their logical sequence

### 2.1. List of study program components

Code	Study program components (academic disciplines, semester works, internships, qualification work)	Number of credits	Control form
	Mandatory components	• <i>j</i> •• •••••	Joint
SC01	Academic communication	3	Credit
SC02	Methodology of geography	3	Exam
SC03	Geospatial analysis	3	Credit
SC04	Regions and landscapes of Europe	3	Exam
SC05	Geography of conflicts	3	Exam
SC06	Internship - 1	6	Credit
SC07	Internship - 2	6	Credit
SC08	Semester work	3	Credit
SC09	Qualification (master) work	6	Public
	Qualification (master) work	0	defense
SC10	Political ecology	4	Exam
SC11	Landscape management and governance	4	Exam
SC12	Rural landscape reconstruction	4	Exam
SC13	Urban landscape reconstruction	4	Exam
SC14	Protected landscape reconstruction	4	Exam
SC15	Environmental peacekeeping	3	Exam
SC16	Master seminar	4	Credit
SC17	Reconstruction of wetland and riverine landscape	3	Credit
Total of	mandatory study program components	66	
	Elective components		
EC01	General elective discipline	3	Credit
EC02	Professional elective discipline	5	Credit
EC03	Professional elective discipline	5	Credit
EC04	Professional elective discipline	5	Credit
EC05	Professional elective discipline	3	Credit
EC06	Professional elective discipline	3	Credit
Total of	elective components	24	
Total sco	ope of the study program	90	

#### 2.2. Study program flowchart



#### 3. Form of master student attestation

Final attestation of master students is a public defense of a master qualification work in front of an examination board and ends with issuing a document certifying assignment of a Master degree with the qualification "Master in Geography and Regional Studies. Study program".

	SC01	SC02	SC03	SC04	SC05	SC06	SC07	SCO8	SC09	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17
GC01	+		+	+	+	+	+	+	+	+	+	+	+	+	+		+
GC02	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+
GC03	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC04	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
GC05	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+
GC06	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC01		+			+	+	+	+	+	+		+	+	+	+		+
PC02		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC03			+			+	+	+	+		+	+	+	+	+		
PC04						+	+		+	+	+	+	+	+	+		+
PC05				+	$^+$	$^+$	$^+$		+	+	+	+	$^+$	$^+$	$^+$	$^+$	+
PC06			+			+	+	+	+			+	+	+	+		+
PC07		$^+$		$^+$		$^+$	$^+$	+	+	$^+$	+	+	$^+$	$^+$	$^+$	+	+
PC08	+							+	+								+
PC09	+																+
PC10		+				+	+	+	+	+	+	+	+	+	+	+	+
PC11					+	+	+		+	+	+	+	+	+	+	+	+

4. Matrix of correspondence of program competences (GC, PC) to study program components (SC)

	SC01	SC02	SC03	SC04	SC05	SC06	SC07	SC08	SC09	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17
PR01	+	+	+	+	+	+	+	+	+	+		+	+	+	+		
PR02	+	+	+			+	+	+		+		+	+	+	+	+	+
PR03	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PR04	+					+	+	+	+	+	+	+	+	+	+		
PR05		+				+	+	+	+	+	+	+		+	+	+	+
PR06		+	+			+	+	+	+	+		+		+	+		
PR07					+	+		+		+	+	+	+	+	+	+	+
PR08		+		+	+	+		+	+	+	+	+		+	+	+	
PR09						÷	+	+		+	+	+	+	+	+	+	
PR10		+	+			+	+	+	+	+		+		+	+		
PR11				+	+	+	+	+		+	+	+	+	+	+	+	
PR12	+					+	+	+	+	+		+		+	+		+
PR13	+						+		+								+
PR14		+	+	+		+	+	+	+	+		+	+	+	+	+	+
PR15					+	+		+		+	+	+	+	+	+	+	+

# 5. Matrix of supporting program study results (PR) by respective study program components (SC)

	Cycle of general training		
EC01	Elective discipline of general training	3	Credit
	Cycle of professional and practical trainin	g	
	Political geography		Credit
EC02	Geoglobalistics	5	Credit
EC02	Global environmental policy	5	Credit
	EU environmental policy		Credit
	Sociology of landscape		Credit
EC03	Behavioral geography	5	Credit
EC05	Modern military conflicts in Europe	5	Credit
	Ecosystem services evaluation methods		Credit
	Historical regional studies		Credit
	Historical landscape studies		Credit
EC04	Tools for community engagement in reconstruction of	5	Credit
	landscapes		
	Policy and practice of postwar reconstruction in Ukraine		Credit
	Green infrastructure		Credit
EC05	Grey infrastructure	3	Credit
LC05	Climate change adaptation of urban landscape	5	Credit
	Climate change adaptation of forest landscape		Credit
	War impact on lithogenic resources		Credit
	Belligerent landforms restoration		Credit
EC06	Remote sensing of the landscape	3	
	Landscape monitoring and assessment of reconstruction effectiveness		Credit
Total of	elective components:	24	

## List of elective disciplines