

SPATIAL PLANNING IN THE UKRAINE'S NATIONAL HIGHER EDUCATION SYSTEM: PROGRAMS, APPROACHES, PROBLEMS

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Abstract

This article analyses the role and content of spatial planning in contemporary higher education in Ukraine. It has been established that the system for training specialists who acquire knowledge across the broad spectrum of issues related to modern understandings of spatial planning is still in the process of formation. Contemporary educational programs related to spatial planning are, in fact, combined with regards to their content. They include educational components of the basic specialty, spatial planning, and other elements designed to attract prospective students. The state encourages connections between universities and non-formal education as they improve the practical orientation of educational programs related to spatial planning. The experience of Ukraine's neighbouring EU member states in training spatial planning specialists provides guidance to Ukrainian higher education institutions. The greatest obstacle to the total integration of spatial planning into the higher education system is its legal uncertainty within extant legislation. Accordingly, it is not institutionally possible in Ukraine to define spatial planning as an independent profession and, as a result, training specialists in this field involves numerous risks.

Keywords:

Spatial planning, Ukraine, higher education, educational programme

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1. Introduction

Spatial planning in Ukraine fully reflects all features of the country's transitional economy (Lozynskyy et al., 2024). It is based on planning practices that have been inherited from the Soviet period and their corresponding tools. In its pursuit of European Union membership, Ukraine has sought to reform its spatial planning system to align it more closely with global, and particularly European, models. However, these reforms began late (only in the latter half of the 2010s) and have, to date, been inconsistent. This process was further delayed by the COVID-19 pandemic and nearly halted by the onset of the large-scale Russian aggression against Ukraine. Today, it is necessary to transform existing spatial planning tools and develop new ones to address the needs of post-war recovery and the reconstruction of the state (Maruniak, Palekha and Kryshstop, 2022).

Currently, Ukraine's spatial planning system cannot be described as entirely underdeveloped. Compared to other European states, it incorporates a number of positive innovations (Nowak et al., 2022; 2023). However, their implementation faces considerable challenges, and some components of the system remain unreformed. Notably, changes within the education system concerning spatial planning have been insufficient. In Ukraine, there is no distinct specialty for training specialists in spatial planning within higher education institutions. Instead, educational programmes in fields such as *Architecture and Urban Planning*, *Geodesy and Land Management*, and *Geography* offer modules related to spatial planning. Additionally, and prior to the large-scale Russian aggression, various local and international non-governmental organisations offered programmes and courses on spatial planning and its components to representatives of territorial communities and other interested parties as part of wider efforts to align Ukraine with European spatial planning standards.

2. The Aim of the Research

This article analyses the place of spatial planning in modern higher education in Ukraine and characterises its content in general terms.

3. Analysis of Literary Sources

Interest in spatial planning issues in Ukraine increased during the 2010s and was driven by the country's strategic orientation towards European integration, association, and, most recently, EU accession. Another factor that emphasises the importance of this research is the administrative and territorial reforms that took place between 2015 and 2020. Researchers have primarily focused on the local level of spatial planning due to its practical applicability. In contrast, spatial planning at the national level has received minimal attention, with few significant changes having occurred over recent decades. Amongst the various types of spatial planning, those which have been most extensively studied are urban, rural, and landscape planning.

There is a voluminous corpus of work on spatial planning in Ukraine that has been authored by experts in urban planning, architecture, public administration, law, geography, land management, and related disciplines. Of recent works, particular attention should be given to the article by Gabrel and Kosmii (2022), which examines the updated general scheme of spatial planning across Ukraine. An analysis of the outcomes of regional development programmes in Ukraine was conducted by a research team led by Radzikhovska (2023). Nowak, Lozynskyy, and Pantyley (2021) compared local-level spatial policies in Ukraine and Poland. Additionally, an international team of researchers analysed spatial planning tools in Central and Eastern European countries at the local level (Nowak et al., 2022).

Since 2022, Russian armed aggression against Ukraine and the challenges of post-war reconstruction have made spatial planning a critical area of research. Noteworthy in this regard is a review article by Maruniak, Palekha, and Kryshstop (2023) which addresses the development of spatial planning during the war in Ukraine and the subsequent rebuilding of the state.

However, there is a noticeable lack of peer-reviewed academic publications that have specifically examined the training of specialists in spatial planning in Ukraine. This issue is frequently raised at conferences and events

related to spatial planning development and in review publications which analyse various aspects of Ukraine's planning system (Lozynskyy et al., 2024).

4. Methods and Sources of Research

To determine the current state and challenges of spatial planning education in Ukraine, the research undertaken for this study was conducted in four stages:

Stage 1 : A brief description of the modern system of spatial planning in Ukraine. This stage focused on analysing Ukraine's legislation on spatial planning, particularly the Law of Ukraine 'On Regulation of Town-Planning Activities' (Law, 2011), as well as other related laws and regulations.

Stage 2 : Analysis of existing programmes related to spatial planning in higher education institutions in Ukraine. The Unified State Electronic Database on Education (YeDEBO) was used to select programmes (Education database, n.d.). Administered by the Ministry of Education and Science of Ukraine, the database provided access to descriptions of educational programmes posted on the official websites of higher education institutions. The analysis of educational components within these programmes was summarised into tables.

Stage 3 : Characteristics of the content of educational programs related to spatial planning. Educational programs in spatial planning at leading universities in Ukraine, as posted on their official websites, were utilized. The webpages contain information about the educational components that make up specific programs.

Stage 4 : Analysis of non-formal education in spatial planning in Ukraine and its importance for higher education. Using Google, institutions and organisations which offer educational courses and e-learning programmes on spatial planning were identified. The information garnered was further verified through direct contact and detailed analysis of selected websites.

Stage 5: Examination of specialist training in spatial planning in selected EU member states of Central and Eastern Europe in the context of Ukrainian perspectives. Official online resources of higher education institutions in these countries were consulted. For Poland, the RAD-on system, administered by the Ministry of Science and Higher Education (Ministerstwo Nauki i Szkolnictwa Wyższego), was used to gather information on fields of study (kierunki studiów). In Romania, data from the Romanian Agency for Quality Assurance of Higher Education (Agenția Română de Asigurare a Calității în Învățământul Superior) provided insights into fields of knowledge, majors, and specialties. With regard to the Czech Republic, information was obtained from the register of the Ministry of Education, Youth, and Sports (Ministerstvo školství, mládeže a tělovýchovy České republiky). The results were summarised into tables.

5. Results of Research

5.1 The Modern System of Spatial Planning in Ukraine: A General Overview

Modern Ukraine inherited the Soviet system of spatial planning, and this is reflected in the terminology that is used (Harat, 2019). The term 'spatial planning' is still undefined in Ukrainian legislation. Instead, the term 'mistobuduvannia' (містобудування) is used, which applies not only to cities but also to regions, communities, and rural areas. 'Mistobuduvannia' is usually translated into English as 'urban planning', although the term derives from two Ukrainian words 'misto' (city) and 'buduvannia' (constructing). It follows, that its literal meaning is broader than exclusively urban-focused activities.

Spatial planning documentation is referred to as 'city constructing documentation'. Legislation also includes the concept of 'planning' of territories' (as opposed to 'territorial planning'), which is combined with 'building development' (Article 2 of the Law of Ukraine *On Regulation of Town-Planning Activities*). Terms such as 'spatial development', 'spatial planning', and 'spatial policy' have only been introduced into practice within the last decade.

The Ministry for Communities and Territories Development of Ukraine oversees spatial policy. The legal framework for spatial planning comprises hundreds of laws and regulations, with the main legislation being the *Law On Regulation of Town-Planning Activities* which was adopted in 2011 (Zakon, 2011). The spatial planning system in Ukraine operates at three levels: national, regional, and local. At the national level, the *Law of Ukraine On the General Planning Scheme of the Territory of Ukraine* which was adopted in 2002 remains in effect (Zakon, 2002). This law primarily concerns the General Scheme, which includes 27 drawings (maps) and textual material. Regional-level planning schemes covering regions, districts, and the Crimea, supplement the General Scheme.

Spatial planning tools in Ukraine are predominantly focused on documentation development. At the local level, these tools include general settlement plans, zoning plans, and detailed territorial plans. In 2020, a new administrative-territorial organisation was introduced, with territorial communities being designated as the lowest level. In June 2020, a new spatial planning tool was introduced: the comprehensive plan for the spatial development of the territorial community. However, other direct and indirect Ukrainian spatial planning tools remain insufficiently developed with regard to both regulatory documents and scholarly literature despite their practical use.

5.2 Educational programs related to spatial planning offered by higher education institutions

Students at higher education institutions in Ukraine study within specific educational programs that must periodically undergo accreditation, i.e. go through an evaluation process which judges their compliance with the requirements set by accreditation bodies. Educational programs can be developed within specific academic specialties or be interdisciplinary. There are relatively few interdisciplinary programs because their accreditation process is significantly more complex. In addition, educational standards are developed for each specialty, and these must be followed. The list of academic specialties approved by the state education authority has recently been updated (List, 2024). Spatial planning is not in this list. However, universities are free to choose the titles of their educational programs within their given specialties, with a single restriction: the title of an educational program must not include words that explicitly point to a different specialty.

Some academic specialties in Ukraine are designated as 'regulated', i. e., the state imposes additional requirements regarding admission procedures, the structure of the educational program, its content, the organization of the educational process, and the certification of graduates. These are specialties that lead to regulated professions and include those which involve high levels of responsibility such as law, nuclear energy, medicine, military service, and so on. The specialty *Architecture and Urban Planning*, which is directly related to spatial planning, is among the regulated specialties.

Educational specialties such as *Architecture and Urban Planning* as well as *Geodesy and Land Management* appear closely aligned with spatial planning. However, these broad fields prioritise general competencies during bachelor's and master's programmes, and are supported by well-developed educational standards. Narrower educational programmes specifically focused on spatial planning have not been developed as they are unlikely to attract sufficient demand.

As of the summer of 2024, 32 higher education institutions in Ukraine offered bachelor's programmes in architecture and urban planning (Education database, n.d.). None of these programmes directly address spatial planning. However, 6 of the 20 institutions offering master's programmes in architecture and urban planning include a dedicated *Urban Planning ('City Constructing')* programme.

In 2024, 49 institutions provided bachelor's training in geodesy and land management, and 40 offered master's programmes (Education database, n.d.). While bachelor's programmes rarely include spatial planning content, the master's programmes offered saw a notable increase in this area. Some institutions of higher education have already introduced new courses related to spatial planning. Notably, 17 Ukrainian universities have introduced courses based on the USAID *Program for Agrarian and Rural Development (AGRO)* methodology for comprehensive spatial development plans for communities (Decentralisation, n.d.).

Additionally, according to the data of YeDEBO, 18 educational programmes across Ukraine explicitly include *spatial, territorial, or urban planning* in their titles, or encompass significant spatial planning components within their curricula (Table 1).

Table 1. Educational programs related to spatial planning in higher educational institutions of Ukraine

№	Higher educational institutions of Ukraine	Specialty	Educational program
Bachelor's degree programme			
1.	Taras Shevchenko National University of Kyiv	Geography	Urban studies and urban planning
2.		Earth Sciences	Soil science, land management and territorial planning
3.	Ivan Franko National University of Lviv	Geography	Urban studies, spatial planning and regional development
4.	Vasyl Stefanyk Precarpathian National University	Geography	Geography and spatial organisation of territorial communities
5.	Ternopil Volodymyr Hnatiuk National Pedagogical University	Geography	Spatial analytics and territorial development of communities and regions
6.		Earth Sciences	Soil science, expert assessment of land and territorial planning
7.	Yuriy Fedkovych Chernivtsi National University	Geography	Regional development and spatial planning
Master's degree programme			
1.	Lesya Ukrainka Volyn National University	Geography	Regional development and spatial planning
2.	Donbas National Academy of Civil Engineering and Architecture.	Architecture and Urban Planning	Urban planning ('City Constructing')
3.	Taras Shevchenko National University of Kyiv	Geography	Urban Studies and regional development
4.	Kyiv National University of Construction and Architecture	Construction and Civil Engineering	Urban Studies and spatial planning
5.		Architecture and Urban Planning	Urban planning ('City Constructing')
6.	<i>Ivan Franko National University of Lviv</i>	Geography	Urban studies, urban planning and sustainable spatial development
7.	<i>Lviv Polytechnic National University</i>	Architecture and Urban Planning	Urban planning ('City Constructing')
8.	National University 'Yuriy Kondratyuk Poltava Polytechnic'	Architecture and Urban Planning	Urban planning ('City Constructing')
9.	Odesa State Academy of Civil Engineering and Architecture	Architecture and Urban Planning	Urban planning ('City Constructing')
10.	Poltava State Agrarian University	Geodesy and land management	Land management and territory planning
11.	Yuriy Fedkovych Chernivtsi National University	Geography	Regional development and spatial planning

Compiled on the basis of: (Education database, n.d.).

In recent years, several Ukrainian higher education institutions have established separate structural units with names that explicitly refer to 'spatial planning'. Examples include:

- The separate structural subdivision of the Educational and Scientific Institute of Spatial Planning and Prospective Technologies of Lviv Polytechnic National University.
- The Faculty of Urban Studies and Spatial Planning at Kyiv National University of Construction and Architecture.
- The Department of Architecture and Spatial Planning, Faculty of Surface Facilities and Airfields of the National Aviation University.
- The Department of Construction, Urban Studies and Spatial Planning, Faculty of Transport and Construction of Volodymyr Dahl East Ukrainian National University.

The Ukrainian spatial planning system places significant emphasis on the development of documentation, including general settlement and detailed plans. Under Ukrainian law, the right to perform such work is enjoyed by companies employing certified specialists and an architect holding a qualification certificate for urban planning documentation development. To obtain this certificate, individuals must hold a relevant specialist's or master's degree and complete qualification improvement courses approved by the ministry. Currently, these courses are offered at four Ukrainian universities: Kyiv National University of Construction and Architecture, O.M. Beketov National University of Urban Economy in Kharkiv, Prydniprovsk State Academy of Civil Engineering and Architecture, and Lviv Polytechnic National University.

Additionally, certified land engineers, whose qualification process is similar, are also required.

5.3. Content of educational programs related to spatial planning

Ukrainian educational programs related to spatial planning vary greatly with regard to their content. This is not surprising given that spatial planning as both a discipline and an independent profession is not clearly institutionally defined in Ukraine. This is why existing educational programmes in higher education institutions usually combine spatial planning with broader topics such as urban studies or regional development.

In addition, in educational programmes related to spatial planning for specialties such as *Geography*, *Earth Sciences*, or *Construction and Civil Engineering*, the largest proportion of educational components (in terms of academic hours) is allocated to developing competencies specific to these disciplines, in accordance with the approved standards of higher education rather than addressing notions of spatial planning.

A bachelor's degree program in Ukraine consists of 240 ECTS credits. Approximately 30 credits are allocated to subjects that seek to develop general competencies (such as foreign language, philosophy, Ukrainian for professional purposes, and so on, as well as basic military training – added in the 2023/2024 academic year. About 90 credits are allocated to subjects required by the educational standard for the specialty under which the given program was created. As a result, only about 60 credits – but sometimes even fewer in practice – remain for subjects directly related to the declared educational program. Finally, the remaining 60 credits are allocated to elective disciplines chosen by the student.

Within the *Geography* specialty (starting with the summer 2025 students intake, will be called *Geography and Regional Studies*), where educational programs related to spatial planning were introduced earliest, analysis of degree programme content shows significant variation depending on program title, the vision and competence of its authors, and the availability of qualified specialists. The subjects included in already accredited educational programs related to spatial planning at leading national universities (Kyiv, Lviv, Chernivtsi) differ considerably.

In Kyiv, where the educational program is titled *Urban Studies and Urban Planning*, the core curriculum includes courses such as 'Introduction to Urban Studies', 'World Geography: Cities', 'Methods of Urban Research', 'Introduction to Urban Planning', 'Urban Ecology', 'Urban Land Use Planning and Land Valuation', 'Urban Sociology', 'GIS for Urban Planning', 'Sustainable Development of Cities and Regions', 'Urban Theory and Practice' etc. Consistent with its title, the program is primarily one focused on urban studies (Program Kyiv, 2025).

In Lviv, the program is titled *Urban Studies, Spatial Planning, and Regional Development*, and urban aspects are also strongly present ('Foundations of Urban Studies', 'GIS in Urban Studies and Spatial Planning', 'Urban Planning', 'Urban Design'). However, there are also many courses specifically related to spatial planning ('Fundamentals of Spatial Planning', 'Spatial Planning in Ukraine', 'European System of Spatial Planning', 'Strategic Spatial Planning') (Program Lviv, 2024).

In Chernivtsi, the educational program *Regional Development and Spatial Planning* includes, in addition to subjects aligned with the program's title, such as 'Fundamentals of Territorial Planning' and 'Foundations of Regional Studies', there are courses that place a strong emphasis on cartography, GIS, ERS ('Earth Remote Sensing'), and information technologies. These include 'GIS and Mathematical Methods for Processing Geographic Data', 'Topography with Basics of Geodesy', 'Cartography and Geomatics with Fundamentals of ERS', and 'Processing Results of Regional Research.' (Program, Chernivtsi, 2023)

The general conclusion is that all of them are, in fact, combined educational programs. They include educational components of the basic specialty, spatial planning, and other elements designed to attract prospective students.

A detailed analysis of educational programmes in the specialty *Architecture and Urban Planning* from three leading institutions – Kyiv National University of Construction and Architecture, Lviv Polytechnic National University, and O.M. Beketov National University of Urban Economy in Kharkiv – reveals that bachelor's programmes provide only introductory knowledge of spatial planning. Core subjects close to spatial planning include courses such as 'Fundamentals of Urban Planning'. Some subjects in this field are offered only as a selective component. Spatial planning content increases significantly in master's programmes, and particularly within institutions that offer a specific 'Urban Planning' programme. This content is explained by the specifics of the Architecture and Urban Planning specialty mentioned above. It is regulated by the state.

5.4. The role of non-formal education

The Ukrainian state bodies that oversee the system of higher education actively encourage its integration with non-formal education in the belief that it will help universities strengthen their connections with practical professionals. The accreditation procedure for educational programs includes a specific requirement to incorporate non-formal education within the academic process. Failure to meet this requirement may negatively impact accreditation outcomes. Higher education institutions are required to develop internal regulations that enable them to:

- credit a student for a specific topic or even an entire academic course if the student submits a certificate (or other proof) of completing a relevant course, either online or in-person, within the non-formal education system, provided it is related to the educational program;
- recognize a certificate obtained by university instructors through non-formal education as a valid form of professional development (which is mandatory every five years), or as evidence of their qualification to teach assigned subjects.

In addition, university instructors actively contribute to the development of educational courses that are subsequently offered on specialized educational platforms. Non-formal education also serves as a valuable reference for university program developers as it helps them to evaluate the relevance of certain topics and themes.

Ukrainian non-formal education related to spatial planning began to develop during the implementation of the administrative and territorial reform which started in 2015 and was completed in 2021. Non-formal education most often involves measures such as educational programmes and courses for representatives of territorial communities, students, and the general public as well as e-courses on spatial planning, and webinars.

One of the first programmes to focus on this area was the *U-LEAD with Europe* programme – a collaboration between the Ukrainian government, the European Union, and its member states, including Germany, Poland,

Denmark, and Slovenia, which aimed to create a multi-level management system in Ukraine. In August 2018, with the support of the *U-LEAD with Europe*, the educational platform for architecture and urban studies *CANactions School* initiated the educational and practice-oriented programme *Integrated Spatial Planning for United Territorial Communities*. This programme focused on adapting European approaches to urban and regional development for the newly created territorial units of Ukraine – the united territorial communities (CANactions School, 2018).

In recent years, *U-LEAD with Europe* has organised a specialised training programme, *Steps for Specialists*, on the topic of *Spatial Planning and Natural Resource Management*. This programme, designed for territorial communities, was implemented four times between 2021 and 2024. It covered topics such as *Principles of Spatial Planning*, *Spatial Planning in Ukraine*, *Spatial Planning in Territorial Communities*, *Challenges of Spatial Planning*, and *Land and Other Natural Resources in Territorial Communities* (U-LEAD, n.d.).

U-LEAD with Europe also offers a free online course, *Spatial Planning in a Territorial Community* (in Ukrainian, with a certificate of completion), for anyone interested in learning about the principles of spatial planning given the recovery and development needs of communities. The course, launched in summer 2024, covers topics such as *Fundamentals of Spatial Planning*, *Typical Challenges of Spatial Planning and Ways to Solve Them*, *Urban Planning Documentation: Types, Elaboration Process, and Requirements*, and *Methods of Public Involvement in Planning* (U-LEAD, 2024).

Another educational programme, *Spatial Planning for Territorial Communities*, is part of the project *Strengthening the Capacity of Communities to Rebuild through Piloting Their Interaction with Universities*. It is run by the Alliance of Ukrainian Universities with support from the Renaissance International Fund, is based at the Institute of Postgraduate Education of Taras Shevchenko Kyiv National University and is intended for employees of local self-government bodies. Four such programmes have been conducted. Experts from the Alliance of Ukrainian Universities share knowledge on spatial planning, including data selection and analysis for understanding territories, strategic planning for territorial community development, territory revitalisation, participatory approaches to spatial planning, and public participation in budget processes with community representatives (Alliance, 2024).

Julie's Data, a private company that provides services to local communities, with the data available including spatial analysis of territories, educational courses, and database development for territory management, has been offering the paid course *Geoinformation Systems in Spatial Planning* for several years. This course is intended for students working in areas related to territory analysis, geospatial data visualisation, and spatial documentation creation. The aims of the course are to familiarise participants with geographic information system (GIS) capabilities, and to provide them with essential skills for working with GIS effectively. In 2023, Julie's Data also launched the crowdsourcing project *Open Spatial Planning Tool for Ukraine*, which seeks to create quality spatial planning tools using a geospatial database that can be accessed by anyone without extensive operational measures (Julie's Data, n.d.).

In general, spatial planning is widely represented in the system of non-formal education, as it is a relatively new and increasingly relevant field. As noted, initially, educational courses in spatial planning were mainly targeted at representatives of local communities. However, even these courses were and are valuable for instructors, as they typically result in the publication of educational videos, presentations, and spatial planning manuals adapted to the Ukrainian context; all of which can be used in teaching students.

Most recent educational courses are primarily targeted at students. The most popular topics include GIS in spatial planning, transport planning and sustainable mobility, climate and environmental aspects of spatial planning, accessibility, barrier-free environments, and inclusivity. Every year, several new courses of this type appear on major educational platforms; however, their overall number still seems to be insufficient.

5.5. Foreign experience in training specialists in spatial planning: guidelines for Ukraine

Among the developers of educational programs related to spatial planning, there is uncertainty about the future of their 'creations', as the role of spatial planning within the higher education system remains undefined,

and there are concerns about a potential major shift in the 'rules of the game' imposed by the state. The Ministry of Education and Science might decide to strictly align spatial planning programs with the specialty *Architecture and Urban Planning*, or it might propose the creation of a new specialty based on these programs. If this were to happen; then most of the existing educational programs would require radical revisions, and some might even need to be discontinued entirely. In this context, public discussion about the future of spatial planning in the national higher education system is essential, especially one that considers the experiences of other countries, and particularly EU member states, given Ukraine's aspirations for European integration.

Research indicates that Ukraine's spatial planning system shares many similarities with the systems that exist in Central and Eastern European states that are members of the European Union, and particularly those that formerly had communist regimes (Nowak, Lozynskyy, and Pantyley, 2021; Nowak et al., 2022). During the European integration process, these states implemented reforms including ones related to spatial planning in order to align their practices with common European standards. Despite these advancements, many challenges persist in these countries which are also relevant to Ukraine. In order to compare the training systems for specialists in spatial planning internationally, this paper chose three states Poland, Romania, and the Czech Republic. Two of these countries are immediate neighbours of Ukraine.

A notable feature of higher education in Poland is the inclusion of a separate specialty 'gospodarka przestrzenna'; introduced after the country's administrative and territorial reforms. On their websites, Polish higher education institutions most commonly translate this field into English as 'spatial management', although it is sometimes termed as 'spatial development' or 'land management'. *The Gospodarka przestrzenna* curriculum focuses primarily on spatial planning, territorial management, and various aspects of architecture, urban studies, geography, economics, and law related to spatial planning. Students in this field are usually trained in departments or faculties associated with architecture, urban studies, geography, or Earth sciences. Classic spatial planning ('planowanie przestrzenne') is developing as an academic discipline in Poland.

As of October 2024, educational programmes in *Gospodarka przestrzenna* were offered at the first educational level (engineer/licentiate) by 31 state higher education institutions, and at the second educational level (master's degree) by 26 institutions. This means that training is provided by nearly all leading universities in the country. In some cases, *Gospodarka przestrzenna* appears as part of the title of other fields, such as *Geografia i gospodarka przestrzenna* (Geography and Spatial Management), *Gospodarka przestrzenna i geozarządzanie* (Spatial Management and Geo-Management), or *Nieruchomości i gospodarka przestrzenna* (Real Estate and Spatial Management) (RAD-on, n.d.).

In Romania, a list of fields of knowledge, specialities, and competencies has been legally established. In the bachelor's degree programme, there are specialities such as *Urban Design and Planning* (*Proiectare și planiare urbană*), *Territorial Planning* (*Planificare teritorială*), and *Landscape Design and Planning* (*Amenajarea și planificarea peisajului*). *Territorial Planning* falls within the field of *Earth and Atmospheric Sciences*, under the speciality *Geography*. *Urban Design and Planning* and *Landscape Design and Planning* belong to the field of knowledge *Architecture and Urbanism*, under the speciality *Urbanism* (Hotărâre, n.d.).

As of October 2024, there were five universities in Romania offering a bachelor's programme in Territorial Planning: the University of Bucharest (in the capital, as well as at its branch in the city of Drobeta-Turnu Severin), Babeș-Bolyai University in Cluj-Napoca (including a programme in Hungarian), Alexandru Ioan Cuza University (in Iași and at its branch in Focșani), the University of Oradea, and the West University of Timișoara. Bachelor's programmes in *Urban Design and Planning* and *Landscape Design and Planning* were offered exclusively at the Ion Mincu University of Architecture and Urban Planning in Bucharest (Hotărâre, n.d.).

There is no legally established list of master's degree programmes in Romania. As a result, the names of specialities related to spatial planning vary significantly between universities (Table 3).

Table 2. Master's degree programs related to spatial planning in Romania

University name	Field of study	Educational program
Technical University of Civil Engineering of Bucharest	Geodetic engineering	Engineering geodetic spatial planning and GIS (Geographic Information System) for sustainable development
	Civil construction and installations	Urban and regional development
'Ion Mincu' University of Architecture and Urban Planning in Bucharest	Urbanism	Spatial planning and regional development, Urban design, Urban mobility, Landscape and territory
University of Bucharest	Geography	Territorial planning and management of urban and rural areas
	Law	Urban and spatial planning law
Babes-Bolyai University in Cluj-Napoca	Geography	Regional planning and development
University of Oradea	Geography	Territorial management and planning with the help of GIS
Ștefan cel Mare University of Suceava	Geography	GIS and territorial planning
West University of Timisoara	Geography	Planning and sustainable development of the territory
Polytechnic University of Timisoara	Architecture	Urbanism and territorial planning

Compiled on the basis of: (Hotărâre-master, n.d.).

In the Czech Republic, bachelor's and master's programmes in spatial planning (územní plánování, prostorové plánování) are offered at two universities: the Czech University of Life Sciences in Prague – bachelor's degree programme in *Territorial Planning* and master's degree programmes in *Spatial Planning and Landscape Planning*; and the University of West Bohemia in Pilsen – bachelor's degree programme in *Spatial Planning* (Registr, n.d.). Additionally, subjects on spatial planning are included in some programmes within specialities such as *Geography* and *Architecture and Urbanism* at other universities.

The experience of Central and Eastern states neighbouring Ukraine in the development of spatial planning related education leads to the conclusion that in Ukraine, the specialisation of academic institutions in the field of spatial planning is expected to evolve gradually, aligning with distinct subfields such as general spatial planning, urban planning, landscape planning, and regional planning. A noteworthy example can be observed in Poland, where a separate academic discipline – *gospodarka przestrzenna* – has been formally recognised within the national framework of higher education as an independent field of study, which involves acquiring knowledge of spatial planning, and territory management, in combination with various issues pertaining to architecture, urban studies, geography, economics, and law related to spatial planning. The realisation of a comparable interdisciplinary approach in Ukraine is, however, unlikely. It is also unlikely that a separate specialty in *Spatial Planning* will be introduced. This is unsurprising given that 'spatial planning' as a type of activity still does not exist in Ukrainian legislation. Spatial planning as an independent profession is not clearly institutionally defined and, as a result, the training of specialists in this field carries numerous risks.

The experience of Ukraine's European neighbours is also valuable in the context of developing educational partnerships between universities in different countries, and particularly so when establishing so-called dual degree programs. This is a relatively common practice in Ukraine's higher education system, and results in a student receiving two diplomas – one from a Ukrainian university and another from a partner institution in an EU member state. Developing such dual degree programs in the field of spatial planning appears especially feasible with universities in Romania or the Czech Republic, particularly at master's level.

6. Discussion and Conclusions

The research findings of this paper are significant for governmental bodies, other researchers, educators, and the general public. They provide an opportunity to identify and explain the development characteristics as well as the current state of education in the field of spatial planning in Ukraine – a nation that has undergone political transition since the late 1980s to early 1990s as it has continued to move from an authoritarian regime to a democracy. In such transitioning states, the development of spatial planning, including education in the field, has historically been very slow. Prior to the period of political transition, spatial planning in Ukraine had not emerged as a distinct professional activity or as an educational speciality that was separate from general urban planning. Contributing factors to the existence of this scenario include both the non-market nature of the economy, and the lack of democracy; both have hindered the development of public participation tools.

In Ukraine, where political transition remains incomplete, there is still no official recognition of the profession of 'spatial planning specialist'. Instead, there are 'urban planning documentation developers' (responsible for general plans, detailed territory plans) who are insufficiently trained in the economic, environmental, and social aspects of spatial planning. Additionally, there is no adequate training in regional planning. To address this gap higher education institutions, have, in recent years, introduced numerous programmes with titles such as *Spatial Planning*, *Territorial Planning*, and *Urban Planning*. However, these programmes present significant employment risks for graduates because the state still only officially recognises the profession of *urban planning documentation developer*.

At the same time, a system of informal education in spatial planning supported by international organisations has gained popularity in Ukraine. This is driven by state policies on European integration and administrative-territorial reforms, both of which require local government employees in communities to possess comprehensive knowledge of spatial planning. The state also encourages connections between universities and non-formal education as this improves the practical orientation of educational programs related to spatial planning.

Analysis of higher education in selected Central European countries such as Poland, Romania, the Czech Republic – nations that have already completed their political transitions and are democratic states – reveals that they have used diverse approaches to building robust systems of education in spatial planning, with varying degrees of success. Unlike Ukraine, these countries experienced shorter periods of authoritarian regimes and are members of the European Union; with the latter actively supporting the resolution of various educational challenges faced by its new member states. The experience of Ukraine's neighbouring EU member states in training spatial planning specialists provides guidance to Ukrainian higher education institutions and suggests promising directions for cooperation, particularly regarding dual degree programs.

The main challenges that modern Ukraine faces are: countering Russian military aggression, addressing its consequences, rebuilding destroyed cities and villages, and reforming society on its path to European Union membership. These challenges cannot be overcome without establishing an effective multi-level system of spatial planning, including comprehensive professional training in higher education institutions. To achieve this, Ukrainian legislation must explicitly define spatial planning as a distinct type of activity and institutionally establish spatial planning as an independent profession with clearly delineated competencies and areas of operation. The proactive efforts of higher education institutions in recent years to develop new educational programmes related to spatial planning demonstrate that Ukrainian researchers and educators are ready to ensure the training of such professionals.

References

- Alliance (2024) The fourth training program 'Spatial Planning for Territorial Communities' of the Alliance of Ukrainian Universities began in Kyiv. [Online]. Available from: <https://auu.com.ua/activities/u-kyievi-rozpochalasya-chetverta-navchalna-programa-prostorove-planuvannya-dlya-terytorialnyh-gromad/> [in Ukrainian]. Accessed [18/10/2024].
- CANactions School (2018) Integrated spatial planning for united territorial communities [Online] Available from: <https://hromada.canactions.com/> [in Ukrainian]. Accessed [18/10/2024].
- Decentralisation (n.d.) Ukrainian universities trained the first specialists in spatial planning in Ukraine. [Online] Available from: <https://decentralization.ua/news/16826> [in Ukrainian] Accessed [18/10/2024].
- education database (n.d.) The only state electronic database on education [Online] Available from: <https://info.edbo.gov.ua/> [in Ukrainian] Accessed [18/10/2024].
- Garat, Mykhailo (2019) Genesis of urban legislation in Ukraine. *Foreign trade: economics, finance, law*, 5, pp. 101–116. DOI: [https://doi.org/10.31617/zt.knute.2019\(106\)09](https://doi.org/10.31617/zt.knute.2019(106)09) [in Ukrainian].
- Habrel, Mykola, Kosmii, M. and Habrel Mykhailo (2022) Meritocentric model of spatial development in Ukraine: updating the general scheme of planning of the state territory. *Spatium*, 47, pp. 21–31. DOI: <https://doi.org/10.2298/SPAT211123008H>.
- Hotărâre (n.d.) Hotărâre pentru modificarea anexelor nr. 1–5 la Hotărârea Guvernului nr. 412/2024 privind aprobarea Nomenclatorului domeniilor și al specializărilor/ programelor de studii universitare și a structurii instituțiilor de învățământ superior pentru anul universitar 2024–2025*. Agenția Română de Asigurare a Calității în Învățământul Superior. [Online] Available from: https://www.aracis.ro/wp-content/uploads/2024/08/HG-1030-2024_LICENTA.pdf Accessed [18/10/2024].
- Hotărâre-master (n.d.) Hotărâre pentru modificarea anexelor nr. 1 și 2 la Hotărârea Guvernului nr. 413/2024 privind aprobarea domeniilor și programelor de studii universitare de master acreditate și a numărului maxim de studenți ce pot fi școlarizați în anul universitar 2024–2025*. Agenția Română de Asigurare a Calității în Învățământul Superior. [Online] Available from: <https://www.aracis.ro/wp-content/uploads/2024/08/HG-1031-2024-MASTERAT.pdf> Accessed [18/10/2024].
- Julie's Data (n.d.) Julie's Data: Geoinformation systems for territory management. [Online]. Available from: <https://juliesdata.com/> Accessed [18/10/2024].
- Law of Ukraine 'About General scheme of planning of the territory of Ukraine' (2002) Information of the Verkhovna Rada of Ukraine, 30: 204. Available from: <https://zakon.rada.gov.ua/laws/show/3059-14#Text> [in Ukrainian].
- Law of Ukraine 'About regulation of urban planning activity' (2011) Information of the Verkhovna Rada of Ukraine, 34: 343. Available from: <https://zakon.rada.gov.ua/laws/show/3038-17#Text> [in Ukrainian].
- List (2024) On Amendments to the List of Fields of Knowledge and Specialties for the Training of Applicants for Higher and Professional Higher Education. Resolution of the Cabinet of Ministers of Ukraine of August 30, 2024, No. 1021. [Online] Available from: <https://zakon.rada.gov.ua/laws/show/1021-2024-%D0%BF#Text> [in Ukrainian] [18/10/2024].
- Lozynskyy, Roman, Oksana Sklyarska, Halyna Labinska, and Oksana Stetsyuk. Spatial planning problems in Ukraine: do we need a complete renewal reform? Society and national interests. № 5 (5). 2024. pp. 567–583. [https://doi.org/10.52058/3041-1572-2024-5\(5\)-567-583](https://doi.org/10.52058/3041-1572-2024-5(5)-567-583) [in Ukrainian].
- Maruniak, Eugenia, Palekha, Yurii and Kryshchop, Tetiana (2023) Planning of Spatial Development in Times of War and Reconstruction: a Vision for Ukraine. *Ukrainian Geographical Journal*, 4, 13–22. DOI: <https://doi.org/10.15407/ugz2022.04.013>
- Nowak, Maciej, Roman Lozynskyy and Viktoriya Pantyley (2021) Local spatial policy in Ukraine and Poland. *Studia z Polityki Publicznej / Public Policy Studies*, Warsaw School of Economics, 8(3), November: pp. 1–17. <https://doi.org/10.33119/kszp/2021.3.1>
- Nowak, Maciej, Viktoriya Pantyley, Małgorzata Blaszkę, Liudmila Fakeyeva, Roman Lozynskyy, and Alexandru-Ionut Petrisor Spatial Planning at the National Level: Comparison of (2023) Legal and Strategic Instruments in a Case Study of Belarus, Ukraine, and Poland. *Land*, 12, 1364. <https://doi.org/10.3390/land12071364>
- Nowak, Maciej, Alexandru-Ionut Petrisor, Andrei Mitrea, Krisztina Filepné Kovács, Gunta Lukstina, Evelin Jürgenson, Zuzana Ladzińska, Velislava Simeonova, Roman Lozynskyy, Vit Rezac, and et al. (2022) The Role of Spatial Plans Adopted at the Local Level in the Spatial Planning Systems of Central and Eastern European Countries. *Land*, 11, 1599. <https://doi.org/10.3390/land11091599>
- Program, Kyiv (2025) Educational and professional program 'Urban Studies and Urban Planning'. Taras Shevchenko National University of Kyiv. [Online] Available from: https://geo.knu.ua/wp-content/uploads/2025/02/ump_2025_bakalavr_projekt-opysu.pdf [in Ukrainian] [21/05/2025].
- Program, Lviv (2024) Educational and professional program 'Urban Studies, Spatial Planning and Regional Development'. Ivan Franko National University of Lviv. [Online] Available from: https://geography.lnu.edu.ua/wp-content/uploads/2025/02/OPP_106_bachelor_Urbanistyka_prostorove_planuvannia_i_rehionalnyi_rozvytok_20 [in Ukrainian] [21/05/2025].
- Program, Chernivtsi (2023) Educational and professional program 'Regional Development and Spatial Planning'. Yuriy Fedkovich Chernivtsi National Universit. [Online] Available from: https://geo.chnu.edu.ua/media/x0nbxfn2/opp_rr_bak_23.pdf [in Ukrainian] [21/05/2025].

Radzihovska, Larysa, Hulivata, Inna, Husak, Liudmyla, Nikolina, Iryna and Ivashchuk, Oleh (2023) Peculiarities of evaluating the results of implementation of regional development programs in Ukraine. *Scientific Bulletin of National Mining University*, 2, 171–176. DOI: <https://doi.org/10.33271/nvngu/2023-2/171>

Registr (n.d.) Registr vysokých škol a uskutečňovaných studijních programů. Ministerstvo školství, mládeže a tělovýchovy České republiky. [Online] Available from: <https://regvssp.msmt.cz/registrvssp/csplist.aspx> Accessed [18/10/2024]

Studia (n.d.) Studia prowadzone na określonym kierunku. RAD-on. Ministerstwo Nauki i Szkolnictwa Wyższego. [Online] Available from: <https://radon.nauka.gov.pl/dane/studia-prowadzone-na-okreslonym-kierunku> Accessed [18/10/2024]

U-LEAD (2024) U-LEAD launches the online course 'Spatial planning in a territorial community' Available from: <https://u-lead.org.ua/news/470> [in Ukrainian] [18/10/2024].

U-LEAD (n.d.) U-LEAD educates communities about spatial planning. [Online] Available from: <https://www.ukrinform.ua/rubric-regions/3587441-ulead-navcae-gromadi-osoblivostam-prostorovogo-planuvanna.html> [in Ukrainian] [18/10/2024].