

Study programme

Faculty:	Faculty of Civil Engineering, Architecture and Environmental Engineering
Major:	Urban Planning
Level of study:	second-cycle programme (magister inżynier)
Form of study:	full-time studies
Academic year:	2026/27

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Basic information

Name of the field of study:	Urban Planning
Level of study:	second-cycle programme (magister inżynier)
Study profile:	general academic
Form of studies:	full-time studies
Duration of studies (number of semesters):	3
The number of ECTS points required to complete studies:	90
Total number of hours of classes:	1125
The number of ECTS points a student obtains as part of classes conducted with the direct participation of academic teachers or other persons conducting classes:	45
Professional title awarded to graduates:	magister inżynier
ISCED code:	0731
Language of study:	polish

Assigning the course to the disciplines to which the learning outcomes relate

Discipline	Percentage share
Civil engineering and transport	51%
Architecture and Urban Planning	49%

Learning outcomes (in relation to the PQF)

No.	Learning outcome code	Learning Outcome Content	Reference to the universal characteristics of the first level of PRK	Reference to the second-level characteristics of the PRK, taking into account the second-level characteristics enabling the acquisition of engineering competences
1	2PLP1	Possesses in-depth knowledge of contemporary theories, development trends and complex processes shaping space, including planning, urban and environmental concepts. Understands thoroughly their interconnections, dynamics and consequences for spatial policies at various levels of governance.	P7U_W, P7U_U	P7S_WG, P7S_UW_inż
2	2PLP2	Understands multidimensional dilemmas of spatial development, including the economic, environmental, technological, legal, and social factors that influence planning decisions. Knows the principles of intellectual property and copyright protection, especially in the context of creating analyses and design studies.	P7U_W	P7S_WK, P7S_WG_inż, P7S_WK_inż
3	2PLP3	Identifies, diagnoses, and solves complex planning problems by applying advanced research methods, digital tools (GIS, CAD, spatial modeling, simulation analysis), and creative data interpretation. Critically analyzes and synthesizes spatial information for advanced decision-making processes.	P7U_U	P7S_UW, P7S_UW_inż
4	2PLP4	Develops concepts and projects for shaping both the natural and cultural environments, taking into account the principles of sustainable development, universal design, revitalization, and the design of public spaces. Applies analytical and modeling methods to generate, evaluate, and implement design solutions.	P7U_U	P7S_UW, P7S_UW_inż
5	2PLP5	Communicates professionally with diverse stakeholder groups, including decision-makers, residents, industry experts, and international partners. Presents analytical results and design concepts in Polish and in a foreign language at a B2+ level, using specialized planning terminology. Formulates arguments, evaluates diverse positions, and effectively participates in public debate.	P7U_U	P7S_UK
6	2PLP6	Works collaboratively in a variety of roles, including leading a project or research process. Effectively coordinates teamwork by setting goals, planning activities, moderating, and critically assessing ongoing tasks.	P7U_U	P7S_UO
7	2PLP7	Critically evaluates and appropriately selects sources of spatial information, including statistical, cartographic, environmental, and social data. Demonstrates the ability to create, structure, and utilize spatial databases. Independently plans the development of own competencies and is able to support others in such a work.	P7U_U	P7S_UU
8	2PLP8	Being aware of the complexity and limitations of one's own expertise, is able to use external expertise, respects diversity of views and understands the importance of scientific foundations in solving spatial problems.	P7U_K	P7S_KK

No.	Learning outcome code	Learning Outcome Content	Reference to the universal characteristics of the first level of PRK	Reference to the second-level characteristics of the PRK, taking into account the second-level characteristics enabling the acquisition of engineering competences
9	2PLP9	Demonstrates a willingness to undertake responsible planning activities in a local and global context, taking into account environmental, social, cultural, and economic impacts. Complies with the ethical principles of the planning profession, engages in initiatives for the public good, demonstrates an entrepreneurial attitude, and applies the latest technologies in implementing spatial solutions.	P7U_K, P7U_W	P7S_KO, P7S_KR, P7S_WK_inž

Matrix of course modules in relation to learning outcomes and curriculum content

No.	Course name	Program content	2PLP1	2PLP2	2PLP3	2PLP4	2PLP5	2PLP6	2PLP7	2PLP8	2PLP9
1	Property Valuation	Market economy; types of real estate; professionals in the real estate market; investing in the real estate market; property value - market value, replacement value, fair value, value for the current use; enterprise value and goodwill; acquisition of real estate data from available sources; real estate market analysis; analysis of property price growth over time; purposes of property valuation; property description; approaches, techniques, and methods of real estate valuation; valuation report.		x	x				x		
2	Spatial Information Systems	The use of spatial information systems (GIS) for analysing complex phenomena and supporting planning decisions. Revision of key GIS concepts and spatial data infrastructure (data types and sources, metadata, discovery/access/analysis and visualisation services), data standardisation, and data quality assessment (geometric and attribute errors and inconsistencies, methods for detection and correction, and approaches to evaluating result reliability).			x				x	x	
3	Sustainable Transportation System	Presentation of basic issues in the field of sustainable transport in spatial planning and skills in using urban studies, including local plans	x			x					
4	Foreign Language for Specialist Purposes	Foreign language course at B2+ level; developing the ability to communicate effectively in speech and writing, using a specialist terminology from the field of study					x				
5	Nature-Based Solutions	Principles of Sustainable Stormwater Management in Urban Areas. Facilities and Solutions Used in Blue-Green Infrastructure Planning	x		x	x					
6	Universal Design	Issues related to universal design and CPTED methodology, as well as the challenges of investment planning in compliance with accessibility standards for people with special needs, and the design of safe spaces.	x	x		x					x
7	Public Spaces	A multidimensional analysis of the role of public spaces in the urban structure, integrating sociological aspects and environmental psychology with the principles of universal design. Workshop design of transformations of selected urban interiors, aiming at their social activation and redefinition of functional-aesthetic quality.	x		x	x			x		
8	Adaptation to Climate Change	Adaptation and mitigation actions as elements of the process aimed at reducing the detrimental impact of weather phenomena in cities (heatwaves, droughts, floods). Assessing the effectiveness of selected adaptation strategies in modifying the microclimate and human thermal comfort.	x		x		x				
9	Urban Planning Workshop	Diagnosis of the potential of the site based on analysis of selected cases of area revitalization, urban programs, and commercial investments. Case studies through field trips and meetings with project authors. Assessment of the effectiveness of implemented changes.			x		x			x	x
10	Urban Area Revitalization	An interdisciplinary project combining issues of architecture, urban planning, spatial planning, social sciences and environmental sciences. The valorisation of local conditions, including issues of spatial degradation, place identity and the needs of local communities, leading to the development of comprehensive and informed design solutions.	x		x	x		x			

No.	Course name	Program content	2PLP1	2PLP2	2PLP3	2PLP4	2PLP5	2PLP6	2PLP7	2PLP8	2PLP9
11	Digital Tools for City Management	Familiarization with the functions of computer-aided tools in the field of Spatial Information Systems (SIS) used in effective city management (desktop and mobile applications, online platforms). Building thematic databases and conducting spatial analyses of changes occurring in cities (economic, social, and environmental). Presenting the results of thematic studies in a publicly accessible form in a mobile application (e.g., ArcGIS StoryMaps).			x				x		
12	Landscape Architecture	Analysis and valuation of urban and natural landscape. Methods of landscape shaping and protection. Principles of preparing landscape studies	x			x		x	x		
13	Urban Social Problems	Analysis of specific problem situations occurring in cities (poverty, exclusion, segregation, etc.). Analytical material is supplemented or, in some cases, constituted by documentary films and meetings with people with disabilities, street workers, and others.	x			x					x
14	Urban Regeneration of Metropolitan Structure	An advanced study of the regeneration processes of a selected part of a large city. The task is carried out in a degraded urban fabric, on a scale that allows for the construction of a system of public spaces. The design study is supplemented by a range of operational activities necessary to improve the quality of the designed space and its social use.			x	x	x				x
15	Urban Regeneration of Small Town	Advanced study of the regeneration processes of small towns, integrating spatial planning with strategies of resilience, climate adaptation and the concept of 'smart shrinking'. Developing multidimensional regeneration models that use endogenous potential and blue-green infrastructure to restore socio-ecosystem balance.			x	x	x				x
16	Internship	Execution of tasks in an industrial or research environment using the knowledge and skills achieved during studies.						x		x	x
17	Quality of the Urban Environment	Presentation of issues related to the quality of the urban environment. Analysis of problems regarding urban environmental quality depending on the size of the settlement unit, type of development, and terrain topography. Measures enabling the improvement of urban air quality. The impact of atmospheric air pollution on indoor air quality.	x	x	x						
18	Entrepreneurship and Innovations in the Digital Era	Creating modern business models in the digital economy. Methods of implementing innovations (e.g. Lean Startup, Design Thinking). Strategies of online marketing, e-commerce, financing start-ups, and risk management.		x					x		x
19	Diploma Seminar	Individual development and solution of a research problem carried out as part of a master's thesis covering issues in the field of mechatronics and related disciplines. Preparation of a written report presenting the process of solving the research problem and presentation of the results obtained. Detailed content implemented		x	x		x	x			x
20	Final Project	Individual development and solution of a research problem carried out as part of a master's thesis covering issues in the field of urban planning and related disciplines. Preparation of a written report presenting the process of solving the research problem and presentation of the results obtained.		x	x		x				x

ECTS - subjects

No.	Course name	ECTS	Subjects in the field of humanities and social sciences	Elective subjects	Profile items	Classes in a foreign language
1	Property Valuation	4				
2	Spatial Information Systems	4			4	
3	Sustainable Transportation System	4			4	
4	Foreign Language for Specialist Purposes	2		2		
5	Nature-Based Solutions	5			5	
6	Universal Design	5			5	
7	Public Spaces	6			6	
8	Adaptation to Climate Change	4			4	
9	Urban Planning Workshop	4				
10	Urban Area Revitalization	4			4	
11	Digital Tools for City Management	4			4	
12	Landscape Architecture	5			5	
13	Urban Social Problems	4	4		4	4
14	Urban Regeneration of Metropolitan Structure	5		5	5	
15	Urban Regeneration of Small Town	5		5	5	
16	Internship	4				
17	Quality of the Urban Environment	2			2	
18	Entrepreneurship and Innovations in the Digital Era	2	2			
19	Diploma Seminar	2				
20	Final Project	20		20		

ECTS indicators

Name	Value
The total number of ECTS credits that a student must obtain through elective courses (amounting to no less than 30% of the total ECTS credits required to obtain the qualification corresponding to the given level of study)	27/90 (30%)
The total number of ECTS credits to be earned by a student through courses in the fields of humanities or social sciences	6
The total number of ECTS credits that a student must obtain from courses related to research conducted at the university, amounting to more than 50% of the total ECTS credits required to graduate from a given level of study	52/90 (57.78%)

Methods of verifying and assessing learning outcomes

The verification of achieved learning outcomes requires the use of diverse assessment methods appropriate to the categories of knowledge, skills, and social competencies to which these outcomes pertain. The selection of suitable tools also depends on the specific nature of the subject and the format of the classes and is described in detail in the course syllabi. The achievement of the required learning outcomes is assessed through:

1. Written assignments (exams, quizzes, reports, essays, projects, posters, thesis, etc.);
2. Oral assessments (oral exams, public speaking, e.g., delivering a paper, presentation, etc.);
3. Practical and/or project-based tasks (both individual and group work);
4. Observation and evaluation of students' participation and activity during classes;
5. Self-assessment and peer evaluation (especially in the case of group projects);
6. Competency exams and final diploma examinations.

Verification can be formative (partial, conducted multiple times during the course) and/or summative (final grade assessment). The final verification result is given according to the currently applicable grading scale.

The course coordinator or instructor is required to present the course syllabus during the first class and to clearly define and formally communicate the assessment methods and conditions for verifying learning outcomes.

Professional internships

Duration: 4 weeks

ECTS credits: 4

Internships are carried out in accordance with the study program in a format adapted to the profile and specifics of the field of study, following the regulations set by the faculty and the university.

Characteristics of the course

Graduate profile

Graduates have the ability to perform spatial analyses for economic and planning purposes using IT tools. They can apply the principles of spatial planning and sustainable development in practical planning. They acquire engineering knowledge that enables them to solve fundamental problems in construction and the operation of urban infrastructure, including heating, gas, water, and transport networks.

They can create urban development projects as well as planning and analysis studies covering various scales, techniques, and problem areas. You will be able to carry out inventories and urban analyses, as well as develop concepts for the development and construction of single-family and multi-family housing areas, concepts for the urban regeneration of run-down areas, planning documents, in particular local land use plans, and specialized technical analyses of spatial transformation.

They have the opportunity to work in planning and design offices, regional and national administration spatial planning departments, local government units (municipal, county, provincial) in the implementation of public tasks, supporting decision-making in the field of spatial development, development agencies, real estate agencies, consulting and advisory companies, and other business-related companies.

Graduates have general competencies such as the ability to work in an interdisciplinary team, the ability to communicate in a foreign language, and the ability to identify, formulate, and solve problems.

The relationship between the field of study and the university's strategy

In accordance with Resolution No. 39/2024 of the Senate of the Lodz University of Technology of June 26, 2024, on the adoption of the Strategy of the Lodz University of Technology for 2025-2030, and in accordance with the Strategy of the Faculty of Civil Engineering, Architecture, and Environmental Engineering 2025 -2030 adopted on October 21, 2025, the mission of the university's development is to build a sustainable research university with a strong academic community, ensuring freedom of research and discussion, as well as modern education, developing local and global cooperation and innovation for the benefit of society, the economy, and the world. In line with the university's mission, the Faculty aims to educate highly qualified specialists in spatial planning, capable of taking on the challenges of the 21st century, especially in the field of new engineering techniques and technologies, thus achieving, among other things, the University's goals related to its impact on the social environment. The skills acquired at the Faculty will enable them to achieve professional success, and their knowledge, social competences, and lifelong learning skills will give them an advantage in competing on the labor market.

Acting in accordance with its stated goal, the Faculty of Civil Engineering, Architecture, and Environmental Engineering at the Technical University of Łódź has developed an educational concept for the Spatial Planning program, with a focus on high-quality education and a modern curriculum. It aims to enable graduates to introduce advanced techniques and technologies into engineering practice and assumes their innovative use. One of the elements of these aspirations is to increase the content of the curriculum related to sustainable development, which is an important goal of the University's strategy. The Faculty also strives to actively cooperate with external and internal stakeholders in order to respond to both market needs and student needs. These activities are closely linked to the University's goals regarding student education and internationalization. The Faculty consistently and promptly implements all procedures planned at the rector's level for modern and efficient management. With this in mind, the Faculty's strategy is to conduct innovative research in cooperation with domestic and foreign universities and research institutions, as well as to cooperate with industry.

The Faculty also considers the adaptation of education to the needs of the regional labor market to be a strategic goal. This is evidenced by constant contact with internal and external stakeholders (entrepreneurs, government officials, social organizations, associations, and professional associations), with whom the Faculty consults on its plans.

Educational objectives and employment and continuing education opportunities

The aim of education in the field of Spatial Planning is to prepare graduates (engineers) for independent, conceptual work in the field of spatial management and to equip them with the knowledge, skills, and competences that enable them to adapt flexibly to the changing needs and requirements of the labor market. In this context, the main tasks of education should be considered to be preparing students to:

- skillfully identifying relationships between the existing state of spatial development and new planning needs, as well as solving

- basic problems in the fields of civil engineering, surveying, and transportation,
- shaping space for diverse needs on various scales, with a sense of responsibility for spatial order and harmony of the built environment as essential elements defining the life of society, while respecting the principles of sustainable development,
- performing spatial planning tasks related to local and regional development processes, using knowledge in the field of civil engineering, architecture and urban planning,
- establishing cooperation with specialists from other fields, as well as undertaking professional activities on the domestic and international labor market.

The educational process includes courses on issues related to construction, urban engineering, general and strategic planning, urban design, shaping urban and regional development policies, and shaping spatial structures and rehabilitating degraded areas.

Graduates who obtain the professional title of engineer in the field of Spatial Planning have knowledge and skills in the following areas:

- spatial planning and urban design at the local and regional level, taking into account the basics of construction, environmental engineering, architectural issues, and the fundamentals of natural, social, and economic sciences,
- history and theory of urban planning, spatial planning, and selected technical and humanities sciences,
- the history and theory of urban planning, spatial planning, and selected technical and humanities sciences, the design of technical infrastructure for cities, including heating, gas, water supply, sewage, and transport networks,
- solving spatial, functional, utility, and engineering problems to a degree that ensures the safety and comfort of users, including people with disabilities,
- gathering information and conducting analytical and research processes using traditional and IT (technologically advanced) techniques,
- energy-efficient construction and energy certification of buildings.

As a result of their education, graduates acquire analytical, creative, methodological, and negotiation skills. They are able to apply their acquired knowledge in practice. They are prepared to make assessments, formulate judgments, and communicate with their surroundings. Such a broad spectrum of knowledge enables them to actively participate in subsequent stages of urban and municipal planning and development. Such a broad spectrum of knowledge enables them to actively participate in the subsequent stages of planning and development of cities and municipalities. During their education, students have the opportunity to complete part of their studies at foreign universities as part of the "Erasmus +" program, which increases their ability to actively compete in the labor market in Poland and Europe.

Description of the process and outcome of consultations on the proposed study program with the socio-economic environment

The Spatial Planning program has been consulted in previous years in terms of specialized and professional education. The changes introduced to the program mainly concern internal regulations or updates to legal conditions and do not affect the substantive scope, so it can be concluded that the opinions resulting from previous consultations remain valid in relation to the proposed program.

The following entities submitted their opinions as part of the consultation process:

- Urban Planning and Architecture Department, Lodz;
- City Engineer's Office;
- Office of the City Conservator of Monuments;
- Revitalization Office;
- Municipal Urban Planning Studio;
- City Strategy Office;
- Roads and Transport Authority;
- Municipal Investment Board;
- Society of Polish Town Planners, Łódź Branch.

Educational programs are also reviewed by internal stakeholders during the definition process: students, doctoral students, and faculty members. A student representative actively participates in the work of the Program Council. Each year, the TUL Career Office provides the results of a survey on the professional careers of graduates.

Students and doctoral students submit their comments on both the study programs and the quality of teaching by academic staff through a system of evaluation surveys or during classroom observations. The main conclusions from these surveys are analyzed at meetings of the Education Quality Committee and forwarded to the Program Councils for their opinion.

The information gathered in this way, as well as the knowledge and experience gained, have a significant impact on the shape of the study program and the classes conducted.

Description of competencies expected from a candidate applying for admission to studies

In accordance with the recruitment resolution in force for a given academic year.

The unit organizing education

Faculty of Civil Engineering, Architecture and Environmental Engineering

Education program

Semester 1

Course	Number of hours	ECTS points	Form of verification	Obligatory
Property Valuation	Tutorials: 15 Project work: 30 Lecture: 15	4	Graded assignment	Obligatory
Spatial Information Systems	Laboratory classes: 45	4	Graded assignment	Obligatory
Sustainable Transportation System	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Obligatory
Foreign Language for Specialist Purposes	Tutorials: 45	2	Graded assignment	Obligatory subjects to choose from
Nature-Based Solutions	Tutorials: 15 Project work: 30 Lecture: 15	5	Exam	Obligatory
Universal Design	Project work: 45 Lecture: 15	5	Graded assignment	Obligatory
Public Spaces	Project work: 60 Lecture: 15	6	Exam	Obligatory
Sum	390	30		

Semester 2

Course	Number of hours	ECTS points	Form of verification	Obligatory
Adaptation to Climate Change	Laboratory classes: 30 Lecture: 15	4	Graded assignment	Obligatory
Urban Planning Workshop	Laboratory classes: 60	4	Graded assignment	Obligatory

Course	Number of hours	ECTS points	Form of verification	Obligatory
Urban Area Revitalization	Seminar: 15 Project work: 30	4	Exam	Obligatory
Digital Tools for City Management	Laboratory classes: 45	4	Graded assignment	Obligatory
Landscape Architecture	Project work: 45 Lecture: 15	5	Graded assignment	Obligatory
Urban Social Problems	Tutorials: 30 Lecture: 15	4	Graded assignment	Obligatory
Elective Course 1		5	Graded assignment	Obligatory group
The student chooses 1 subject.				
Urban Regeneration of Metropolitan Structure	Project work: 60	5	Graded assignment	Optional
Urban Regeneration of Small Town	Project work: 60	5	Graded assignment	Optional
Sum	360	30		

Semester 3

Course	Number of hours	ECTS points	Form of verification	Obligatory
Internship	Internship: 0	4	Pass	Obligatory
Quality of the Urban Environment	Laboratory classes: 20 Lecture: 15	2	Graded assignment	Obligatory
Entrepreneurship and Innovations in the Digital Era	Seminar: 15 Lecture: 15	2	Graded assignment	Obligatory
Diploma Seminar	Seminar: 30	2	Graded assignment + exam	Obligatory
Final Project	Diploma Thesis: 0	20	Pass	Obligatory subjects to choose from
Sum	95	30		