Wrocław University of Science and Technology

Study programme

Organizational unit:	Faculty of Architecture
Field of study:	Architecture
Level of study:	second degree 3 semesters
Form of study:	full-time studies
Education cycle:	2025/2026

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Field of study characteristics

Basic information

Organizational unit:	Faculty of Architecture
Field of study:	Architecture
Study level:	second degree 3 semesters
Study form:	full-time studies
Education profile:	general academic profile
Language of study:	English
Valid from the education cycle:	2025/2026
Number of semesters:	3
Number of semesters in the English version of the programme:	3
Total number of hours of classes:	Directional: 370 Architecture and Urban Planning: 660
Total number of ECTS points required to complete a given level of study:	90
Professional title awarded to graduates:	Master of Science in Architecture

Fields of science and scientific disciplines

Scientific disciplines to which the field of study is assigned:

Field engineering and technical sciences

Assigning the major to the fields and disciplines to which the learning outcomes relate:

Discipline	Percentage
Architecture and urban planning	100%

Main discipline: Architecture and urban planning

Description of the field, profile of the graduate and possibilities of continuing studies

3-semester studies. Total number of ECTS points required to complete studies at master's level: 90. Total number of hours 1030. Entry requirements: architectural engineering diploma, diploma grade, portfolio grade. Professional title awarded after graduation: Master of Science in Architecture.

The graduate should have the following competences:

A) knowledge in the field of:

- architectural design of objects with complex functions in a complex spatial context, principles of universal design, interdisciplinary nature of architectural design,
- urban design of various scales and levels of complexity, in particular development complexes, taking into account local conditions and connections,
- basic conservation methods and techniques,
- spatial planning and spatial policy tools, also in the context of sustainable development,
- advanced theory of architecture and urban planning,

- history of art, architecture and urban planning with particular emphasis on contemporary architecture,
- philosophy with particular emphasis on aesthetics,
- protection of architectural and urban heritage, as well as cultural landscape,
- modern construction systems,
- economic, legal and social conditions, as well as technical infrastructure, communication and the natural environment, necessary to understand the social, economic, ecological, historical, cultural and legal conditions of architects' activities,
- technical and construction regulations, ethical principles of the architect's profession, basic concepts in the field of intellectual property protection,
- ways of communicating the ideas of architectural, urban and planning projects,
- theoretical foundations of conducting scientific research, as well as the interpretation of scientific studies in the discipline of architecture and urban planning, scientific research methodology, including the preparation of scientific studies.

B) skills in the following areas:

- creating complex architectural designs, creating and transforming space in such a way as to give it new values taking into account the neighborhood context, technical and non-technical aspects,
- designing complex urban complexes,
- preparing planning studies,
- implementation of the principles and guidelines of universal design in architecture, urban planning and spatial planning,
- preparation of a conservation design concept for the transformation of architectural and urban structures with cultural values, taking into account the protection of these values,
- critical analysis of conditions, valorization of the state of development and spatial development, formulating conclusions for architectural design, urban design and spatial planning,
- recognizing the non-technical effects of the architect's design activities, including its impact on the cultural and natural environment,
- creative thinking and action taking into account the complex and multi-aspect conditions of design activities,
- integration of information obtained from various sources, formulating and justifying opinions based on the available scientific achievements of the discipline and demonstrating their connection with the design process,
- communicating using various techniques and tools in a professional environment, preparing a presentation devoted to the implementation of a project task,
- application of ethical norms and rules as well as legal provisions in the field of architectural design, urban design and spatial planning,
- using advanced computer simulations, analyzes and information technologies supporting architectural and urban design,
- obtaining information from literature, databases and other sources in order to use it in the design process or scientific activity,
- using concepts from the field of aesthetics, perceiving the broader, philosophical context of issues related to architectural and urban design.

The graduate's profile is also shaped by the social competences acquired during studies, in particular:

- ability to work in a team, act as a coordinator of activities in the design process, take responsibility for joint tasks and projects,
- ability to speak publicly and discuss professional issues, readiness to formulate and provide the public with information regarding the achievements of architecture and urban planning,
- preparation for proper determination of priorities for the implementation of the project task,
- awareness of the importance of the cultural heritage of the region, country and Europe, attentiveness to the requirements of the natural environment.

The graduate should be able to speak one modern foreign language at the B2+ proficiency level of the Common European Framework of Reference for Languages of the Council of Europe. The study program meets the requirements set out in the "Standards of education preparing for the profession of architect" (Journal of Laws of July 22, 2019, item 1359). The graduate is prepared to take up professional activity as a designer in architectural and urban planning studios and as an employee in contracting and construction supervision in the field of urban design and the design of architectural facilities and their surroundings, as well as in investment and development offices and public administration units. The graduate is also prepared to study at the Doctoral School and start scientific and research work.

Currentness of the study programme

Concept and goals of education

While implementing the curriculum, students attend classes organized following the Regulations of higher studies at the Wrocław University of Science and Technology. Classes are conducted in the forms specified in the Study Regulations, using both traditional teaching methods and tools as well as the opportunities offered by the university e-learning platform. Outside of class hours, instructors are available to students during consultation hours designated and announced on the Faculty's website. An important element of

learning is the student's own work, which involves preparing for classes (based on materials provided by the instructors and recommended literature), studying literature, preparing reports, and preparing for tests and exams.

Passing subjects (this subject) means obtaining a given learning result. Items are scored according to the rules defined on the item cards. Failure by a student to achieve the learning outcomes assigned to a course results in failure to pass the course and the need to repeat it.

Information regarding the inclusion of socio-economic needs in the study programme and the compliance of the major learning outcomes with these needs

The graduate is prepared to take up professional activity as a designer in architectural and urban planning studios and as an employee in contracting and construction supervision in the field of urban design and the design of architectural facilities and their surroundings, as well as in investment and development offices and public administration units. The graduate is also prepared to study at the Doctoral School and start scientific and research work. The study program takes into account in a balanced way the theoretical and practical aspects of the architectural profession, with emphasis on the problem of creativity and design independence of graduates. The leading courses in the education of students in the field of Architecture are architectural, conservation and urban design.

Design is supplemented with specialized courses related to modern construction and theoretical systems (theory of architecture and urban planning, heritage protection, elements of philosophy, aesthetics) and computer systems (various types of modeling: BiM, 3D). The learning outcomes include preparing graduates to: work in architectural and urban design offices, public administration units related to architecture and urban planning. Due to the broad, interdisciplinary profile of education, based on theory, the graduate can also take up work related to conducting scientific research and continue education within the Doctoral School.

The graduate has advanced knowledge in the field of architectural, urban and conservation design, theory of architecture and urban planning, as well as in the field of modern construction systems and integration of design processes. Is able to use the knowledge and experience gained during studies to design architectural and urban design in an interdisciplinary context and the standard of universal design.

In addition, the graduate has skills related to IT techniques, necessary in the work of both a designer and a manager planning the investment process. Is able to work in a team, is aware of the social role of the architectural profession and the humanistic aspects of engineering activities.

The graduate knows a foreign language at B2+ level and is aware of the need for self-education and professional development.

Other important factors determining the validity of the study programme

Academic teachers involved in the education process are scientifically active, which influences the validity of the information provided. The programme is consulted with the Social and the Student Council. The validity of the study program is guaranteed by:

- Accreditation of the Polish Accreditation Committee,
- Systematic updating of the content taking into account the latest research results in the discipline of architecture and urban planning,
- Adapting the topics of practical classes to current trends,
- Providing students with access to modern laboratories, equipment and the latest software,
- Emphasis on students acquiring soft skills, such as the ability to work in a group, present their own results, conduct debates and participate in discussions, which is in line with employers' expectations,
- Education and development of teaching staff.

The connection of the programme with the University's mission and its development strategy

The 2nd level of study program in the field of Architecture implements the basic goal of Wrocław University of Science and Technology, which is high-level education.

The study program implemented at the Faculty of Architecture is related to the University's mission in the following areas:

Creativity:

- interdisciplinary profile - combining sciences in the field of technology, art, humanities, the program is intended for students

who have the basics of theoretical knowledge in the discipline of architecture and urban planning, as well as basic design skills,
- flexibility and modernity of the specialized model of education, the program offers students a wide range of optional courses, which allows them to pursue their individual creative interests;

Professionalism and hard skills:

- combining creativity with technical knowledge and practical skills desired on the labor market (e.g. in the field of BIM),
- access to modern laboratories and computer labs creates opportunities for development and specialization; the university provides students with network access to the necessary software;

Partnership cooperation with the different organizations:

- cooperation with partners on research topics, summer schools and design workshops,
- the educational profile is conducive to the selection of student work topics related to the economic and social needs of Wrocław and the region; particular emphasis is placed on activities in the field of spatial policy of the city and the region, urban planning and architecture, shaping the living environment of the society.

Learning outcomes

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
1.1.1)	In terms of knowledge, the graduate knows and understands structural, constructional and engineering problems associated with designing buildings		
1.1.2)	In terms of knowledge, the graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems		
1.1.3)	In terms of knowledge, the graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies		
1.1.4)	In terms of knowledge, the graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents		
1.1.5)	In terms of knowledge, the graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale		
1.1.6)	In terms of knowledge, the graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project		
1.1.7)	In terms of knowledge, the graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment		
1.1.8)	In terms of knowledge, the graduate knows and understands history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs		
1.1.9)	In terms of knowledge, the graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design		
1.1.10)	In terms of knowledge, the graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists		
1.1.11)	In terms of knowledge, the graduate knows and understands principles of collecting information and interpreting it when developing a design concept		
1.1.12)	In terms of knowledge, the graduate knows and understands principles of professional presentation of architectural and urban planning concepts		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
1.1.13)	In terms of knowledge, the graduate knows and understands the nature of the architectural profession and its role in society		
PEK_W1	The graduate knows the properties of the Fibonacci sequence		
PEK_W2	The graduate has basic knowledge of convex sets		
PEK_W3	The graduate knows shapes and parquet floors		
PEK_W4	brak		
PEK_W5	The graduate knows the basic classes of graphs		
PEK_W6	The graduate knows basic curves and surfaces		
Skills			
1.2.1)	In terms of skills, the graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context		
1.2.2)	In terms of skills, the graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values		
1.2.3)	In terms of skills, the graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design		
1.2.4)	In terms of skills, the graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study		
1.2.5)	In terms of skills, the graduate is able to organize the work including all phases of design concept development		
PEK_U1	The graduate is able to apply Euler's formula to study polyhedra		
PEK_U2	The graduate is able to examine simple properties of graphs		
PEK_U3	The graduate is able to describe areas in various coordinates		
PEK_U4	The graduate studies the properties of curves on a plane		
Social competence			
1.3.1)	In terms of social competence, the graduate is ready to work in a professional manner, comply with the principles of professional ethics and take responsibility for his or her actions		
1.3.2)	In terms of social competence, the graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession		
1.3.3)	In terms of social competence, the graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
1.3.4)	In terms of social competence, the graduate is ready to learn all life long, among others, by enrolling in doctoral and post-graduate programs or participating in other forms of education		
1.3.5)	In terms of social competence, the graduate is ready to inspire others to learn and organize the educational process		
PEK_K01	The graduate is able to independently search for information in the literature		
PEK_K02	The graduate understands the need to work systematically and independently to master the course material		
Language and physical education outcomes			
SJO_S2_U01	Be able to use a foreign language at B2+ ESCJ level and specialised terminology	P7S_UK	

Detailed

A. Design

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
A.W1.	In terms of knowledge, the graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment		
A.W2.	In terms of knowledge, the graduate knows and understands urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account		
A.W3.	In terms of knowledge, the graduate knows and understands spatial planning and spatial policy tools		
A.W4.	In terms of knowledge, the graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
A.W5.	In terms of knowledge, the graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities		
A.W6.	In terms of knowledge, the graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration		
A.W7.	In terms of knowledge, the graduate knows and understands basic methods and techniques for conservation, modernization and reconstruction of historic buildings		
A.W8.	In terms of knowledge, the graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines		
Skills			
A.U1.	In terms of skills, the graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects		
A.U2.	In terms of skills, the graduate is able to design a simple and compound urban complex		
A.U3.	In terms of skills, the graduate is able to elaborate planning studies related to spatial development and interpret them to the extent that is necessary for urban and architectural design		
A.U4.	In terms of skills, the graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations		
A.U5.	In terms of skills, the graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing		
A.U6.	In terms of skills, the graduate is able to prepare an architectural conservation design concept of the transformation of an architectural and urban structure with cultural values, with special regard to the protection of these values and to the appropriate methods and techniques, in accordance with the adopted program, which includes non-technical aspects		
A.U7.	In terms of skills, the graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
A.U8.	In terms of skills, the graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design		
A.U9.	In terms of skills, the graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline		
A.U10.	In terms of skills, the graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning		
A.U11.	In terms of skills, the graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams		
A.U12.	In terms of skills, the graduate is able to estimate the time needed to complete a complex design task		
A.U13.	In terms of skills, the graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning		
A.U14.	In terms of skills, the graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design		
A.U15.	In terms of skills, the graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning		
Social competence			
A.S1.	In terms of social skills, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems		
A.S2.	In terms of social skills, the graduate is ready to speak and make presentations in public		
A.S3.	In terms of social skills, the graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects		
A.S4.	In terms of social skills, the graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe		

B. Design context

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
B.W1.	In terms of knowledge, the graduate knows and understands advanced theory of architecture and urban planning that is useful in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design		
B.W2.	In terms of knowledge, the graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning		
B.W3.	In terms of knowledge, the graduate knows and understands the role and importance of the natural environment in architectural and urban design and in spatial planning, as well as the need to create spatial order, sustainable development, and issues associated with threats to the environment and the cultural landscape		
B.W4.	In terms of knowledge, the graduate knows and understands issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning		
B.W5.	In terms of knowledge, the graduate knows and understands advanced issues of construction, technology and building services engineering, structures and physics of buildings, including key complex issues in architectural and urban design and spatial planning		
B.W6.	In terms of knowledge, the graduate knows and understands technical and building regulations		
B.W7.	In terms of knowledge, the graduate knows and understands theoretical basis of scientific reasoning and research to the extent that is useful in performing complicated design tasks and in interpreting scientific studies in the scientific discipline of architecture and urban planning		
B.W8.	In terms of knowledge, the graduate knows and understands methods of communicating ideas for architectural, urban and planning designs and methods of developing such designs		
B.W9.	In terms of knowledge, the graduate knows and understands basic ethics of professional architectural practice and key concepts of intellectual property protection		
Skills			
B.U1.	In terms of skills, the graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
B.U2.	In terms of skills, the graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations		
B.U3.	In terms of skills, the graduate is able to recognize systemic and non-technical aspects, including environmental, cultural, artistic, economic and legal aspects, in the process of architectural and urban design and urban planning that has a high level of complexity		
B.U4.	In terms of skills, the graduate is able to formulate opinions in the form of a critical analysis related to architecture and present and synthetically describe the ideological basis for the design		
B.U5.	In terms of skills, the graduate is able to make use of properly selected advanced computer simulations, analyses and computer technologies that aid architectural and urban design, as well as evaluate the obtained results and their usefulness in designing and produce constructive conclusions		
B.U6.	In terms of skills, the graduate is able to prepare and deliver a detailed presentation of the results of the completed engineering design task using various communication techniques and in a manner that is easy to understand		
B.U7.	In terms of skills, the graduate is able to prepare and deliver a detailed presentation of the results of the completed engineering design task using various communication techniques and in a manner that is easy to understand		
B.U8.	In terms of skills, the graduate is able to properly apply professional and ethical standards and rules as well as legal provisions in the field of architectural and urban design and spatial planning		
Social competence			
B.S1.	In terms of social competence, the graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work		
B.S2.	In terms of social competence, the graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms		

C. Complementary classes, in particular: foreign languages and - optionally - philosophy and aesthetics, history of art, sociology and environmental psychology

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
C.W1.	In terms of knowledge, the graduate knows and understands styles in art and the corresponding creative traditions and the process of creative work related to architecture as well as skills and techniques of similar artistic disciplines		
C.W2.	In terms of knowledge, the graduate knows and understands problems of philosophy with special consideration of aesthetics – to the extent that it affects the quality of architectural, urban design and planning work, which are necessary in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as in evaluating existing and projected solutions		
C.W3.	In terms of knowledge, the graduate knows and understands basic principles of the methodology of scientific research, including the preparation of scientific studies		
C.W4.	In terms of knowledge, the graduate knows and understands vocabulary and grammatical structures of a foreign language that is a language of international communication, in terms of formulating and understanding written and oral statements, both general and specialized, in the field of architecture, as well as the need to have a good command of a foreign language, also in the context of scientific activity		
Skills			
C.U1.	In terms of skills, the graduate is able to recognize various types of cultural products specific to architecture, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process		
C.U2.	In terms of skills, the graduate is able to properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context of issues associated with architectural and urban design		
C.U3.	In terms of skills, the graduate is able to obtain information from literature, databases and other sources, also in a foreign language which is a language of international communication, in order to utilize it in the designing process or – to a basic extent – in scientific activity		
C.U4.	In terms of skills, the graduate is able to prepare a scientific study, and define the subject, scope and purpose of scientific research		
C.U5.	In terms of skills, the graduate is able to use at least one foreign language which is an language of international communication at the B2+ level according to the Common European Framework of Reference for Languages, including specialist terminology in the field of architecture and urban design that is necessary in designing and – to a basic extent – in scientific activity		

D. Diploma: preparation of the diploma thesis and preparation for the diploma examination (theoretical part i practical part)

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
Knowledge			
D.W1.	In terms of knowledge, the graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems		
D.W2.	In terms of knowledge, the graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies		
D.W3.	In terms of knowledge, the graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design		
D.W4.	In terms of knowledge, the graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists		
D.W5.	In terms of knowledge, the graduate knows and understands principles of professional presentation of architectural and urban planning concepts		
Skills			
D.U1.	In terms of skills, the graduate is able to perform a critical analysis of existing conditions, an assessment of the condition of land use and architectural development, and formulate conclusions for designs in a complicated, interdisciplinary context		
D.U2.	In terms of skills, the graduate is able to design a complex architectural structure or urban complex, creating and transforming space so as to give it new values – in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during university studies		
D.U3.	In terms of skills, the graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a method of recording that satisfied the requirements of professional architectural and urban design		
D.U4.	In terms of skills, the graduate is able to apply analytical methods in formulating and solving design tasks		
D.U5.	In terms of skills, the graduate is able to present the theoretical background and the justification for the presented solutions in the form of a scientific study		
D.U6.	In terms of skills, the graduate is able to organize the work including all phases of design concept development		
Social competence			
D.S1.	In terms of social competence, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems		

Code	Description of the directional learning outcome	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework	Characteristics for qualifications at level 6 or 7 of the Polish Qualifications Framework, enabling the acquisition of engineering competences
D.S2.	In terms of social competence, the graduate is ready to speak and make presentations in public		
D.S3.	In terms of social competence, the graduate is ready to accept criticisms of the solutions he or she presents and respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms		
D.S4.	In terms of social competence, the graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work; communicate opinions in a generally understandable manner		
D.S5.	In terms of social competence, the graduate is ready to properly prioritize activities that lead to the completion of the task		

Detailed information on ECTS points

Architecture

Name	Architecture and Urban Planning
Total ECTS	90
Total number of hours of classes	1030
Number of ECTS points assigned to classes related to scientific activities conducted at the university in the discipline or disciplines to which the field of study is assigned (DN)	71/90 (78.89%)
Number of ECTS points allocated to classes developing practical skills (including laboratory, project) (P)	62.2
The number of ECTS points that a student will receive by completing classes that require the direct participation of academic teachers or other persons conducting classes and students (BU)	43.2
Percentage of ECTS for elective courses	82/90 (91.11%)
The number of ECTS points that a student will receive by completing classes in the humanities or social sciences appropriate for a given field of study	5
The number of ECTS points that a student will receive by completing classes in basic sciences (mathematics, physics/chemistry)	2

Number of hours and ECTS points for the education standard

Architecture and Urban Planning

Groups of classes in which specific learning outcomes are achieved	Number of hours ZZU	Number of ECTS points
A. Design	435	35
B. Design context	375	27
C. Complementary classes, in particular: foreign languages and - optionally - philosophy and aesthetics, history of art, sociology and environmental psychology	120	8
D. Diploma: preparation of the diploma thesis and preparation for the diploma examination (theoretical part i practical part)	100	20
Total	**1030**	**90**

Organization of studies

Implementation of the study programme

Allowable ECTS deficit

Semester	Allowable deficit of ECTS points after a semester
Semester 1	8
Semester 2	8
Semester 3	0

Detailed requirements

The dates of credits and examinations are carried out in accordance with the applicable Regulations for higher studies at the Wrocław University of Science and Technology. Additionally, the Faculty authorities send letters to the teaching staff specifying detailed requirements for a given semester regarding the dates of tests/exams, grade entries and diploma processes.

Methods of verifying the intended learning outcomes

Activity form	Methods of verifying the intended learning outcomes
Seminar	Credit - oral, written; multimedia presentations conducted and prepared individually or in groups; case study analysis, class participation, paper
Classes	Credit - oral, written; short test, input task, evaluation of the sub-tasks; practical exam, model, essay, paper
Project	Project preparation, project implementation, project documentation, case study analysis, model
Diploma thesis	Evaluation of work in the preparation of a diploma thesis; diploma examination
Laboratory	Preparation of laboratory reports; oral statements, class participation; short test, input task, evaluation of the sub-tasks
Lecture	Exam - oral, written, credit, test - oral, written

Description of the process leading to achieving learning outcomes

The student gains knowledge and skills by participating in practical and theoretical classes, the programs of which are largely based on the results of scientific research conducted by the course supervisors. The basis of education are optional design courses, which allow the student not only to choose a design path with their own interests, but also direct contact with specialists in the "master-student" formula. The principle of increasing the complexity of the design tasks set for students was adopted. Designing is supplemented with theoretical, technical and workshop courses, which concern, inter alia, conducting scientific research and present its results in professional publications. The program is complemented by humanities and language courses, as well as design workshops, study trips and summer schools. The three-semester course of education ends with a diploma examination checking the student's theoretical knowledge and defense of the diploma thesis - a master's project.

Internships

Not applicable.

Diploma exam

The diploma examination consists of two parts: theoretical and practical. The theoretical part of the diploma examination is intended to test the knowledge of a student completing second-cycle studies and covers issues related to:

- architectural, urban and conservation design in the social, cultural, natural, historical, economic and legal context;
- spatial planning;
- modern construction systems,
- theory of architecture and town planning, philosophy and aesthetics, protection of heritage, ergonomics, ethics of the architect profession and law in the investment process;
- acoustics.

The theoretical part of the exam takes place in written form (test).

The practical part of the diploma examination - the master's project is intended to test the skills of a student completing second-cycle studies in the field of: designing complex architectural structures and multifunctional urban complexes, creating and transforming space in such a way as to give it new values, taking into account non-technical aspects. The master's project should synthesize the interdisciplinary knowledge acquired by a second-cycle student during his studies, showing his creativity and ability to prepare an advanced graphic, written and oral presentation. The work must contain the theoretical background and justification of the presented solutions in the form of a scientific study.

Study plan

Architecture

Semester 1

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
An introduction to mathematical modelling	Lecture: 15	Graded credit	1	Obligatory
Foreign Language 2.1	Classes: 30	Graded credit	2	Obligatory group
The student chooses classes from the offer of the Department of Foreign Languages				
Foreign Language 2.1	Classes: 30	Graded credit	2	Elective
Block: Theory of contemporary architecture	Lecture: 30	Graded credit	2	Obligatory group
The student chooses one subject				
Theory of contemporary architecture	Lecture: 30	Graded credit	2	Elective
Theory and history of architecture in the first half of the 20th century and its protection	Lecture: 30	Graded credit	2	Elective
Block: Protection of Cultural Heritage	Lecture: 30	Graded credit	2	Obligatory group
The student chooses one subject				
Conservation theory, heritage protection, cultur studies and archeology	Lecture: 30	Graded credit	2	Elective
Theory and practice in conservation design	Lecture: 30	Graded credit	2	Elective
Sum	**105**		**7**	

Specialty: Architecture and Urban Planning

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Computer Aided Design BIM I	Lecture: 15 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 2	Obligatory in specialty
Structures in Contemporary Architecture 1	Lecture: 15 Classes: 30	Lecture: Exam Classes: Graded credit	Lecture: 2 Classes: 2	Obligatory in specialty
Block:Conservation Design and Special Design as a Result of Local Conditions	Project: 60	Graded credit	4	Obligatory group
The student chooses one subject				
Conservation Design - Urban Interiors, Contemporary Public Space in Historical Context	Project: 60	Graded credit	4	Elective
Conservation Design	Project: 60	Graded credit	4	Elective
Block: Urban Design	Project: 60	Graded credit	5	Obligatory group
The student chooses one subject				
Urban Design - Urban Planning of the Future	Project: 60	Graded credit	5	Elective
Urban design - Revitalization of Urban Structures	Project: 60	Graded credit	5	Elective
Block: Architectutal Design 1	Project: 105	Graded credit	9	Obligatory group
The student chooses one subject				
Architectutal Design - Hybrid Architecture – Megastructure / Urban Vertical Farms	Project: 105	Graded credit	9	Elective
Architectural Design - Public Buildings	Project: 105	Graded credit	9	Elective
Architecture Design - Environmentally Friendly Dwelling Architecture	Project: 105	Graded credit	9	Elective
Sum	**315**		**25**	

Semester 2

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Foreign Language 2.2	Classes: 60	Graded credit	3	Obligatory group

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
The student chooses classes from the offer of the Department of Foreign Languages				
Foreign Language 2.2	Classes: 60	Graded credit	3	Elective
Block: Humanities	Lecture: 30	Graded credit	3	Obligatory group
The student chooses one subject				
Aesthetics and Philosophy	Lecture: 30	Graded credit	3	Elective
History of art	Lecture: 30	Graded credit	3	Elective
History of Garden Art	Lecture: 30	Graded credit	3	Elective
Cultural interactions between Western Art and non-European civilizations	Lecture: 30	Graded credit	3	Elective
Professional Ethics and Law in the Investment Process	Lecture: 30	Exam	2	Obligatory
Ergonomics	Lecture: 15	Graded credit	1	Obligatory
Sociology and environmental psychology	Lecture: 15	Graded credit	2	Obligatory
Physics (acoustics)	Lecture: 15	Graded credit	1	Obligatory
Sum	**165**		**12**	

Specialty: Architecture and Urban Planning

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Block: Ecology	Lecture: 15	Graded credit	1	Obligatory group
The student chooses one subject				
Architecture of the Urban Landscapes	Lecture: 15	Graded credit	1	Elective
Ecology and Landscape Architecture	Lecture: 15	Graded credit	1	Elective
Thinking the Landscape, interdisciplinary approach	Lecture: 15	Graded credit	1	Elective
Block: Design Workshop – Integration of Design Processes	Lecture: 15 Laboratory: 30	Graded credit	3	Obligatory group

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
The student chooses one subject				
GIS Spatial Analysis in Architecture	Lecture: 15 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 2	Elective
Designing by modeling – from photogrammetry to 3d printing	Lecture: 15 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 2	Elective
Computer Aided Design BIM II	Lecture: 15 Laboratory: 30	Lecture: Graded credit Laboratory: Graded credit	Lecture: 1 Laboratory: 2	Elective
Block: Methodology of Scientific Work	Seminar: 15	Graded credit	1	Obligatory group
The student chooses one subject				
Methodology of Scientific Research	Seminar: 15	Graded credit	1	Elective
Methodology of Scientific Work	Seminar: 15	Graded credit	1	Elective
Structures in Contemporary Architecture 2	Lecture: 15 Classes: 30	Lecture: Graded credit Classes: Graded credit	Lecture: 1 Classes: 2	Obligatory in specialty
Modern Technologies	Lecture: 15	Graded credit	1	Obligatory in specialty
Block: Architectural design 3	Project: 60	Graded credit	5	Obligatory group
The student chooses one subject				
Meta-Habitat in Different Cultures	Project: 60	Graded credit	5	Elective
Inventive Methods	Project: 60	Graded credit	5	Elective
ProtoLAB	Project: 60	Graded credit	5	Elective
Recycling of Postindustrial	Project: 60	Graded credit	5	Elective
Civic Buildings - their meaning, context and impact	Project: 60	Graded credit	5	Elective
Hotels, offices, banks and stock exchange buildings	Project: 60	Graded credit	5	Elective
Assembly Halls and Spaces for Performance Designing	Project: 60	Graded credit	5	Elective
Architecture in public space	Project: 60	Graded credit	5	Elective
Monumental architecture of Public Buildings	Project: 60	Graded credit	5	Elective

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Adaptation of historic buildings to the new function	Project: 60	Graded credit	5	Elective
Workplace Ergonomics	Project: 60	Graded credit	5	Elective
Futuristic Housing Architecture	Project: 60	Graded credit	5	Elective
Housing Architecture for Seniors	Project: 60	Graded credit	5	Elective
Designing for People with Disabilities	Project: 60	Graded credit	5	Elective
Community Planning Process in Practice	Project: 60	Graded credit	5	Elective
Waterfront - Urban Waterside Zones	Project: 60	Graded credit	5	Elective
Block: Architectutal Design 2	Project: 105	Graded credit	9	Obligatory group
The student chooses one subject				
Social and Service Architecture	Project: 105	Graded credit	9	Elective
Experimental Architecture	Project: 105	Graded credit	9	Elective
Adaptive Architecture	Project: 105	Graded credit	9	Elective
Architectural Design - Service and Housing Development in the City	Project: 105	Graded credit	9	Elective
Hospitals and other healthcare facilities	Project: 105	Graded credit	9	Elective
Multifunctional Complexes - Housing, Education, Culture	Project: 105	Graded credit	9	Elective
Sum	**300**		**23**	

Semester 3

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Diploma thesis	Diploma thesis: 15	Graded credit	16	Obligatory elective
Diploma thesis - lecture	Lecture: 15	Graded credit	1	Obligatory
Diploma thesis - workshops	Project: 70	Graded credit	3	Obligatory elective
Sum	**100**		**20**	

Specialty: Architecture and Urban Planning

Subject	Number of hours	Form of verification	ECTS points	Mandatoriness
Spatial planning	Project: 45	Graded credit	3	Obligatory in specialty
Sum	**45**		**3**	

Syllabuses

Wrocław University of Science and Technology

Computer Aided Design BIM I

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.31PS.03709.25

Lecture languages
English

Mandatoriness
Obligatory in specialty

Block
Specialty subjects

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W02	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept.	1.1.11)
PEU_W03	The graduate knows and understands technical and building regulations.	B.W6.
In terms of skills		

PEU_U01	The graduate is able to make use of properly selected advanced computer simulations, analyses and computer technologies that aid architectural and urban design, as well as evaluate the obtained results and their usefulness in designing and produce constructive conclusions.	B.U5.
PEU_U02	The graduate is able to prepare and deliver a detailed presentation of the results of the completed engineering design task using various communication techniques and in a manner that is easy to understand.	B.U6.

Program content ensuring learning outcomes

The course presents and discusses the BIM process from both a theoretical (lecture) and practical (laboratory) perspective. The BIM lecture introduces students to the principles and practices of Building Information Modelling (BIM), a digital approach to design, construction, and management of buildings. It covers key topics such as the evolution of BIM, its benefits, and its application across various stakeholders including architects, engineers, contractors, and facility managers. The course explores:

- BIM tools;
- standards;
- documents and processes;
- the roles of different professionals within a BIM-enabled project.

It also addresses the integration of BIM with other technologies, like energy modelling and cost estimation, providing a comprehensive understanding of how BIM enhances collaboration, efficiency, and decision-making throughout the lifecycle of a building.
By understanding these components, students:

- can better appreciate the transformative impact of BIM on the construction industry;
- acquire knowledge of BIM processes, tools, and technologies;
- learn how to use BIM to improve collaboration, coordination, and efficiency in building design and construction projects.

During the laboratory classes students:

- develop skills in 3D modelling, data management, and project visualization;
- understand the importance of information exchange across various project stakeholders.
- gain insight into BIM standards, documentation, and project management practices, preparing them to actively participate in or lead BIM-driven projects in their near-future careers.

Throughout the subsequent laboratory meetings, the own office building model is updated with newly learned issues. Based on the prepared model, conceptual/technical documentation is generated, what constitutes the basis for passing the laboratory part. The lecture ends with a written test to assess the comprehension of the topic.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Laboratory	30
Preparaton for classes	16
Prepararation for an exam/credit	4
Preparation of a report/summary/presentation/paper	8

Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

An introduction to mathematical modelling

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.31PM.03690.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory
Study form full-time studies	**Block** Subjects of basic education - mathematics
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows the properties of the Fibonacci sequence	PEK_W1
PEU_W02	The graduate has basic knowledge related to convex set	PEK_W2
PEU_W03	The graduate knows solids and tilings	PEK_W3
PEU_W04	The graduate has basic knowledge related to lattice polygons	PEK_W4
PEU_W05	The graduate knows basic classes of graphs	PEK_W5
PEU_W06	The graduate knows basic curves and surfaces	PEK_W6
In terms of skills		
PEU_U01	The graduate is able to apply Euler’s formula to investigate polyhedral solids	PEK_U1
PEU_U02	The graduate is able to investigate basic properties of graphs	PEK_U2

PEU_U03	The graduate is able to describe areas in diverse coordinates sets	PEK_U3
PEU_U04	The graduate is able to investigate properties of curves on the plane	PEK_U4
In terms of social competences		
PEU_K01	The graduate understands the need to work independently to master the course material	PEK_K01, PEK_K02

Program content ensuring learning outcomes

Presenting the Fibonacci sentence and the principle of mathematical induction.
Presenting the theory of convex sets.
Giving basic knowledge related to tilings of surfaces and to filling spaces.
Passing on basic knowledge related to lattice polygons.
Giving basic understanding of graph theory.
Passing on knowledge related to curves and surfaces.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparaton for classes	4
Prepararation for an exam/credit	4
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Structures in Contemporary Architecture 1

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03710.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory in specialty
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 15 h, 2 ECTS, Exam • Classes: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands construction, building, and engineering problems related to building design;	1.1.1)
PEU_W02	The graduate knows and understands the principles, solutions, structures, and building materials used in the performance of complex engineering tasks in the field of architectural and urban design;	1.1.9)
PEU_W03	The graduate knows and understands the issues related to architecture and urban planning in the context of the multi-disciplinary nature of architectural and urban design and the need to cooperate with other specialists;	1.1.10)

PEU_W04	The graduate knows and understands issues related to architectural design, urban planning, and spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, and economic, legal, and social conditions – necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical conditions of engineering activities and sees the need to take them into account in architectural design, urban planning, rural planning, and spatial planning;	B.W4.
PEU_W05	The graduate knows and understands advanced issues of construction, building technology and installations, structure and building physics, including key, complex issues in architectural, urban, and planning design;	B.W5.
PEU_W06	The graduate knows and understands the methods of communicating the idea of architectural, urban, and planning projects and their development;	B.W8.
PEU_W07	The graduate knows and understands the basic principles of ethics of the architectural profession and the concepts of intellectual property protection;	B.W9.
In terms of skills		
PEU_U01	The graduate can use the experience gained during studies to critically analyze conditions and formulate conclusions for design in a complex, interdisciplinary context;	1.2.1)
PEU_U02	The graduate can use interdisciplinary knowledge and skills acquired during studies to design a complex architectural object or urban complex that meets aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U03	The graduate can use analytical methods to formulate and solve design tasks, present the theoretical background and justification for the presented solutions in the form of a scientific study;	1.2.1), 1.2.2)
PEU_U04	The graduate can integrate advanced knowledge from various areas of science, including history, history of architecture, history of art and protection of cultural assets, and spatial management while solving complex engineering tasks;	B.U1.
PEU_U05	The graduate can perceive the importance of non-technical aspects and effects of the architect's design activity, including its impact on the cultural and natural environment, and take responsibility for technical decisions made in the environment and for passing on the cultural and natural heritage to future generations;	B.U2.
PEU_U06	The graduate can use appropriately selected advanced computer simulations, analyses, and information technologies supporting architectural and urban design, as well as evaluate the obtained results and their usefulness in design and draw constructive conclusions;	B.U3.
PEU_U07	The graduate can prepare and present a presentation devoted to the detailed results of the implementation of an engineering design task using various communication techniques, including one formulated in a generally understandable manner;	B.U4.
In terms of social competences		
PEU_K01	The graduate is ready to undertake and perform work professionally, including compliance with the principles of professional ethics and taking responsibility for the actions taken;	1.3.1)

PEU_K02	The graduate is ready to formulate opinions on the achievements of architecture and urban planning, their conditions, and other aspects of the architect's activity, as well as to provide information and opinions;	B.S1.
PEU_K03	The graduate is ready to make a reliable self-assessment, formulate constructive criticism regarding architectural and urban planning activities, as well as accept criticism of the solutions presented by him/her, respond to criticism clearly and objectively, also use arguments referring to the available achievements in the scientific discipline, and use criticism creatively and constructively;	B.S2.

Program content ensuring learning outcomes

As part of the course, students will become familiar with the importance of the structural system for shaping architectural form and their mutual dependence, as well as knowledge about the most important structural systems used in contemporary architecture. They will learn the geometrical foundations of shaping complex structural forms, the importance of spatial rigidity of the structural system, and the methods of ensuring it. They will acquire the skills to assess the scope of the usefulness of using individual structural systems in specific design tasks and to identify the structural system in an existing object, as well as the skills of shaping the structural system using physical modeling. They will acquire the skills to prepare and present in a transparent and visually attractive way the concept of a structural system for a unique architectural object.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Classes	30
Preparation of a project	22
Preparation of a report/summary/presentation/paper	14
Prepararation for an exam/credit	15
Credit/Exam	4
Student workload	**Hours** 100

Wrocław University of Science and Technology

Foreign Language 2.1

Educational subject description sheet

Basic information

Field of study
lektoraty

Speciality
-

Organizational unit
Wrocław University of Science and Technology

Study level
second degree

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
PWRSJOS.97JO.02684.25

Lecture languages
English

Mandatoriness
Elective

Block
Foreign languages

Semesters	Activities, hours, ECTS and examination
Semester 1, Semester 2, Semester 3	• Classes: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	Student has knowledge, skills and competences consistent with the requirements specified for the minimum B2 level according to the Common European Framework of Reference for Languages; knows, understands and uses linguistic means (grammatical, lexical and stylistic) from academic, specialist and technical languages used in the field of study and in the academic and professional environment; communicates in an intercultural and professional environment; understands and has the ability to analyze foreign-language specialist texts; improves their skills in the area of specialized and academic languages.	SJO_S2_U01

Program content ensuring learning outcomes

B2 plus English, French, Spanish, GermanC1 plus English languageGeneral educational content

Formation and deepening of communicative competence in academic and professional settings.
Interaction appropriate to the appropriate level of linguistic competence, such as the student's own profile for academic and professional purposes. Deepening creative, receptive and interactive competence in a team.
Language in communication in specialized and professional fields in the modern world. Verbal and non-verbal communication - functioning freely in an intercultural environment, conducting discourse, polemics, analysis of specialized texts.

Calculation of ECTS points

Activity form	**Activity hours**
Classes	30
Preparaton for classes	30
Student workload	**Hours** 60

Wrocław University of Science and Technology

Conservation Design - Urban Interiors, Contemporary Public Space in Historical Context

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03712.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 60 h, 4 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands: structural, constructional and engineering problems associated with designing buildings;	1.1.1)
PEU_W02	The graduate knows and understands: detailed issues in the field of architecture and urban planning related to solving complex design problems;	1.1.2)
PEU_W03	The graduate knows and understands: advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies;	1.1.3)

PEU_W04	The graduate knows and understands: relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale;	1.1.5)
PEU_W05	The graduate knows and understands: regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project;	1.1.6)
PEU_W06	The graduate knows and understands: history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs;	1.1.8)
PEU_W07	The graduate knows and understands: principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design;	1.1.9)
PEU_W08	The graduate knows and understands: issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)
PEU_W09	The graduate knows and understands: principles of collecting information and interpreting it when developing a design concept;	1.1.11)
PEU_W10	The graduate knows and understands: principles of professional presentation of architectural and urban planning concepts;	1.1.12)
PEU_W11	The graduate knows and understands: the nature of the architectural profession and its role in society;	1.1.13)
PEU_W12	The graduate knows and understands: architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	A.W1.
PEU_W13	The graduate knows and understands: urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account;	A.W2.
PEU_W14	The graduate knows and understands: spatial planning and spatial policy tools;	A.W3.
PEU_W15	The graduate knows and understands: provisions of local land-use plans to the extent that is necessary for architectural design;	A.W4.
PEU_W16	The graduate knows and understands: the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	A.W5.
PEU_W17	The graduate knows and understands: advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration;	A.W6.
PEU_W18	The graduate knows and understands: basic methods and techniques for conservation, modernization and reconstruction of historic buildings;	A.W7.

PEU_W19	The graduate knows and understands: the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines;	A.W8.
In terms of skills		
PEU_U01	The graduate is able to: use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U02	The graduate is able to: use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U03	The graduate is able to: prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design;	1.2.3)
PEU_U04	The graduate is able to: apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study;	1.2.4)
PEU_U05	The graduate is able to: organize the work including all phases of design concept development;	1.2.5)
PEU_U06	The graduate is able to: design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
PEU_U07	The graduate is able to: design a simple and compound urban complex;	A.U2.
PEU_U08	The graduate is able to: elaborate planning studies related to spatial development and interpret them to the extent that is necessary for urban and architectural design;	A.U3.
PEU_U09	The graduate is able to: perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations;	A.U4.
PEU_U10	The graduate is able to: evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing;	A.U5.
PEU_U11	The graduate is able to: prepare an architectural conservation design concept of the transformation of an architectural and urban structure with cultural values, with special regard to the protection of these values and to the appropriate methods and techniques, in accordance with the adopted program, which includes non-technical aspects;	A.U6.
PEU_U12	The graduate is able to: perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values;	A.U7.

PEU_U13	The graduate is able to: think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
PEU_U14	The graduate is able to: integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U9.
PEU_U15	The graduate is able to: communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning;	A.U10.
PEU_U16	The graduate is able to: work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams;	A.U11.
PEU_U17	The graduate is able to: estimate the time needed to complete a complex design task;	A.U12.
PEU_U18	The graduate is able to: formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;	A.U13.
PEU_U19	The graduate is able to: prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design;	A.U14.
PEU_U20	The graduate is able to: implement the principles and guidelines of universal design in architecture, urban planning and spatial planning;	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to: work in a professional manner, comply with the principles of professional ethics and take responsibility for his or her actions;	1.3.1)
PEU_K02	The graduate is ready to: respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.2)
PEU_K03	The graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage;	1.3.3)
PEU_K04	The graduate is ready to: learn all life long, among others, by enrolling in doctoral and post-graduate programs or participating in other forms of education;	1.3.4)
PEU_K05	The graduate is ready to: inspire others to learn and organize the educational process;	1.3.5)
PEU_K06	The graduate is ready to: effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K07	The graduate is ready to: speak and make presentations in public;	A.S2.
PEU_K08	The graduate is ready to: take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.

PEU_K09	The graduate is ready to: take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe;	A.S4.

Program content ensuring learning outcomes

Introduction to basic notions of modern design of public space in heritage protection areas of urban interiors in Medieval location shaped interiors and post Renaissance urban interiors (districts from the 18th century and 19th century, interwar districts, modernism 1945- 1980) and presenting the influence of contemporary architectural actions on forming and fulfilling the cultural landscape of city.
To acquaint students with basic notions and definitions in the area of protection of monuments and landscape protection areas, relations between the architecture, environment and human activity, and needs for adapting of certain examples of architectural design and forms urban “small architecture”, greenery etc. located in historic urban developments for human scale.
To acquaint students with the ability to perform field studies needed for evaluation of cultural landscape and its elements on the basis from selected for project area.
Introduction for designing the precise conservatory urban guidelines useful in various fields of landscape and monument protection areas and to form such guidelines in MPAs.
To acquaint students with the ability of interpretations of the influence of different conservation and extra-conservation actions on urban structures, cultural landscape, social perspective of monument forms, authenticity of architecture etc.
To acquaint students with the ability of presentation in urban scale elements of spatial composition of urban interiors from general scale to the scale of urban detail and to present the influence which detail has on urban space aesthetics.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Conducting literature research	2
Preparaton for classes	12
Preparation of a project	17
Preparation of a report/summary/presentation/paper	7
Credit/Exam	2
Student workload	**Hours** 100

Wrocław University of Science and Technology

Conservation Design

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03713.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 60 h, 4 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the structural, construction and engineering problems associated with the design of buildings;	1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W02	The graduate knows and understands detailed architecture and urban planning problems in solving complex design problems;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W03	The graduate knows and understands advanced problems concerning architecture and urban planning useful for the design of architectural objects and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activity, integrating the knowledge gained during the studies;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.5), 1.1.6), 1.1.8), 1.1.9)

PEU_W04	The graduate shall know and understand the relations between man and architecture, and between architecture and its surrounding environment, and the need to adapt architecture to human needs and human scale;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.6), 1.1.8), 1.1.9)
PEU_W05	The graduate knows and understands the legislation and procedures necessary for the design of buildings and the integration of buildings into the overall planning project;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.8), 1.1.9)
PEU_W06	The graduate knows and understands the history and theory of architecture and the arts, technology and humanities to the extent necessary for the proper execution of architectural projects;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.9)
PEU_W07	The graduate knows and understands the principles, solutions, structures and building materials used in the performance of complex engineering tasks in architectural and urban design;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8)
PEU_W08	The graduate knows and understands architecture and urban design issues in the context of the multi-discipline nature of architectural and urban design and the need to collaborate with other professionals;	1.1.1), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W09	The graduate knows and understands the principles of information gathering and interpretation in the preparation of a design concept;	1.1.1), 1.1.10), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W10	The graduate knows and understands the principles of professional presentation of architectural and urban design concepts;	1.1.1), 1.1.10), 1.1.11), 1.1.13), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W11	The graduate knows and understands the nature of the architectural profession and its role in society;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.2), 1.1.3), 1.1.5), 1.1.6), 1.1.8), 1.1.9)
PEU_W12	The graduate knows and understands architectural design of varying degrees of complexity, from simple tasks to objects of complex function in a complex context, in particular: simple objects taking into account the basic needs of users, single and multi-family residential buildings, service buildings in residential complexes, public buildings and their complexes of varying scale and complexity in an open landscape or urban environment;	A.W2., A.W3., A.W4., A.W5., A.W6., A.W7., A.W8.
PEU_W13	The graduate knows and understands urban design in the development of tasks of different scales and complexity, in particular: development complexes, local development plans taking into account local conditions and connections;	A.W1., A.W3., A.W4., A.W5., A.W6., A.W7., A.W8.
PEU_W14	The graduate knows and understands spatial planning and spatial policy tools;	A.W1., A.W2., A.W4., A.W5., A.W6., A.W7., A.W8.
PEU_W15	The graduate knows and understands the provisions of local spatial development plans to the extent necessary for architectural design;	A.W1., A.W2., A.W3., A.W5., A.W6., A.W7., A.W8.
PEU_W16	The graduateknows and understands the principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular to persons with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including the ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, in particular for persons with disabilities;	A.W1., A.W2., A.W3., A.W4., A.W6., A.W7., A.W8.

PEU_W17	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to prepare design concepts in an interdisciplinary environment, with particular emphasis on interprofessional cooperation;	A.W1., A.W2., A.W3., A.W4., A.W5., A.W6., A.W8.
PEU_W18	The graduate knows and understands basic methods and techniques for the conservation, upgrading and restoration of historic structures;	A.W1., A.W2., A.W3., A.W4., A.W5., A.W6., A.W8.
PEU_W19	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines, as well as its application in the design process in cooperation with specialists from these disciplines;	A.W1., A.W2., A.W3., A.W4., A.W5., A.W6., A.W7.
In terms of skills		
PEU_U01	The graduate is able to use the experience gained during the course of studies to critically analyse conditions and formulate conclusions for designing in a complex interdisciplinary context;	1.2.2), 1.2.3), 1.2.4), 1.2.5)
PEU_U02	The graduate is able to use the interdisciplinary knowledge and skills acquired during the course of studies to design a complex architectural object or urban complex meeting aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.1), 1.2.3), 1.2.4), 1.2.5)
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his/her own design concepts in the field of architecture and urban planning, meeting the requirements of professional writing appropriate for architectural and urban planning design;	1.2.1), 1.2.2), 1.2.4), 1.2.5)
PEU_U04	The graduate is able to use analytical methods to formulate and solve design tasks, present the theoretical background and justification of the presented solutions in the form of a scientific paper;	1.2.1), 1.2.2), 1.2.3), 1.2.5)
PEU_U05	The graduate is able to organise his/her work, taking into account all the phases of work on a design concept,	1.2.1), 1.2.2), 1.2.3), 1.2.4)
PEU_U06	The graduate is able to design a simple and complex architectural object, creating and transforming space so as to give it new values - in accordance with the set or accepted programme, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects;	A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U07	The graduate is able to design a simple and complex urban complex;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U08	The graduate is able to prepare planning studies on urban development and interpret them to the extent necessary for design at the urban and architectural scale;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U09	The graduate is able to make a critical analysis of conditions, including valorisation of the state of land use and development; formulate conclusions for design and spatial planning, forecast processes of transformations of the settlement structure of towns and villages, and predict social consequences of these transformations;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U5., A.U6., A.U7., A.U8., A.U9.

PEU_U10	The graduate is able to assess the usefulness of advanced methods and tools for solving simple and complex engineering tasks, typical for architecture, urban planning and spatial planning, and select and apply appropriate methods and tools in design;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U6., A.U7., A.U8., A.U9.
PEU_U11	The graduate is able to develop a conservation design concept for the transformation of an architectural and urban structure with cultural values, taking into account the protection of these values and appropriate methods and techniques, in accordance with the adopted programme taking into account non-technical aspects;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U7., A.U8., A.U9.
PEU_U12	The graduate shall be able to critically analyse and assess the project and the manner of its implementation with respect to modernisation and additions to architectural and urban planning structures with cultural values;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U8., A.U9.
PEU_U13	The graduate is able to think creatively and act, taking into account the complex and multifaceted conditions of design activity, as well as express his/her own artistic concepts in architectural and urban design,	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U9.
PEU_U14	The graduate is able to integrate information obtained from various sources, interpret and critically analyse it in detail and draw conclusions from it, as well as formulate and justify opinions and demonstrate their relation to the design process, based on the available scientific output in the discipline;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8.
PEU_U15	The graduate is able to communicate using various techniques and tools in a professional and interdisciplinary environment within the scope relevant to architectural and urban design and spatial planning;	A.U1., A.U11., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U16	The graduate is able to work individually and as part of a team, including with specialists from other industries, and to take a leading role in such teams;	A.U1., A.U10., A.U12., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U17	The graduate is able to estimate the time required to complete a complex design task;	A.U1., A.U10., A.U11., A.U13., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U18	The graduate is able to formulate new ideas and hypotheses, analyse and test novelties related to engineering problems and research problems in architectural and urban design and spatial planning;	A.U1., A.U10., A.U11., A.U12., A.U14., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U19	The graduate is able to produce architectural and construction documentation at appropriate scales with reference to conceptual architectural design;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U15., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U20	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning;	A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
In terms of social competences		

PEU_K01	The graduate is prepared to use imagination, intuition, creativity and independent thinking effectively to solve complex design problems;	A.S2., A.S3., A.S4.
PEU_K02	The graduate is ready for public speaking and presentations;	A.S1., A.S3., A.S4.
PEU_K03	The graduate is ready to take on the role of coordinator of activities in the project process, manage teamwork and use interpersonal skills (conflict resolution, negotiation skills, delegation of tasks), conform to the rules of teamwork and take responsibility for joint tasks and projects;	A.S1., A.S2., A.S4.
PEU_K04	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including the preservation of regional, national and European heritage;	A.S1., A.S2., A.S3.
PEU_K05	The graduate is ready to: undertake and perform work in a professional manner, including observing professional ethics and taking responsibility for actions taken;	1.3.2), 1.3.3), 1.3.4), 1.3.5)
PEU_K06	The graduate is ready to: respect diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.1), 1.3.3), 1.3.4), 1.3.5)
PEU_K07	The graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban values in the protection of the environment and cultural heritage;	1.3.1), 1.3.2), 1.3.4), 1.3.5)
PEU_K08	The graduate is ready to: lifelong learning, including by undertaking doctoral school and postgraduate studies or participating in other forms of education;	1.3.1), 1.3.2), 1.3.3), 1.3.5)
PEU_K09	The graduate is ready to: inspire others to learn and organise learning;	1.3.1), 1.3.2), 1.3.3), 1.3.4)

Program content ensuring learning outcomes

C1 ability to conduct research, analysis and evaluation prior to the conservation project.
C2 learning about the cultural conditions of the city in the process of urban and architectural design, while respecting the historical context.
C3 to identify the intangible and tangible value of historical buildings, as well as their complexes, and the possibility of adapting them to contemporary requirements and needs.
C4 understanding by the student that each monument is different and requires an individual approach when assessing its value and defining the functional programme.
C5 ability to plan an urban plot located within a historical development quarter, square or street.
C6 ability to apply reconstructionin in conservation design methods, adaptation, modernisation and upgrading, combined with the ability to adapt buildings to the contemporary regulations, requirements, standards and norms, while significantly reducing interference with historic values.
C7 paying attention to the proper relations between contemporary architecture and the historical context.
C8 the ability to use knowledge of historical styles in the rebuilding of a monument.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	30
Preparation of a report/summary/presentation/paper	8

Credit/Exam	2
Student workload	**Hours** 100

Wrocław University of Science and Technology

Theory of contemporary architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.31PK.03692.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale	1.1.5)
PEU_W02	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies	1.1.3)
PEU_W03	The graduate knows and understands the history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs	1.1.8)

PEU_W04	The graduate knows and understands advanced theory of architecture and urban planning that is useful in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design	B.W1.
PEU_W05	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning	B.W2.
PEU_W06	The graduate knows and understands the role and importance of the natural environment in architectural and urban design and in spatial planning, as well as the need to create spatial order, sustainable development, and issues associated with threats to the environment and the cultural landscape	B.W3.
In terms of skills		
PEU_U01	The graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks	B.U1.
PEU_U02	The graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations	B.U2.
In terms of social competences		
PEU_K01	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work	B.S1.

Program content ensuring learning outcomes

Learning about the history of architectural trends and attitudes since the beginning of the 20th century. Learning about the latest directions of development of contemporary architecture.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Preparation of a report/summary/presentation/paper	16
Preparaton for classes	2
Credit/Exam	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Theory and history of architecture in the first half of the 20th century and its protection

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.31PK.03693.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.	1.1.5)
PEU_W02	The graduate knows and understands history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs.	1.1.8)
PEU_W03	The graduate knows and understands advanced theory of architecture and urban planning that is useful in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design.	B.W1.

PEU_W04	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning.	B.W2.
PEU_W05	The graduate knows and understands the role and importance of the natural environment in architectural and urban design and in spatial planning, as well as the need to create spatial order, sustainable development, and issues associated with threats to the environment and the cultural landscape.	B.W3.
In terms of skills		
PEU_U01	The graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks.	B.U1.
PEU_U02	The graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations.	B.U2.
In terms of social competences		
PEU_K01	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work.	B.S1.

Program content ensuring learning outcomes

The curriculum content of the cours concerns:

- theory and practice related to the transformation of architectural form in the first half of the 20th century,
- architects' approach to new problems that appeared in the 20th century,
- features of architecture belonging to the modernist trend of various formal varieties,
- specific problems related to the renovation of modernist buildings entered in the register of monuments.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Preparation of a report/summary/presentation/paper	16
Preparaton for classes	2
Credit/Exam	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Urban Design - Urban Planning of the Future

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03715.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate has knowledge of factors influencing the space and functioning of the urbanised environment. Characterises environmental factors, identifies the main problems, describes the problems and selects options for solutions.	1.1.2), A.W2., A.W5., A.W8.
PEU_W02	The graduate has a general knowledge of the projected and possible changes in futuristic urban design, related to the new possibilities of creation and to the new tools of the architect-urbanist.	A.W3., A.W4.
PEU_W03	The graduate has a general knowledge of the use of advanced technological solutions, equipment, building materials and their influence on the possibilities of shaping modern urban planning with respect for the natural environment	1.1.2), A.W2., A.W3., A.W4., A.W5., A.W8.
In terms of skills		

PEU_U01	The graduate will be able to analyse, argue, select and classify urban planning issues, forecasting possible directions of urban development on the basis of current and future projections related to general social and technical development. He/she is able to make a critical analysis of collected materials, documents, also on the basis of a local inspection, formulating valorisation of the state of land use and development. He/she defines conclusions for spatial design and planning, forecasts processes of transformations of the settlement structure in general.	1.2.3), 1.2.4), 1.2.5), A.U4., A.U8., A.U9.
PEU_U02	The graduate can use interdisciplinary knowledge for the creation of futuristic urbanism	1.2.4), A.U10., A.U13., A.U4., A.U5., A.U8.
PEU_U03	The graduate be able to design a simple and more complex ensemble of urban (structure in an urbanised environment). W in connection with this he/she is able to draw up planning studies in relation to urban development and interpret them to the extent necessary to design on an urban and architectural scale.	1.2.2), 1.2.3), A.U10., A.U15., A.U2., A.U3., A.U5., A.U8.
PEU_U04	The graduate is able to assess the usefulness of acquired information, the selection of methods and tools for solving engineering tasks in connotation with architectural and urban planning problems, spatial planning, and to select and apply appropriate methods and tools in design. The student will be able to creatively solve problems and propose design solutions, taking into account the complexity of the conditions of design activity, and express their own artistic concepts in architectural and urban design.	1.2.3), A.U10., A.U13., A.U4., A.U8.
PEU_U05	The graduate is able to integrate information, making selections based on interpretations and critically, formulate new ideas and hypotheses, analyse and test novelties related to engineering problems, seeing their relation with the design process, based on the available scientific output in the discipline. Able to present publicly in a readable and understandable form using available methods, tools and techniques in a professional and interdisciplinary environment related to architectural and urban design and urban planning.	1.2.3), 1.2.5), A.U10., A.U13., A.U15.
In terms of social competences		
PEU_K01	The graduate aware of the possibilities of flexible shaping of urban layouts using modern technological and technical solutions.	A.S1., A.S4.
PEU_K02	The graduate has the ability to think critically and farsightedly about the needs of the community in a changing world. Accepts social complexity and identifies the problems associated with it, is responsible in decisions, defends, protects and cares for the welfare of the public.	A.S2., A.S3., A.S4.

Program content ensuring learning outcomes

Paradigms of contemporary urbanism, 21st century visions. - Literature review, inspirations, studies of the topic and issues. Presentation of selected thematic issues (urban and related issues) in a forum, paper, critical discussion
Presentation of alternative preliminary concepts for the multifunctional urban structure of the future and their theoretical references. Critical discussion by the whole group. Evaluation.
Development of an urban vision: construction of a spatial and programmatic concept - functionality, accessibility, workshop and group discussion.Consultation.
Development of the urban vision: morphology and physiognomy, functional diagrams, construction of an analogue model, graphic recording of the graphic recording of the urban vision (2D and 3D). Workshop work and group discussion. Consultation
Presentation of a concept for a multifunctional urban structure of the future (preferred scale 1:2000). Discussion Critical discussion in the whole group. Evaluation.
Selection of an area for detailed development. Urban-architectural concept of a hybrid structure functional - a fragment of a

previously developed whole: functionality, accessibility, composition, architectural elements of the structure. Workshop work and group discussion.
Urban-architectural concept of a hybrid functional structure: morphology and physiognomy, forms of graphic recording, cross-sections, diagrams, etc. graphical notation, sections, diagrams, 3D models, visualisations.
Urban-architectural concept of the hybrid functional structure: intensity, residency, calculation of urban indicators, proposal of pro-ecological solutions.
Presentation of the urban-architectural concept of the hybrid functional structure (preferred scale 1:1000 i 1:500). Critical discussion in the whole group. Evaluation.
Concept of planning record for hybrid functional structure. Clause. Issues and language of the planning notation - possibilities and limitations. Innovative solutions. Workshop work on the basis of the clause and literature studies, brainstorming. Discussion.
Selected elements of the local development plan notation for a hybrid structure functional structure. Calculation of urban indicators. Individual or group consultations.
Review of the entire developed project and its components. Refinement of its individual components and graphic notation. Presentation, discussion and critical appraisal.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	5
Preparation of a report/summary/presentation/paper	7
Conducting literature research	5
Self-study of class topics	10
Preparation of a project	36
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Urban design - Revitalization of Urban Structures

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03716.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate is familiar with spatial planning issues, including the basic tools of spatial policy;	A.W2., A.W3., A.W4.
PEU_W02	The graduate understands the essence of the urban renewal process, its complexity and interdisciplinary nature, as well as the crucial role of public participation in the revitalisation process;	1.1.2), A.W5., A.W8.
In terms of skills		
PEU_U01	The graduate analyses spatial, socio-economic, environmental, and cultural conditions; is capable of selecting analytical tools based on specific needs; organises and interprets the results of urban analyses;	1.2.4), 1.2.5), A.U4., A.U5., A.U9.

PEU_U02	The graduate prepares and presents a spatial development conception for a revitalisation area as well as an urban and architectural conception for the revitalisation area; adapts design solutions to existing conditions and effectively address design challenges at various scales;	1.2.2), 1.2.3), 1.2.4), 1.2.5), A.U10., A.U13., A.U15., A.U2., A.U3., A.U4., A.U5., A.U8., A.U9.
PEU_U03	The graduate prepares a revitalisation programme, local spatial rewitalisation plan and interprets it;	1.2.2), 1.2.3), 1.2.4), 1.2.5), A.U10., A.U13., A.U15., A.U2., A.U3., A.U4., A.U5., A.U8., A.U9.
In terms of social competences		
PEU_K01	The graduate identifies issues related to spatial degradation; is capable of presenting and justifying design solutions that address the identified problems;	A.S1.
PEU_K02	The graduate presents the results of their work publicly;	A.S2.
PEU_K03	The graduate respects the principles of working in a project team, demonstrates initiative, and coordinates project tasks;	A.S3.
PEU_K04	The graduate takes responsibility for shaping the natural environment and cultural landscape;	A.S4.

Program content ensuring learning outcomes

Discussion of issues related to the urban renewal process.
Analysis of conditions for project areas.
Development of a revitalisation actions programme for degraded areas.
Creation of spatial development concept for revitalised areas.
Creation of urban-architectural concept for revitalised areas.
Creation of local revitalisation plan.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Self-study of class topics	12
Preparaton for classes	5
Preparation of a project	40
Preparation of a report/summary/presentation/paper	6
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Conservation theory, heritage protection, cultur studies and archeology

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.31PK.03695.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies	1.1.3)
PEU_W02	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale	1.1.5)
PEU_W03	The graduate knows and understands the methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment	1.1.7)

PEU_W04	The graduate knows and understands the history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs	1.1.8)
PEU_W05	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning	B.W2.
PEU_W06	The graduate knows and understands issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning	B.W4.
In terms of skills		
PEU_U01	The graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study	1.2.4)
PEU_U02	The graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks	B.U1.
PEU_U03	The graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations	B.U2.
PEU_U04	The graduate is able to recognize systemic and non-technical aspects, including environmental, cultural, artistic, economic and legal aspects, in the process of architectural and urban design and urban planning that has a high level of complexity.	B.U3.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage	1.3.3)

Program content ensuring learning outcomes

Students will learn about the scientific, theoretical, legislative and organizational foundations for conservation and revalorization design work in the field of protecting architectural objects and urban complexes in the cultural landscape, and the development of the conservation idea. Students will learn about the basic principles of archaeology and the protection of archaeological heritage. Students will be introduced to the issues of selected cultures from antiquity to the present day. Presentation of selected trends in contemporary art. Emphasis on the influence of political and social factors on culture and art. Drawing the attention of listeners to the ideological content of works of art and the methods of their interpretation.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparaton for classes	10
Preparation of a report/summary/presentation/paper	8
Credit/Exam	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Theory and practice in conservation design

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.31PK.03696.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Lecture: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)
PEU_W02	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.	1.1.5)
PEU_W03	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment	1.1.7)

PEU_W04	The graduate knows and understands history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs.	1.1.8)
PEU_W05	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning	B.W2.
PEU_W06	The graduate knows and understands issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning	B.W4.
In terms of skills		
PEU_U01	The graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study.	1.2.4)
PEU_U02	The graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks.	B.U1.
PEU_U03	The graduate is able to recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations	B.U2.
PEU_U04	The graduate is able to recognize systemic and non-technical aspects, including environmental, cultural, artistic, economic and legal aspects, in the process of architectural and urban design and urban planning that has a high level of complexity.	B.U3.
In terms of social competences		
PEU_K01	The graduate is ready to trespect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K02	Tthe graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)

Program content ensuring learning outcomes

The curriculum content covers the following topics:

- types of cultural and natural heritage and its protection,
- digital methods of documenting archaeological and architectural heritage,
- principles of operation of conservation services.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Preparaton for classes	18
Credit/Exam	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Architectutal Design - Hybrid Architecture – Megastructure / Urban Vertical Farms

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03718.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W02	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project.	1.1.6)
PEU_W03	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)

PEU_W04	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W05	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts.	1.1.12)
PEU_W06	The graduate knows and understands the nature of the architectural profession and its role in society.	1.1.13)
PEU_W07	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment.	A.W1.
PEU_W08	The graduate knows and understands urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account.	A.W2.
PEU_W09	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design.	A.W4.
PEU_W10	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
PEU_W11	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration.	A.W6.
PEU_W12	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		
PEU_U01	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U02	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design.	1.2.3)
PEU_U03	The graduate is able to organize the work including all phases of design concept development.	1.2.5)

PEU_U04	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects.	A.U1.
PEU_U05	The graduate is able to design a simple and compound urban complex.	A.U2.
PEU_U06	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing.	A.U5.
PEU_U07	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
PEU_U08	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline.	A.U9.
PEU_U09	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U10	The graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams.	A.U11.
PEU_U11	The graduate is able to estimate the time needed to complete a complex design task.	A.U12.
PEU_U12	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U13	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design.	A.U14.
PEU_U14	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)
PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K03	The graduate is ready to speak and make presentations in public.	A.S2.

PEU_K04	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects.	A.S3.
PEU_K05	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

Introduction to research methodologies for designing complex functional and spatial structures, focusing on hybrid vertical farm projects within urban environments as an alternative method of food production for residents.
Exploration of the challenges in integrating urban and production spaces, treated as social spaces, and designing environments that stimulate the creative activity of residents.
Familiarization with the intricate technical infrastructure of farms implementing sustainable, closed-cycle production principles, with a focus on future-oriented practices.

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparation of a project	102
Preparaton for classes	6
Preparation of a report/summary/presentation/paper	10
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Architectural Design - Public Buildings

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03719.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	[1.1.2)] In terms of knowledge, the graduate knows and understands: detailed issues in the field of architecture and urban planning related to solving complex design problems;	1.1.2)
PEU_W02	[1.1.6)] In terms of knowledge, the graduate knows and understands: regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project;	1.1.6)
PEU_W03	[1.1.7)] In terms of knowledge, the graduate knows and understands: methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment;	1.1.7)

PEU_W04	[1.1.10)] In terms of knowledge, the graduate knows and understands: issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)
PEU_W05	[1.1.12)] In terms of knowledge, the graduate knows and understands: principles of professional presentation of architectural and urban planning concepts;	1.1.12)
PEU_W06	[A.W1.] In terms of knowledge, the graduate knows and understands: architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	A.W1.
PEU_W07	[A.W2.] In terms of knowledge, the graduate knows and understands: urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account;	A.W2.
PEU_W08	[A.W4.] In terms of knowledge, the graduate knows and understands: provisions of local land-use plans to the extent that is necessary for architectural design;	A.W4.
PEU_W09	[A.W5.] In terms of knowledge, the graduate knows and understands: the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	A.W5.
PEU_W10	[A.W6.] In terms of knowledge, the graduate knows and understands: advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration;	A.W6.
PEU_W11	[A.W8.] In terms of knowledge, the graduate knows and understands: the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
PEU_W12	[1.1.13)] In terms of knowledge, the graduate knows and understands: the nature of the architectural profession and its role in society.	1.1.13)
In terms of skills		
PEU_U01	[1.2.2)] In terms of skills, the graduate is able to: use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.2)
PEU_U02	[1.2.3)] In terms of skills, the graduate is able to: prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design;	1.2.3)

PEU_U03	[1.2.5)] In terms of skills, the graduate is able to: organize the work including all phases of design concept development.	1.2.5)
PEU_U04	[A.U1.] In terms of skills, the graduate is able to: design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
PEU_U05	[A.U2.] In terms of skills, the graduate is able to: design a simple and compound urban complex;	A.U2.
PEU_U06	[A.U5.] In terms of skills, the graduate is able to: evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing;	A.U5.
PEU_U07	[A.U8.] In terms of skills, the graduate is able to: think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
PEU_U08	[A.U9.] In terms of skills, the graduate is able to: integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U9.
PEU_U09	[A.U10.] In terms of skills, the graduate is able to: communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning;	A.U10.
PEU_U10	[A.U11.] In terms of skills, the graduate is able to: work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams;	A.U11.
PEU_U11	[A.U12.] In terms of skills, the graduate is able to: estimate the time needed to complete a complex design task;	A.U12.
PEU_U12	[A.U13.] In terms of skills, the graduate is able to: formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;	A.U13.
PEU_U13	[A.U14.] In terms of skills, the graduate is able to: prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design;	A.U14.
PEU_U14	[A.U15.] In terms of skills, the graduate is able to: implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	[1.3.3)] In terms of social competence, the graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage;	1.3.3)
PEU_K02	[A.S1.] In terms of social skills, the graduate is ready to: effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.

PEU_K03	[A.S2.] In terms of social skills, the graduate is ready to: speak and make presentations in public;	A.S2.
PEU_K04	[A.S3.] In terms of social skills, the graduate is ready to: take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.
PEU_K05	[A.S4.] In terms of social skills, the graduate is ready to: take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

Designing large-scale public buildings with complex functions and a high degree of technical complexity in the context of urban planning and culture. Land development projects. Solving spatial and functional systems, programming, hierarchy and spatial relations, floor plans, sections, elevations, and details with consideration of structural elements and construction issues. Issues of accessibility, supplies, multi-space garages, sustainability, pro-environmental approach, problems of health and safety, evacuation, fire protection, inclusiveness and high quality of adopted solutions.

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparation of a project	118
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Architecture Design - Environmentally Friendly Dwelling Architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.31PS.03720.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 1	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W02	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project.	1.1.6)
PEU_W03	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)
PEU_W04	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)

PEU_W05	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts.	1.1.12)
PEU_W06	The graduate knows and understands the nature of the architectural profession and its role in society.	1.1.13)
PEU_W07	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment.	A.W1.
PEU_W08	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design.	A.W4.
PEU_W09	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
PEU_W10	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration.	A.W6.
PEU_W11	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
PEU_W12	The graduate knows and understands urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account.	A.W2.
In terms of skills		
PEU_U01	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U02	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design.	1.2.3)
PEU_U03	The graduate is able to organize the work including all phases of design concept development.	1.2.5)
PEU_U04	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects.	A.U1.
PEU_U05	The graduate is able to design a simple and compound urban complex.	A.U2.

PEU_U06	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing.	A.U5.
PEU_U07	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
PEU_U08	The graduate is able to integrate information obtained from various sources, interpret and critically analyse it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline.	A.U9.
PEU_U09	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U10	The graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams.	A.U11.
PEU_U11	The graduate is able to estimate the time needed to complete a complex design task.	A.U12.
PEU_U12	The graduate is able to formulate new ideas and hypotheses, analyse and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U13	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design.	A.U14.
PEU_U14	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)
PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K03	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S2.
PEU_K04	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects.	A.S3.
PEU_K05	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

Program content ensuring learning outcomes: Development of creative and workshop skills in the field of designing the architecture of pro-social multifunctional complexes in an urbanized environment. getting acquainted with the basic issues of designing the architecture of multifunctional complexes in relation to the existing spatial order and cultural heritage of the place, presentation of issues related to pro-social trends (co-living, cooperative) in the process of shaping architectural objects and the universal design trend in relation to multifunctional complexes, presentation of the contemporary needs of shaping multifunctional complexes as social and center-forming catalysts, showing the integrating role of multifunctional complexes in the functioning of the local community and the functional and spatial structure of the city, getting acquainted with the principles of designing and verifying the correctness of functional-spatial and structural-technical solutions for the architecture of multifunctional complexes as well as the issues of energy efficiency and economic efficiency of architectural solutions.

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparaton for classes	50
Preparation of a project	52
Conducting empirical studies	8
Self-study of class topics	8
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Foreign Language 2.2

Educational subject description sheet

Basic information

Field of study lektoraty	**Education cycle** 2025/2026
Speciality -	**Subject code** PWRSJOS.97JO.02690.25
Organizational unit Wrocław University of Science and Technology	**Lecture languages** English
Study level second degree	**Mandatoriness** Elective
Study form full-time studies	**Block** Foreign languages
Education profile general academic profile	

Semesters	**Activities, hours, ECTS and examination**
Semester 1, Semester 2, Semester 3	• Classes: 60 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of skills		
PEU_U01	Student has knowledge, skills and competences consistent with the requirements specified for the appropriate language level; knows, understands and uses linguistic means (grammatical, lexical and stylistic) defined at a certain level from everyday life with selected elements of academic, specialist and technical language used in the field of study and in the academic and professional environment; communicates in a family, social and intercultural environment, practicing communication skills; appreciates the need to improve their skills in effective communication, develops competences in the area of communication language, basics of specialist and academic language	SJO_S2_U01

Program content ensuring learning outcomes

A1; A2; B1 French, Spanish, Japanese, German, Polish as a foreign language, Russian
General educational content
Formation and deepening of communicative competence in a family, social and intercultural environment and for a specific level for academic and professional needs.
Interaction appropriate to the appropriate level of language competence, e.g., the student's own profile and interests; presenting oneself, one's interests and ideas in environmental, academic and professional contexts. Developing creative, receptive and interactive competence in a group.
Language in communication in the modern world. Verbal and non-verbal communication - sensitivity to cultural differences, starting a conversation, joining in a discussion, moving on to the next points, summarizing statements, using characteristic phrases and expressions for a certain language level; taking part in various forms of interaction.

Calculation of ECTS points

Activity form	**Activity hours**
Classes	60
Preparaton for classes	30
Student workload	**Hours** 90

Wrocław University of Science and Technology

Aesthetics and Philosophy

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32HS.03702.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Subjects from the fields of humanities or social sciences
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 30 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs	1.1.8)
PEU_W02	The graduate knows and understands styles in art and the corresponding creative traditions and the process of creative work related to architecture as well as skills and techniques of similar artistic disciplines	C.W1.
PEU_W03	The graduate knows and understands problems of philosophy with special consideration of aesthetics – to the extent that it affects the quality of architectural, urban design and planning work, which are necessary in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as in evaluating existing and projected solutions	C.W2.
In terms of skills		

PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context	1.2.1)
PEU_U02	The graduate is able to obtain information from literature, databases and other sources, also in a foreign language which is a language of international communication, in order to utilize it in the designing process or – to a basic extent – in scientific activity	C.U3.
PEU_U03	The graduate is able to recognize recognize various types of cultural products specific to architecture, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process	C.U1.
PEU_U04	The graduate is able to properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context of issues associated with architectural and urban design	C.U2.
PEU_U05	The graduate is able to prepare a scientific study, and define the subject, scope and purpose of scientific research	C.U4.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage	1.3.3)

Program content ensuring learning outcomes

Familiarizing students with selected issues of aesthetics, primarily contemporary.
Presentation of selected trends in contemporary art.
Emphasis on the influence of political, social and philosophical factors on culture and art.
Drawing students' attention to the ideological content of works of art and methods of their interpretation.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Preparaton for classes	30
Preparation of a report/summary/presentation/paper	13
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

History of art

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32HS.03703.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Subjects from the fields of humanities or social sciences
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 30 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	the graduate knows and understands history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs;	1.1.8)
PEU_W02	the graduate knows and understands styles in art and the corresponding creative traditions and the process of creative work related to architecture as well as skills and techniques of similar artistic disciplines;	C.W1.
PEU_W03	the graduate knows and understands problems of philosophy with special consideration of aesthetics – to the extent that it affects the quality of architectural, urban design and planning work, which are necessary in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as in evaluating existing and projected solutions;	C.W2.
In terms of skills		

PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U02	The graduate is able to recognize various types of cultural products specific to architecture, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process	C.U1.
PEU_U03	The graduate is able to properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context of issues associated with architectural and urban design;	C.U2.
PEU_U04	The graduate is able to obtain information from literature, databases and other sources, also in a foreign language which is a language of international communication, in order to utilize it in the designing process or – to a basic extent – in scientific activity;	C.U3.
PEU_U05	The graduate is able to prepare a scientific study, and define the subject, scope and purpose of scientific research;	C.U4.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage;	1.3.3)

Program content ensuring learning outcomes

The curriculum content of the subject concerns:

- the history of contemporary and modern art, in a chronological and thematic approach,
- presenting case studies, selected artistic techniques, such as sculpture, painting, multimedia and photography,
- profiles of outstanding artists from each period,
- the influence of political, economic and social factors on the development of art, showing how historical realities shape the means of artistic expression and the subject matter of works,
- specialised terminology relating to artistic styles, techniques and tools.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Preparation of a project	15
Self-study of class topics	15
Preparaton for classes	13
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

History of Garden Art

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
-

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000S.32HS.03704.25

Lecture languages
English

Mandatoriness
Elective

Block
Subjects from the fields of humanities or social sciences

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 30 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands history and theory of architecture, art, technology and humanities to the extent that is necessary to create proper architectural designs.	1.1.8)
PEU_W02	The graduate knows and understands styles in art and the corresponding creative traditions and the process of creative work related to architecture as well as skills and techniques of similar artistic disciplines.	C.W1.
PEU_W03	The graduate knows and understands problems of philosophy with special consideration of aesthetics – to the extent that it affects the quality of architectural, urban design and planning work, which are necessary in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as in evaluating existing and projected solutions.	C.W2.
In terms of skills		

PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
PEU_U02	The graduate is able to recognize various types of cultural products specific to architecture, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process.	C.U1.
PEU_U03	The graduate is able to properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context of issues associated with architectural and urban design.	C.U2.
PEU_U04	The graduate is able to obtain information from literature, databases and other sources, also in a foreign language which is a language of international communication, in order to utilize it in the designing process or – to a basic extent – in scientific activity.	C.U3.
PEU_U05	The graduate is able to prepare a scientific study, and define the subject, scope and purpose of scientific research.	C.U4.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)

Program content ensuring learning outcomes

The curruculum includes introducing students to a number of affinities and relationships between garden art and other fields of art, including architecture (as well as aesthetic and philosophical trends), set in a historical context.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Preparation of a report/summary/presentation/paper	41
Credit/Exam	2
Self-study of class topics	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

Cultural interactions between Western Art and non-European civilizations

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32HS.03705.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Subjects from the fields of humanities or social sciences
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 30 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows the styles in art and the creative traditions associated with them, as well as the process of realization of artistic works related to architecture and the workshop means of related artistic disciplines;	1.1.8), C.W1., C.W2.
PEU_W02	The graduate knows and understands: history and theory of art, technology and humanities to the extent that is necessary to create proper architectural designs;	1.1.8), C.W1., C.W2.
In terms of skills		
PEU_U01	The graduate is able to: recognize various types of cultural products, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process;	1.2.1), C.U1., C.U2.

PEU_U02	The graduate is able to use the basic principles of scientific research methodology, including the preparation of scientific studies, learns the basics of formal, iconographic and iconological analysis;	1.2.1), C.U1., C.U2., C.U3., C.U4.
PEU_U03	The graduate is able to: properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context;	C.U2.
PEU_U04	The graduate is able to obtain information from literature, databases and other sources, also in a foreign language, in order to use it in scientific activities;	C.U3., C.U4.
In terms of social competences		
PEU_K01	The graduate appreciates and is ready to take responsibility for humanistic, social, cultural, architectural and urban values in the protection of the environment and cultural heritage;	1.3.3)
PEU_K02	The graduate is sensitive and ready to respect the diversity of views, cultures and religions;	1.3.2)

Program content ensuring learning outcomes

To introduce students to selected notions related to problems of history of Western European painting and sculpture, formal and aesthetic differences between western European art and that of other cultural circles. An introduction to the type of relationships between the visual arts and philosophy, literature and science. To present problems related to defining art, aesthetic criteria for Western European and Eastern European, Byzantine and Far East Asian paintings. To introduce students to general notions of analysis of paintings, presentation of so-called layers of painting meaning: formal, depicting, depicted and symbolic as well as their cultural significance. To present basic features of figurative and abstract painting and sculpture. To introduce students to basic formal methods applied in paintings (contour, line, solid, chiaro-scuro, color, size, shape, scale, composition) and rules associated with them in different art streams. To present the problems of iconographic and iconological analysis of a painting and the impact of different cultures on the matter of art. To acquaint students with basic painting and sculpture techniques and non-Western influences reflecting in them.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	30
Conducting literature research	15
Preparation of a report/summary/presentation/paper	21
Self-study of class topics	7
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

Professional Ethics and Law in the Investment Process

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32PK.03697.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 30 h, 2 ECTS, Exam

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning.	B.W4.
PEU_W02	The graduate knows and understands technical and building regulations.	B.W6.
PEU_W03	The graduate knows and understands basic ethics of professional architectural practice and key concepts of intellectual property protection.	B.W9.

In terms of skills		
PEU_U01	The graduate is able to elaborate planning studies related to spatial development and interpret them to the extent that is necessary for urban and architectural design.	B.U3.
PEU_U02	The graduate is able to properly apply professional and ethical standards and rules as well as legal provisions in the field of architectural and urban design and spatial planning.	B.U8.
PEU_U03	The graduate is able to prepare and present a presentation devoted to the detailed results of the implementation of an engineering design task using various communication techniques, including one formulated in a generally understandable manner.	B.U7.
In terms of social competences		
PEU_K01	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work.	B.S1.
PEU_K02	The graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms.	B.S2.

Program content ensuring learning outcomes

The curriculum content of the cours concerns:

- presentation of basic concepts and issues related to ethics,
- discussion and analysis of the main ethical problems in the profession of architecture,
- sensitization of the student to the ethical problems of contemporary societies,
- grounding the knowledge of the axiology and deontology of the architect profession in the broader context of engineering and general ethics,
- acquiring analytical tools enabling an objective assessment of ethical conflicts occurring in the professional practice of an architect,
- attaining the ability to act in accordance with ethical and professional standards,
- attaining knowledge and expertise to solve basic management and organizational problems in the investment process,
- gaining awareness of the importance of the architect's place in the entire life cycle of a building,
- knowledge of the sequence of technological and organizational activities.

Calculation of ECTS points

Activity form	Activity hours
Lecture	30
Self-study of class topics	6
Conducting literature research	6
Prepararation for an exam/credit	6

Credit/Exam	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Ergonomics

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32PK.03698.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory
Study form full-time studies	**Block** Major-specific subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the relationships between humans and architecture and between architecture and the surrounding environment, as well as the need to adapt architecture to human needs and human scale;	1.1.5)
PEU_W02	The graduate knows and understands the advanced theory of architecture and urban planning, which is useful for formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design;	B.W1.

PEU_W03	The graduate knows and understands issues related to architectural design, urban planning, and spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, and economic, legal, and social conditions - necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical conditions of engineering activities and sees the need to take them into account in architectural design, urban planning, rural planning, and spatial planning;	B.W4.
In terms of skills		
PEU_U01	The graduate can use interdisciplinary knowledge and skills acquired during their studies in order to design a complex architectural object or urban complex that meets aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U02	The graduate can recognize the importance of non-technical aspects and effects of an architect’s design activity, including its impact on the cultural and natural environment, and take responsibility for technical decisions made in the environment and for passing on the cultural and natural heritage to future generations;	B.U2.
PEU_U03	The graduate can formulate statements of a critical analytical nature in the field of architecture, as well as present and synthetically describe the ideological foundations of the project based on the adopted assumptions;	B.U4.
In terms of social competences		
PEU_K01	The graduate is ready to make reliable self-assessments, formulate constructive criticism of architectural and urban planning activities, as well as accept criticism of the solutions he/she presents, respond to criticism in a clear and objective manner, also use arguments referring to the available achievements in the scientific discipline, and use criticism creatively and constructively;	B.S2.

Program content ensuring learning outcomes

Learning the basic principles of ergonomic design in architecture, the impact of functional requirements on spatial organization and ergonomic requirements on the utility quality of buildings and their interiors, the principles of adapting architectural space to the needs and psychophysical capabilities of humans, learning the directions of development of architectural design, interior furnishings, and industrial forms in the context of human psychophysical needs.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparation of a report/summary/presentation/paper	2
Preparaton for classes	4
Prepararation for an exam/credit	2
Credit/Exam	2

Student workload	Hours 25

Wrocław University of Science and Technology

Sociology and environmental psychology

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality -	**Subject code** W1ARC/000S.32HS.03699.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory
Study form full-time studies	**Block** Subjects from the fields of humanities or social sciences
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands: advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)
PEU_W02	The graduate knows and understands: the nature of the architectural profession and its role in society.	1.1.13)

PEU_W03	The graduate knows and understands: issues related to architectural and urban design and to spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, economic, legal and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design and spatial planning.	B.W4.
In terms of skills		
PEU_U01	The graduate is able to: use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
In terms of social competences		
PEU_K01	The graduate is ready to: respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K02	The graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)

Program content ensuring learning outcomes

The main course objective is conveying advanced knowledge about sociology and environmental psychology in the perspective of architectural design.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparaton for classes	16
Preparation of a report/summary/presentation/paper	15
Credit/Exam	2
Self-study of class topics	2
Student workload	**Hours** 50

Wrocław University of Science and Technology

Physics (acoustics)

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
-

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000S.32PF.03700.25

Lecture languages
English

Mandatoriness
Obligatory

Block
Subjects of basic education - physics

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	[B.W5.] In terms of knowledge, the graduate knows and understands:advanced issues of construction, technology and building services engineering, structures and physics of buildings, including key complex issues in architectural and urban design and spatial planning;	B.W5.
PEU_W02	[B.W6.] technical and building regulations;	B.W6.
In terms of skills		
PEU_U01	[B.U8.] In terms of skills, the graduate is able to: properly apply professional and ethical standards and rules as well as legal provisions in the field of architectural and urban design and spatial planning.	B.U8.

Program content ensuring learning outcomes

Architectural and urban aerodynamics: the properties of fluids, physical quantities describing the movement of air masses, criteria numbers, equations of motion for incompressible fluid. Prandtl assumptions for the equations of fluid motion near an obstacle, a boundary layer, Reynolds number intervals, flows. Building and architectural acoustics, noise and hazards, protection against noise and undesirable reverberation phenomena, construction of partitions, interior solutions in the field of acoustics, current standards and their application.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Prepararation for an exam/credit	6
Credit/Exam	2
Self-study of class topics	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Architecture of the Urban Landscapes

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03722.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate and understands: styles in art and the corresponding creative traditions and the process of creative work related to architecture as well as skills and techniques of similar artistic disciplines;	C.W1.
PEU_W02	The graduate knows and understands: basic principles of the methodology of scientific research, including the preparation of scientific studies;	C.W3.
In terms of skills		
PEU_U01	The graduate is able to: recognize various types of cultural products specific to architecture, and critically analyze them using typical methods, in order to determine their meanings, social impact and their place in the historical and cultural process.	C.U1.

PEU_U02	The graduate is able to: properly use terms such as aesthetic value, beauty and aesthetic experience, and see the broader philosophical context of issues associated with architectural and urban design;	C.U2.
PEU_U03	The graduate is able to: obtain information from literature, databases and other sources, also in a foreign language which is a language of international communication, in order to utilize it in the designing process or – to a basic extent – in scientific activity;	C.U3.
In terms of social competences		
PEU_K01	The graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage;	1.3.3)

Program content ensuring learning outcomes

To introduce students to basic problems of protection of the cultural landscape of certain cites in cases of designing contemporary architecture in the context of listed/protected urban areas in Europe, America, Middle East and Maghreb regions.
To introduce students to importance of the contextual urban and architecture design for local society and national identity
To present problems of reconstructions, renovations and restitution of certain architecture forms and its importance for the local urban and landscape context.
To present problems of protection and revalorization of the monumental/ listed architecture and building forms and incorporating contemporary design actions into the local cultural landscape.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Conducting literature research	3
Preparation of a report/summary/presentation/paper	5
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Ecology and Landscape Architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03723.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate is able to assess the impact of the undertaken design activities on the environment, and to rationally select design measures in order to minimize negative effects while maintaining human needs;	1.1.5), B.W3.
PEU_W02	The graduate is able to indicate objects, structures and processes in the natural environment that require protection and appropriately undertake design actions or not to take them;	1.1.7)
In terms of skills		
PEU_U01	The graduate is able to perceive systemic complexity in the process of architectural, urban and planning design, including the impact of design activities on the cultural and natural environment, as well as take responsibility for decisions made, taking into account sustainable development;	B.U2., B.U3.
In terms of social competences		

PEU_K01	The graduate is able to rationally justify decisions made concerning the natural environment and is able to convey his/her opinion to the public;	B.S1.

Program content ensuring learning outcomes

The course is aiming at broadening the knowledge of landscape structures and elements as well as ideas, standards and good practices in shaping space in a manner consistent with the principles of sustainable development. A student will develope the ability to critically evaluate contemporary landscape structures for the purposes of architectural and urban planning, as well as heritage protection. Developing social attitudes related to the designer's sense of responsibility for shaping elements of the environment, including the urban one is also one of the course didactic goals.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparaton for classes	2
Preparation of a report/summary/presentation/paper	6
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Thinking the Landscape, interdisciplinary approach

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03724.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)
In terms of skills		
PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
In terms of social competences		
PEU_K01	Tthe graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)

Program content ensuring learning outcomes

The curriculum content of the course concerns an interdisciplinary approach to landscape issues in all its dimensions, in line with the current state of research and the methodology behind the humanities, natural sciences, engineering and social sciences.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparation of a report/summary/presentation/paper	8
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

GIS Spatial Analysis in Architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03726.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)
PEU_W02	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept;	1.1.11)
PEU_W03	The graduate knows and understands technical and building regulations;	B.W6.
In terms of skills		

PEU_U01	The graduate is able to make use of properly selected advanced computer simulations, analyses and computer technologies that aid architectural and urban design, as well as evaluate the obtained results and their usefulness in designing and produce constructive conclusions;	B.U5.
PEU_U02	The graduate is able to prepare and deliver a detailed presentation of the results of the completed engineering design task using various communication techniques and in a manner that is easy to understand;	B.U6.
In terms of social competences		
PEU_K01	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work;	B.S1.
PEU_K02	The graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	B.S2.

Program content ensuring learning outcomes

Expanding skills in the use of GIS software tools in spatial analysis and the space management process at the interface of urban planning and architectural design

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Laboratory	30
Preparation of a project	25
Credit/Exam	2
Self-study of class topics	3
Student workload	**Hours** 75

Wrocław University of Science and Technology

Designing by modeling – from photogrammetry to 3d printing

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03727.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)
PEU_W02	The graduate principles of collecting information and interpreting it when developing a design concept;	1.1.11)
PEU_W03	The graduate technical and building regulations;	B.W6.
In terms of skills		
PEU_U01	The graduate make use of properly selected advanced computer simulations, analyses and computer technologies that aid architectural and urban design, as well as evaluate the obtained results and their usefulness in designing and produce constructive conclusions;	B.U5.

PEU_U02	The graduate prepare and deliver a detailed presentation of the results of the completed engineering design task using various communication techniques and in a manner that is easy to understand;	B.U6.
In terms of social competences		
PEU_K01	The graduate formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect's professional work;	B.S1.
PEU_K02	The graduate perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	B.S2.

Program content ensuring learning outcomes

The programme content of the course (laboratories and lectures) covers:

- photogrammetry as a tool supporting the work of a designer,
- use of spatial representations in research, conceptual and design documentation,
- spatial modelling techniques,
- use of basic elements in building the spatial composition,
- use of VR techniques and interactive models for design presentations.

The course content (laboratory) involves learning the capabilities of the following programs: MeshRoom, RealityCapture, MetaShape, CloudCompare, Blender, Blender GIS, PrusaSlicer and Twinmotion.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Laboratory	30
Preparation of a project	4
Preparaton for classes	12
Self-study of class topics	12
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

Computer Aided Design BIM II

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03728.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit • Laboratory: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands issues related to architecture and urban planning in the context of the multi-disciplinary nature of architectural design and the need to cooperate with other specialists; understands the issues of modeling information about a building in the context of its life cycle; independently predicts and identifies architectural problems to be solved;	1.1.10)
PEU_W02	The graduate knows and understands the principles of collecting information and its interpretation in the preparation of project documentation from the concept phase to the implementation design phase and workshop solutions; classifies elements appropriately, correctly assigns them to layers and floors, and is able to compare their properties; understands the idea of openBIM, digital twin and non-native *.IFC format;	1.1.11)

PEU_W03	The graduate knows and understands technical and construction regulations and interprets them correctly. Knows the hierarchy of legislation and is able to find the legal basis at each level;	B.W6.
In terms of skills		
PEU_U01	The graduate is able to use properly selected advanced computer simulations, analyzes and information technologies supporting architectural design, evaluate the results obtained and their usefulness in design, and draw constructive conclusions; independently searches for possibilities of exporting and importing data and selects software correctly; correctly classifies elements and can import foreign classification systems; is able to construct an analytical model of the building structure and basic MEP installations; it freely combines any components of the BIM model;	B.U5.
PEU_U02	The graduate is able to prepare and present a presentation devoted to the detailed results of the implementation of an engineering design task using various communication techniques, formulated in a generally understandable manner; is able to publish (export) the prepared BIM model both in the 3D version and in the two-dimensional version of the design documentation; is able to verify the correctness of the architectural model and its compliance with industry models (he is able to check collisions between elements);	B.U6.
In terms of social competences		
PEU_K01	The graduate is ready to formulate and convey to the public information and opinions regarding the achievements of architecture and urban planning, their complex conditions and other aspects of the architect's activity; he presents his design concept clearly and concisely in the form of a multimedia presentation;	B.S1.
PEU_K02	The graduate is ready for reliable self-assessment and formulating constructive criticism regarding architectural and urban activities; He is also ready to accept criticism of the solutions he presents, responding to criticism in a clear and substantive manner, also using arguments referring to the available achievements in the scientific discipline; he uses criticism creatively and constructively, treating it as a condition for progress and overcoming the imperfections of his own work; acts in accordance with the ethical principles of the architectural profession and legislation; he conducts open discussions, defending his decisions while respecting dissenting opinions;	B.S2.

Program content ensuring learning outcomes

The course includes learning how to prepare the correct architectural model for interdisciplinary cooperation and coordination. The Solibri or BIMCollab program will be used to check the correctness of models in the form of IFC files, model presentation and a list of its elements. The course combines theoretical knowledge presented in the form of short lectures with practical exercises of the content provided and the implementation of subsequent skills in group projects carried out in the laboratory. An important part of the course is learning communication in BIM (BCF) and learning the meaning of BEP (BIM Execution Plan). It is planned to use the so-called agile project management (here: agile) in iterative-incremental programming (here: design) and implementation of laboratory tasks in the so-called "sprints". During the course, students take on various roles, learning further aspects of interdisciplinary design and the coordination of various models. During the course, students acquire knowledge and skills in the field of basic MEP design and the integration of architectural models with structural design programs (SCIA or Robot Structural Analysis).
The course is carried out in accordance with the OpenBIM idea, where what is important is the content contributed to the project, not the design program. The idea of a "digital twin" for managing planned and existing architectural facilities is presented. Part of the course includes the assessment of the building life cycle (taking into account both embedded and operational energy) in BIM projects and the analysis of architectural model data performed using One Click LCA or Design

LCA. The idea of interdisciplinarity of architectural and construction projects and the importance of LCA in the early design phase are discussed. The course also covers issues related to simulation of the implementation and cost simulation of designed facilities (Expert EDU Standard or BIM Estimate).
The final part of the course presents currently available parametric tools (Rhino / Grasshopper), the use of point clouds (including in architectural inventories) and the AI Vizualizer based on the Stable Diffusion engine. Students have the option of exporting entire or parts of the models made during the exercises to *stl files in order to prepare and produce 3D prints.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Laboratory	30
Preparation of a project	15
Preparation of a report/summary/presentation/paper	8
Prepararation for an exam/credit	5
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

Methodology of Scientific Research

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03730.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Seminar: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands advanced issues of architecture and urban planning useful for the design of architectural objects and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge gained during the course of study;	1.1.11), 1.1.3), B.W1., B.W2., B.W7.
PEU_W02	The graduate knows and understands the principles of information gathering and interpretation in the preparation of a design concept;	1.1.11), 1.1.3), B.W1., B.W2., B.W7.
PEU_W03	The graduate knows and understands advanced theory of architecture and urban planning useful for formulating and solving complex tasks in architectural and urban design and urban planning, as well as development trends and current directions in architectural and urban design;	1.1.11), 1.1.3), B.W1., B.W2., B.W7.

PEU_W04	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent necessary in architectural, urban planning and planning work;	1.1.11), 1.1.3), B.W1., B.W2., B.W7.
PEU_W05	The graduate knows and understands the theoretical basis of scientific reasoning and research in a range useful for complex design tasks, as well as the interpretation of scientific studies in the scientific discipline - architecture and urban planning;	1.1.11), 1.1.3), B.W1., B.W2., B.W7.
In terms of skills		
PEU_U01	The graduate is able to integrate advanced knowledge from different areas of science, including history, architectural history, history of art and protection of cultural property, spatial management when solving complex engineering tasks;	B.U1., B.U4.
PEU_U02	The graduate is able to formulate statements of critical analysis in the field of architecture, as well as present and synthesize the ideological basis of the project based on the assumptions made;	B.U1., B.U4.
In terms of social competences		
PEU_K01	The graduate is ready for lifelong learning, including by undertaking doctoral school and postgraduate studies or participating in other forms of education;	1.3.4), B.S1., B.S2.
PEU_K02	The graduate is ready to formulate and communicate information and opinions to the public on the achievements of architecture and urbanism, their complex conditions and other aspects of the architect's activity;	1.3.4), B.S1., B.S2.

Program content ensuring learning outcomes

The curriculum content of the course includes the following topics:

- Characteristics of scientific work.
- Scientific work versus architectural design.
- Interdisciplinarity as a principle of modern scientific research.
- Structure and editing of a research paper.
- Research methods - part 1. Experimental methods. Inductive and deductive method. Quantitative and qualitative methods.
- Research methods - part 2. Queries and prospecting: non-invasive research, historical, metrological, formal analysis, structural and archaeological-architectural methods.
- Research methods - part 3. Methods of dating: chronological stratification, construction technique and technology as an indicator of the chronology of structures. Stratigraphy and stratification - practical exercises.
- Research methods - part 4. Absolute dating methods. Perspectives of research on the determination of chronology (statistical analysis, laboratory studies).
- Architectural research.
- Problems of interpretation of research results.

Calculation of ECTS points

Activity form	**Activity hours**
Preparation of a report/summary/presentation/paper	6
Seminar	15
Credit/Exam	2

Preparaton for classes	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Methodology of Scientific Work

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03731.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Seminar: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)
PEU_W02	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept.	1.1.11)
PEU_W03	The graduate knows and understands advanced theory of architecture and urban planning that is useful in formulating and solving complex tasks in the field of architectural and urban design and spatial planning, as well as development trends and current directions in architectural and urban design.	B.W1.

PEU_W04	The graduate knows and understands the history of architecture and urban planning, contemporary architecture, heritage protection to the extent that is necessary in architecture, urban planning and spatial planning.	B.W2.
PEU_W05	The graduate knows and understands theoretical basis of scientific reasoning and research to the extent that is useful in performing complicated design tasks and in interpreting scientific studies in the scientific discipline of architecture and urban planning.	B.W7.
In terms of skills		
PEU_U01	The graduate is able to integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks.	B.U1.
PEU_U02	The graduate is able to formulate opinions in the form of a critical analysis related to architecture and present and synthetically describe the ideological basis for the design.	B.U4.
In terms of social competences		
PEU_K01	The graduate is ready to learn all life long, among others, by enrolling in doctoral and post-graduate programs or participating in other forms of education.	1.3.4)
PEU_K02	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work.	B.S1.
PEU_K03	The graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accept criticisms of the solutions he or she presents, respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms.	B.S2.

Program content ensuring learning outcomes

The program content concerns:

- permanent parts of written diploma theses,
- links of texts with original illustrations.

Calculation of ECTS points

Activity form	**Activity hours**
Preparaton for classes	6
Seminar	15
Credit/Exam	2
Self-study of class topics	2

Student workload	Hours 25

Wrocław University of Science and Technology

Structures in Contemporary Architecture 2

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03732.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory in specialty
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit • Classes: 30 h, 2 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional, and engineering problems associated with designing buildings;	1.1.1)
PEU_W02	The graduate knows and understands principles, solutions, structures, and building materials used in complex engineering tasks related to architectural and urban design;	1.1.9)
PEU_W03	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)

PEU_W04	The graduate knows and understands issues related to architectural and urban design and spatial planning, such as technical infrastructure, communication, natural environment, landscape architecture, and economic, legal, and social factors, which are necessary to understand the social, economic, ecological, natural, historical, cultural, legal, and other non-technical determinants of engineering work and recognizes the need to take them into account in architectural, urban, rural design, and spatial planning;	B.W4.
PEU_W05	The graduate knows and understands advanced issues of construction, technology and building services engineering, structures, and physics of buildings, including key complex issues in architectural and urban design and spatial planning;	B.W5.
PEU_W06	The graduate knows and understands methods of communicating ideas for architectural, urban and planning designs and methods of developing such designs;	B.W8.
PEU_W07	The graduate knows and understands the basic ethics of professional architectural practice and key concepts of intellectual property protection;	B.W9.
In terms of skills		
PEU_U01	The graduate can use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U02	The graduate can use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space, and giving it new values;	1.2.2)
PEU_U03	The graduate can use analytical methods to formulate and solve design tasks, present the theoretical background and justification for the presented solutions in the form of a scientific study;	1.2.1), B.U1.
PEU_U04	The graduate can integrate advanced knowledge in various fields of science, including history, history of architecture, history of art and protection of cultural goods, and spatial management when solving complex engineering tasks;	B.U1.
PEU_U05	The graduate can recognize the importance of non-technical aspects and effects of an architect’s design work, including its impact on the cultural and natural environment, and take responsibility for his or her technical decisions in the environment and for transmitting the cultural and natural heritage to the next generations;	B.U2.
PEU_U06	The graduate can use appropriately selected advanced computer simulations, analyses, and information technologies supporting architectural and urban design, as well as evaluate the obtained results and their usefulness in design and draw constructive conclusions;	1.2.1), 1.2.2), B.U1.
PEU_U07	The graduate can prepare and present a presentation devoted to the detailed results of implementing an engineering design task using various communication techniques, including one formulated in a generally understandable manner;	1.2.2), B.U2.
In terms of social competences		
PEU_K01	The graduate is ready to work professionally, comply with the principles of professional ethics, and take responsibility for his or his actions;	1.3.1)

PEU_K02	The graduate is ready to formulate opinions on the achievements of architecture and urban planning, their conditions, and other aspects of the architect's activity, as well as to provide information and opinions;	B.S1.
PEU_K03	The graduate is ready to perform a thorough self-assessment, articulate constructive criticisms about architectural and urban planning activities, as well as accepting criticisms of the solutions he or she presents, respond to such criticisms clearly and factually, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	B.S2.

Program content ensuring learning outcomes

As part of the course, students become familiar with the issues of practical shaping of construction systems using the *Research by Design* method. They acquire the skills to assess the scope of the usefulness of using individual construction systems in specific design tasks and the skills to combine different construction elements into complex systems. Students acquire the skills to use the aesthetic and symbolic potential of a construction system to shape the architectural form of a facility.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Classes	30
Preparation of a project	6
Self-study of class topics	7
Preparation of a report/summary/presentation/paper	8
Prepararation for an exam/credit	7
Credit/Exam	2
Student workload	**Hours** 75

Wrocław University of Science and Technology

Modern Technologies

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03733.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory in specialty
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate and understands engineering problems related to building design, issues related to physics, technology, methods and means for implementing ecologically responsible and sustainable design; principles, solutions, structures and building materials used in complex engineering tasks related to design; The graduate knows and understands advanced architectural theory useful in formulating and solving complex tasks, understands issues in the field of construction, technology and engineering of building installations, construction and physics of buildings, theoretical foundations of reasoning and scientific research to a degree that allows him to perform complex design tasks;	1.1.1), 1.1.4), 1.1.7), 1.1.9), B.W1., B.W5., B.W7.
In terms of skills		

PEU_U01	The graduate is able to use the experience gained during his/her studies to critically analyze conditions and formulate conclusions, is able to integrate advanced knowledge from various fields of science, The graduate is able to recognize the importance of non-technical aspects and effects of the architect's design work, including its impact on the cultural and natural environment, and is able to formulate opinions in the form of critical analysis related to architecture and present and synthetically describe the ideological foundations of the project;	1.2.1), B.U1., B.U2., B.U4.
In terms of social competences		
PEU_K01	The graduate is ready to learn throughout his/her life, inspire others to learn and organize the educational process, and to formulate information and opinions and inform the public about the achievements of architecture, their complex determinants and other aspects of the professional work of an architect;	1.3.4), 1.3.5), B.S1.

Program content ensuring learning outcomes

Course familiarize students with modern technologies related to construction, in the field of design, construction and use of building.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Preparaton for classes	8
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Meta-Habitat in Different Cultures

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03735.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	In terms of knowledge, the graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment	A.W1.
PEU_W02	In terms of knowledge, the graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines	A.W8.
In terms of skills		

PEU_U01	In terms of skills, the graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects	A.U1.
PEU_U02	In terms of skills, the graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design	A.U8.
PEU_U03	In terms of skills, the graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline	A.U9.
In terms of social competences		
PEU_K01	In terms of social skills, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems	A.S1.
PEU_K02	In terms of social skills, the graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe	A.S4.

Program content ensuring learning outcomes

The curriculum content of the course concerns:

- contemporary philosophical-social, civilization-technological and urban-spatial conditions of housing architecture in the world (evolutionary and structural-functional perspective),
- basic ethical and aesthetic problems in shaping the house and habitat in different cultures (individualism, regionalism, universalism),
- cultural diversity of archetypes of places and human activities and diversity of languages of spatial patterns of the house and habitat,
- contemporary trends in housing architecture in the world (meta-polis and meta-habitat in the post-modern world),
- creating a vision of living on My Planet, a vision with which the author of the project identifies and for which he takes full responsibility, is aware of the language of spatial patterns that he uses in designing housing architecture.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	45
Self-study of class topics	18
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Inventive Methods

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03736.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	In terms of knowledge, the graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment	A.W1.
PEU_W02	In terms of knowledge, the graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration	A.W6.

PEU_W03	In terms of knowledge, the graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines	A.W8.
In terms of skills		
PEU_U01	In terms of skills, the graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects	A.U1.
PEU_U02	In terms of skills, the graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing	A.U5.
PEU_U03	In terms of skills, the graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design	A.U8.
PEU_U04	In terms of skills, the graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning	A.U13.
In terms of social competences		
PEU_K01	In terms of social skills, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems	A.S1.
PEU_K02	In terms of social skills, the graduate is ready to speak and make presentations in public	A.S2.

Program content ensuring learning outcomes

The curriculum content of the course concerns:

- development of creative and workshop skills and stimulation of creative thinking through the use of inventive methods in architectural design,
- the conceptual dimension of architecture, methods of stimulating creative thinking and criteria for evaluating and interpreting an architectural work as tools for selecting the best variant from among many solutions,
- various design methods used by outstanding architects of modernism, post- and neo-modernism,
- inventive methods (intuitive, analytical, creative methods) used during a design course carried out in the form of architectural workshops,
- methods that allow for going beyond thinking habits and broadening the creator's imagination in the process of designing architecture.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	45

Self-study of class topics	18
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

ProtoLAB

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03665.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate can define a design problem and propose an original solution in the field of small architecture, industrial forms, and innovative structures;	1.1.10), 1.1.12), A.W6.
PEU_W02	The graduate can formulate the issues related to the design process and implementation of a product in architecture at subsequent stages;	1.1.11), A.W8.
PEU_W03	The graduate can characterize and recognize contemporary architectural and material solutions;	1.1.10), A.W6.
In terms of skills		
PEU_U01	The graduate can analyze design problems at various stages of the design and implementation process and select optimal solutions;	1.2.3), 1.2.4), A.U12., A.U9.
PEU_U02	The graduate can make decisions in a group, and plan and coordinate group activities;	1.2.5), A.U10., A.U11.

PEU_U03	The graduate can create an architectural element designed in advance on a 1:1 or 1:2 scale using basic construction tools;	1.2.1), A.U1., A.U13., A.U14., A.U5., A.U8.
In terms of social competences		
PEU_K01	The graduate is open to the ideas of his colleagues and is determined to achieve the jointly undertaken goals;	1.3.1), 1.3.2), 1.3.4), 1.3.5), A.S1., A.S2., A.S3.

Program content ensuring learning outcomes

As part of the course, students acquire knowledge of the methodology of designing a product in architecture from the concept stage to its implementation and knowledge of creative problem-solving in design based on given guidelines in the field of small architecture, industrial forms, and innovative structures. They will familiarize themselves with information on contemporary innovative architectural and material solutions. Students acquire skills in solving design problems intended for implementation through the full path from design to construction, as well as skills in perceiving relationships in teamwork sensitivity and care for the best possible final effect of the assigned task. Students acquire skills in using basic construction tools and power tools.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	10
Preparation of a project	23
Preparation of a report/summary/presentation/paper	30
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Recycling of Postindustrial

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03737.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the methods and means of implementing ecologically responsible sustainable design and the protection and conservation of the surrounding environment;	1.1.10), 1.1.7), A.W7.
In terms of skills		
PEU_U01	The graduate is able to use interdisciplinary knowledge and skills acquired during their studies to design a complex architectural object or urban complex that meets aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2), 1.2.3), A.U1., A.U10., A.U15., A.U6., A.U7.
In terms of social competences		
PEU_K01	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban values in the protection of the environment and cultural heritage;	1.3.3), A.S1., A.S2., A.S4.

Program content ensuring learning outcomes

The program content includes familiarization with the basic issues and contemporary trends in the transformation of post-industrial areas and buildings. The content includes learning the skills of developing and presenting post-industrial area revitalization projects and architectural solutions that combine the issues of protection and conservation of existing buildings with a new function and contemporary form of development.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	50
Preparation of a report/summary/presentation/paper	13
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Civic Buildings - their meaning, context and impact

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03738.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W02	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)
PEU_W03	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.	1.1.5)

PEU_W04	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project	1.1.6)
PEU_W05	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W06	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept.	1.1.11)
PEU_W07	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts	1.1.12)
PEU_W08	The graduate knows and understands the nature of the architectural profession and its role in society.	1.1.13)
PEU_W09	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment.	A.W1.
PEU_W10	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design.	A.W4.
PEU_W11	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
PEU_W12	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		
PEU_U01	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U02	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects.	A.U1.
PEU_U03	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations.	A.U4.

PEU_U04	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing.	A.U5.
PEU_U05	The graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values.	A.U7.
PEU_U06	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
PEU_U07	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline.	A.U9.
PEU_U08	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U09	The graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams.	A.U11.
PEU_U10	The graduate is able to estimate the time needed to complete a complex design task.	A.U12.
PEU_U11	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U12	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design.	A.U14.
PEU_U13	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to work in a professional manner, comply with the principles of professional ethics and take responsibility for his or her actions.	1.3.1)
PEU_K02	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K03	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K04	The graduate is ready to speak and make presentations in public.	A.S2.
PEU_K05	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects.	A.S3.

PEU_K06	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

The programme content of the course concerns:

- the design of a campus or a single public building with a high degree of functional complexity: a local government institution, public administration, the judiciary, in a specific location;
- design of buildings serving diverse groups of stakeholders;
- the problem of shaping the function and form of contemporary service architecture with significant symbolic content;
- integration of architecture and visual works necessary to convey symbolic content and visual information
- principles of incorporating architecture into the urban and social context;
- principles of universal design of public interiors of a facility and its surroundings;
- creative design based on analytical methods, application of functional-spatial and technical criteria in architecture, as well as verification of the correctness of architectural solutions on the basis of these criteria.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a report/summary/presentation/paper	14
Conducting literature research	14
Preparation of a project	35
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Hotels, offices, banks and stock exchange buildings

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03739.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	[A.W1.] In terms of knowledge, the graduate knows and understands: architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	A.W1.

PEU_W02	A.W5. In terms of knowledge, the graduate knows and understands: the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	A.W5.
PEU_W03	A.W8. In terms of knowledge, the graduate knows and understands: the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		
PEU_U01	A.U1. In terms of skills, the graduate is able to: design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
PEU_U02	A.U8. In terms of skills, the graduate is able to: think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
PEU_U03	A.U9. In terms of skills, the graduate is able to: integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U9.
PEU_U04	A.U11. In terms of skills, the graduate is able to: work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams;	A.U11.
PEU_U05	A.U12. In terms of skills, the graduate is able to: estimate the time needed to complete a complex design task;	A.U12.
PEU_U06	A.U13. In terms of skills, the graduate is able to: formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;	A.U13.
PEU_U07	A.U14. In terms of skills, the graduate is able to: prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design;	A.U14.
PEU_U08	A.U15. In terms of skills, the graduate is able to: implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	A.S1. In terms of social skills, the graduate is ready to: effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K02	A.S2. In terms of social skills, the graduate is ready to: speak and make presentations in public;	A.S2.

PEU_K03	A.S3. In terms of social skills, the graduate is ready to: take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.

Program content ensuring learning outcomes

Design of architectural objects of offices, hotels and banks in the context of urban planning and culture. Solving spatial and functional systems, programming, hierarchy and relations of space, projections of individual floors, sections, elevations, details with consideration of structural elements and construction issues. Issues of accessibility, sustainability, pro-environmental approach, health and safety issues, inclusiveness and high quality of adopted solutions.

Design of architectural objects of offices, hotels and banks in the context of urban planning and culture. Solving spatial and functional systems, programming, hierarchy and relations of space, projections of individual floors, sections, elevations, details with consideration of structural elements and construction issues. Issues of accessibility, sustainability, pro-environmental approach, health and safety issues, inclusiveness and high quality of adopted solutions.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	57
Credit/Exam	2
Preparaton for classes	6
Student workload	**Hours** 125

Wrocław University of Science and Technology

Assembly Halls and Spaces for Performance Designing

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03740.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	1.1.1 In terms of knowledge, the graduate knows and understands: structural, constructional and engineering problems associated with designing buildings;	1.1.1)
PEU_W02	[1.1.2)] In terms of knowledge, the graduate knows and understands: detailed issues in the field of architecture and urban planning related to solving complex design problems;	1.1.2)
PEU_W03	[1.1.4)] In terms of knowledge, the graduate knows and understands: issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents;	1.1.4), A.W4., A.W5., A.W8.
PEU_W04	[1.1.5)] In terms of knowledge, the graduate knows and understands: relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale;	1.1.5)

PEU_W05	[1.1.6)] In terms of knowledge, the graduate knows and understands: regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project;	1.1.6)
PEU_W06	[1.1.7)] In terms of knowledge, the graduate knows and understands: methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment;	1.1.7)
PEU_W07	[1.1.9)] In terms of knowledge, the graduate knows and understands: principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design;	1.1.9)
In terms of skills		
PEU_U01	[1.2.1)] In terms of skills, the graduate is able to: use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U02	[1.2.2)] In terms of skills, the graduate is able to: use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U03	[1.2.3)] In terms of skills, the graduate is able to: prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design;	1.2.3)
PEU_U04	[1.2.5)] In terms of skills, the graduate is able to: organize the work including all phases of design concept development.	1.2.5)
PEU_U05	A.U1. design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
PEU_U06	A.U7. perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values;	A.U7.
PEU_U07	A.U8. think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
PEU_U08	A.U9. integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U9.
PEU_U09	A.U11. work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams;	A.U11.
PEU_U10	A.U13. formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;	A.U13.

PEU_U11	A.U14. prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design;	A.U14.
In terms of social competences		
PEU_K01	[1.3.1)] In terms of social competence, the graduate is ready to: work in a professional manner, comply with the principles of professional ethics and take responsibility for his or her actions;	1.3.1)
PEU_K02	[1.3.2)] In terms of social competence, the graduate is ready to: respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.2)
PEU_K03	[1.3.3)] In terms of social competence, the graduate is ready to: take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage;	1.3.3)
PEU_K04	[A.S1.] In terms of social skills, the graduate is ready to: effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K05	[A.S2.] In terms of social skills, the graduate is ready to: speak and make presentations in public;	A.S2.
PEU_K06	A.S3. In terms of social skills, the graduate is ready to: take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.
PEU_K07	[A.S4.] In terms of social skills, the graduate is ready to: take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

Design of architectural objects related to cultural functions, particularly in concert halls. A brief historical outline of the evolution of spaces and buildings for performance (assembly spaces), typologies, and model projects. Solving spatial and functional systems, programming, hierarchy, and spatial relations, selected plans with a detailed solution for the hall's interior, sections, and the whole, including structural elements and construction issues. Issues of accessibility, sustainability, pro-environmental approach, visibility, good audibility, acoustics, health and safety issues, inclusiveness and high quality of the adopted solutions.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	13
Preparation of a project	50
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Architecture in public space

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03741.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate designs architecture of varying degrees of complexity, from simple tasks to objects of complex function in a complex context, in particular: simple objects that take into account the basic needs of users, multi-family dwellings, service buildings in residential complexes, public buildings and their complexes of varying scale and complexity in open landscape or urban environments;	A.W1.
PEU_W02	The graduate designs urban assemblies in the development of tasks of different scales and complexity, in particular: development assemblies, local development plans taking into account local conditions and contexts;	A.W2., A.W6.

PEU_W03	The graduate will select the principles of universal design, including the idea of designing spaces and buildings that are accessible to all users, in particular people with varying degrees of disability, in architecture, urban planning and spatial planning, and the principles of ergonomics, including the ergonomic parameters necessary to ensure that the designed space and facilities are fully functional for all users, in particular people with varying degrees of disability;	A.W5.
PEU_W04	The graduate will select the advanced analytical methods, tools, techniques and materials required to prepare design concepts in an interdisciplinary environment, with particular emphasis on inter-professional collaboration;	A.W8.
PEU_W05	The graduate recognises the interdisciplinary nature of architecture and urban design and the need to integrate knowledge from other disciplines and apply it in the design process in collaboration with specialists from these disciplines.	A.W8.
In terms of skills		
PEU_U01	The graduate designs simple and complex architectural objects, creating and transforming space to give it new values, according to a set or adopted programme, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects;	A.U1.
PEU_U02	The graduate designs a simple and complex urban complex;	A.U2.
PEU_U03	The graduate critically analyse the conditions, including the valorisation of the state of land use and development, formulate conclusions for spatial design and planning, forecast the processes of transformation of the settlement structure of towns and villages, and predict the social effects of these transformations;	A.U4., A.U7.
PEU_U04	The graduate evaluate the suitability of advanced methods and tools for solving simple and complex engineering problems typical of architecture, urbanism and spatial planning, and select and apply appropriate methods and tools in design;	A.U5.
PEU_U05	The graduate will critically analyse and evaluate the design and implementation of the project in terms of the modernisation and enhancement of architectural and urban structures of cultural value;	A.U7.
PEU_U06	The graduate think creatively and act, taking into account the complex and multifaceted conditions of design activity, and express their own artistic concepts in architectural and urban design;	A.U8.
PEU_U07	The graduate integrates information from different sources, interprets and critically analyses it in detail and draws conclusions from it, and formulates and justifies opinions and their relationship to the design process, based on the available scholarship in the discipline;	A.U9.
PEU_U08	The graduate communicates using a variety of techniques and tools in an interdisciplinary professional environment in an area relevant to architectural design, urban design and spatial planning;	A.U10.
PEU_U09	The graduate will produce architectural and construction documentation at appropriate scales with reference to the conceptual architectural design;	A.U11., A.U12., A.U13., A.U14., A.U15.
In terms of social competences		

PEU_K01	The graduate is open to the effective use of imagination, intuition, creativity and independent thinking to solve complex design problems;	A.S1.
PEU_K02	The graduate is capable of public speaking and presentations	A.S2.
PEU_K03	The graduate is ready to take on the role of coordinator of activities in the project process, to manage work in a team and to use interpersonal skills (conflict resolution, negotiation skills, delegation of tasks), to follow the rules of teamwork and to take responsibility for shared tasks and projects.	A.S3.

Program content ensuring learning outcomes

Pr 1
a - Introduction to the subject matter of the course: to introduce the students to the objectives, methods and design trends in the design of integrated architectural objects related to public space; to discuss and illustrate the issue of contextual design taking into account environmental, landscape, cultural and social values; to define the conditions for passing the course and the assessment criteria, to indicate the subject literature and the list of teaching materials / 4 hrs.
b - Introduction to Stage 1 - Preparatory work and collection and preparation of the necessary materials for analysis / 4 hours
PR 2
a - Presentation by the students of the materials and photos collected
b - Discussion of the issues of pre-design studies, the method of analysis, how they are developed and used in the design concept - design by research. / 4 h
Pr 3
a - Cloze test 1 (hierarchy of objectives and ways of achieving the objectives), presentation by students and discussion of the results with attention to the knowledge of the method of pre-design studies.
b - Individual work by the students on the conclusions of the analyses / 4 hours
Pr 4
a - Individual work of the students on the definition of the initial questions for the designed ensemble of integrated architectural facilities dedicated to the service zones of gastronomy, entertainment, culture, sport, play and leisure. Individual work on the analytical part (problem areas, problem tree, social structure of needs).
b - Documentation of results and discussion / 4 hours
Pr 5
a - Presentation and discussion of the results of the students' work
b - Introduction to Stage 2 - work on defining the main tasks of inclusive architectural objects and the utility programme for the designed objects integrated into the functional-spatial layout of the place / 4 hours
Pr 6
a - Presentation by students of preliminary diagrams of the relationship between the functions within the buildings and the functional-spatial layout of the place, discussion
b - Discussion on the issue of architectural objects integrating the inhabitants into the urban life and interacting with the surrounding public space / 4 hrs
Pr 7
a - individual work of the students on the design of a set of inclusive architectural objects, consolidated with the urban context
b - discussion of contemporary trends in the design of architecture in the public space / 4 hours
Pr 8
a - Execution of Cloistered Work 2 (design of an ensemble of inclusive architectural objects), presentation by students and discussion of results
b - Students' individual work on stage 3 - concept / 4 hours
Pr 9
a - Presentation by students of the preliminary design of the ensemble of inclusive architectural objects and discussion
b - individual work of students on the project / 4 h
Pr 10
a - Students' individual work on Stage 4 - Design of public spaces taking into account functional zoning. Design of small architectural objects dedicated to the zones of gastronomy, entertainment, culture, sport, play and rest.
b - Discussion of contemporary trends in flooring design and urban detailing. Building the image and identity of a place and highlighting new functions through cubic objects, small architecture, greenery, water, light / 4 hours
Pr 11

a - Presentation of the working version of the TMP by the students and discussion (with particular attention to the validity of the solutions).
b - Individual work of the students on the PZT / 4 hours
Pr 12
a - Execution of Cloister Work 3 (design of the floor and urban detail), presentation by students and discussion of the results
b - Individual work by students on Stage 5 - detail design / 4 hours
Pr 13
Individual student work on the project / 4 hours
Pr 14
a - Presentation by students of the final version of the ensemble of integrated architectural objects, consolidated with the urban context, and discussion (with particular attention to design graphic standards).
b - Individual student work on the project / 4 hours
Pr 15
Presentation by students and handover of the final project and discussion / 4 hours
Total hours 60 h

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	60
Credit/Exam	2
Preparation of a project	3
Student workload	**Hours** 125

Wrocław University of Science and Technology

Monumental architecture of Public Buildings

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03742.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings.	1.1.1)
PEU_W02	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W03	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)
PEU_W04	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project.	1.1.6)

PEU_W05	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)
PEU_W06	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W07	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular public use buildings and complexes of such buildings with a varying scale and level of complexity in an urban environment.	A.W1.
PEU_W08	The graduate knows and understands urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account.	A.W2.
PEU_W09	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
PEU_W10	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		
PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
PEU_U02	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements	1.2.2)
PEU_U03	The graduate is able to apply analytical methods in formulating and solving design tasks.	1.2.4)
PEU_U04	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects.	A.U1.
PEU_U05	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development.	A.U4.
PEU_U06	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
In terms of social competences		

PEU_K01	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)
PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K03	The graduate is ready to speak and make presentations in public.	A.S2.

Program content ensuring learning outcomes

The programme content of the subject concerns:
- ways of shaping public buildings (services of supra-local importance) situated in the existing contexts of a historic city,
- design of public buildings with complex function/technology and the role of the architect in this process,
- design of public buildings with a complex functional programme and formal and legal requirements, together with a detailed land development design,
- development of a multi-discipline architectural design,
- a creative, but at the same time critical approach to the design of public buildings embedded in a defined historic city environment,
- a search for innovative solutions in the confrontation of local tradition with modernity.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	60
Credit/Exam	2
Self-study of class topics	3
Student workload	**Hours** 125

Wrocław University of Science and Technology

Adaptation of historic buildings to the new function

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03743.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings;	1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W4., A.W5.
PEU_W02	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problem;	1.1.1), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W4., A.W5.
PEU_W03	The graduate knows and understands advanced issues related to architecture and urban planning useful for designing structures in the context of social, natural, economic, legal and other non-technical conditions of engineering activities;	1.1.1), 1.1.2), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W4., A.W5.

PEU_W04	The graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents;	1.1.1), 1.1.2), 1.1.3), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W4., A.W5.
PEU_W05	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.6), A.W1., A.W2., A.W3., A.W4., A.W5.
PEU_W06	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planni	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), A.W1., A.W2., A.W3., A.W4., A.W5.
PEU_W07	The graduate knows and understands architectural design in a complex context, public use buildings in an urban environment;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W2., A.W3., A.W4., A.W5.
PEU_W08	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W3., A.W4., A.W5.
PEU_W09	The graduate knows and understands spatial planning and spatial policy tools;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W4., A.W5.
PEU_W10	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W5.
PEU_W11	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, and the principles of ergonomics, necessary to provide full functionality of the space and structures under design;	1.1.1), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), A.W1., A.W2., A.W3., A.W4.
In terms of skills		
PEU_U01	The graduate is able to design a simple and complex architectural object, creating and transforming space so as to give it new values - in accordance with a set or adopted programme, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects;	A.U10., A.U11., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U02	The graduate is able to design a simple and complex urban complex;	A.U1., A.U10., A.U11., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U03	TThe graduate are able to produce planning studies on land use and interpret them to the extent necessary for urban and architectural scale design.	A.U1., A.U10., A.U11., A.U2., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U04	The graduate is able to make a critical analysis of conditions, including valorisation of the state of land development and building development; formulate conclusions for designing and spatial planning, forecast processes of transformations of the settlement structure of towns and villages, and predict social consequences of these transformations;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U05	The graduate is able to assess the suitability of advanced methods and tools for solving simple and complex engineering tasks typical of architecture, urban planning and spatial planning and to select and apply appropriate methods and tools in design;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U4., A.U6., A.U7., A.U8., A.U9.

PEU_U06	The graduate is able to develop a conservation design concept for the transformation of an architectural and urban structure with cultural values, taking into account the protection of these values and appropriate methods and techniques, in accordance with the adopted programme taking into account non-technical aspects;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U4., A.U5., A.U7., A.U8., A.U9.
PEU_U07	The graduate is able to critically analyse and evaluate the project and the way it is implemented in terms of modernisation and additions to architectural and urban structures with cultural values;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U4., A.U5., A.U6., A.U8., A.U9.
PEU_U08	The graduate is able to think creatively and act, taking into account the complex and multifaceted conditions of design activity, and to express his/her own artistic concepts in architectural and urban design;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U9.
PEU_U09	The graduate is able to integrate information obtained from various sources, interpret and critically analyse it in detail and draw conclusions from it, as well as formulate and justify opinions and demonstrate their relation to the design process, based on the available scientific output in the discipline;	A.U1., A.U10., A.U11., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8.
PEU_U10	The graduate is able to communicate using a variety of techniques and tools in a professional and interdisciplinary environment within the scope relevant to architectural and urban design and spatial planning;	A.U1., A.U11., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
PEU_U11	The graduate is able to work individually and as part of a team, including with specialists from other disciplines, and to take a leading role in such teams;	A.U1., A.U10., A.U2., A.U3., A.U4., A.U5., A.U6., A.U7., A.U8., A.U9.
In terms of social competences		
PEU_K01	The graduate is prepared to use imagination, intuition, creativity and independent thinking effectively to solve complex design problems;	A.S2., A.S3., A.S4.
PEU_K02	The graduate is ready for public speaking and presentations;	A.S1., A.S3., A.S4.
PEU_K03	The graduate is ready to take on the role of coordinator of activities in the project process, to manage work in a team and to use interpersonal skills (conflict resolution, negotiation skills, delegation of tasks), to conform to the rules of teamwork and to take responsibility for joint tasks and projects;	A.S1., A.S2., A.S4.
PEU_K04	The graduate is ready to take responsibility for the shaping of the natural environment and the cultural landscape, including the preservation of the heritage of the region, the country and Europe;	A.S1., A.S2., A.S3.

Program content ensuring learning outcomes

C1 acquainting with the issues of protection of historic monuments and with the basic concepts of monument protection.
C2 familiarize with the relationship between man and architecture and the need to adapt architecture to human needs and human scale.
C3 shaping responsibility for humanistic, social, cultural, architectural and urban values in the protection of the environment and cultural heritage.
C4 the ability to define the style and date of the building, learn about its history and transformations to the extent necessary for the proper execution of architectural designs.
C5 the ability to develop analyzes of the results of field work in the form of graphic and descriptive documentation, in the context of the multi-sector nature of architectural design and the need to cooperate with other specialists.
C6 the ability to develop conservation recommendations and conclusions and apply them in design work.
C7 Ability to design an architectural detail.

Calculation of ECTS points

Activity form	Activity hours
Project	60
Preparaton for classes	30
Preparation of a project	20
Conducting literature research	7
Self-study of class topics	6
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Workplace Ergonomics

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03744.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the relationships between humans and architecture and between architecture and the surrounding environment, as well as the need to adapt architecture to human needs and human scale;	1.1.5)
PEU_W02	The graduate knows and understands the principles of collecting information and its interpretation as part of preparing a design concept;	1.1.11)
PEU_W03	The graduate knows and understands the principles of professional presentation of architectural and urban planning concepts;	1.1.12)

PEU_W04	The graduate knows and understands architectural design of varying degrees of complexity, from simple tasks to objects with a complex function in a complicated context, in particular: simple objects taking into account the basic needs of users, single- and multi-family housing developments, service facilities in residential building complexes, public utility facilities and their complexes of varying scale and complexity in an open landscape or urban environment;	A.W1.
PEU_W05	The graduate knows and understands the principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular people with disabilities, in architecture, urban planning and spatial planning, as well as the principles of ergonomics, including the ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, in particular people with disabilities;	A.W5.
PEU_W06	The graduate knows and understands advanced analysis methods, tools, techniques, and materials necessary to prepare design concepts in an interdisciplinary environment, with particular emphasis on inter-industry cooperation;	A.W6.
PEU_W07	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other fields, as well as its application in the design process in collaboration with specialists in these fields;	A.W8.
In terms of skills		
PEU_U01	The graduate can use interdisciplinary knowledge and skills acquired during their studies in order to design a complex architectural object or urban complex that meets aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U02	The graduate can prepare an advanced graphic, written, and oral presentation of his/her own design concepts in the field of architecture and urban planning, meeting the requirements of professional notation appropriate for architectural and urban design;	1.2.3)
PEU_U03	The graduate can design a simple and complex architectural object, creating and transforming space in order to give it new values – in accordance with a given or adopted program, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects;	A.U1.
PEU_U04	The graduate can evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks typical of architecture, urban planning, and spatial planning, and select and apply appropriate methods and tools in design.	A.U5.
PEU_U05	The graduate can integrate information obtained from various sources, interpret and critically analyze them in detail, and draw conclusions from them, as well as formulate and justify opinions and demonstrate their relationship to the design process, based on the available scientific achievements in the discipline.	A.U9.
PEU_U06	The graduate can communicate using a variety of techniques and tools in a professional and interdisciplinary environment within the scope appropriate to architectural and urban design and spatial planning;	A.U10.
In terms of social competences		

PEU_K01	The graduate is ready to undertake and perform work professionally, including compliance with the principles of professional ethics and taking responsibility for the actions undertaken;	1.3.1)
PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complex design problems;	A.S1.
PEU_K03	The graduate is ready for public speaking and presentations;	A.S2.

Program content ensuring learning outcomes

Learning the basic issues of designing various types of rooms and their equipment in terms of work comfort, the impact of functional requirements on spatial organization, and ergonomic requirements on the quality of use of selected types of workspaces in the home environment and selected public utility buildings, and the degree of adaptation of rooms to the basic functional and spatial needs of working people.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	18
Conducting literature research	5
Preparation of a project	18
Self-study of class topics	12
Prepararation for an exam/credit	10
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Futuristic Housing Architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03745.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale;	1.1.5)
PEU_W02	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	A.W1.

PEU_W03	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines;	A.W8.
PEU_W04	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings;	1.1.1)
In terms of skills		
PEU_U01	The graduate is able to organize the work including all phases of design concept development;	1.2.5)
PEU_U02	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
PEU_U03	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U9.
PEU_U04	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U05	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.2)
PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K03	The graduate is ready to speak and make presentations in public;	A.S2.

Program content ensuring learning outcomes

Possible and predicted development of residential architecture in the near and distant, difficult to determine future.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	57
Credit/Exam	2
Self-study of class topics	6

Student workload	Hours 125

Wrocław University of Science and Technology

Housing Architecture for Seniors

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03746.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		

PEU_W01	The graduate knows and understands architectural design of various levels of complexity, from simple tasks to objects with complex functions in a complex context, in particular: simple objects that take into account the basic needs of users, single- and multi-family residential buildings, service facilities in complexes housing development, public utility facilities and their complexes of various scale and complexity in an open landscape or urban environment; The graduate knows and understands the principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, as well as the principles of ergonomics, including the necessary ergonomic parameters to ensure full functionality of the designed space and facilities for all users, in particular for people with disabilities; The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other fields, as well as its application in the design process in cooperation with specialists in these fields;	A.W1., A.W5., A.W8.
In terms of skills		
PEU_U01	The graduate is able to design a simple and complex architectural object, creating and transforming the space to give it new values - in accordance with a given or adopted program, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects; The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering problems and research problems in the field of architectural and urban design and spatial planning; The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning;	A.U1., A.U13., A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking in order to solve complex design problems; The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preserving the heritage of the region, country and Europe;	A.S1., A.S4.

Program content ensuring learning outcomes

Improving skills related to the study of urban and architectural conditions and developing the need to conduct research and analyzes in architectural design related to architecture for seniors.
Getting to know the latest trends in designing the architecture of facilities dedicated to the elderly.
Teaching the design of senior facilities in connection with medical technology, the needs of users and staff.
Developing spatial imagination and the ability to create social spaces developing empathy.
Principles of universal design, including the idea of designing spaces and buildings for all users, in particular for people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users , especially for people with disabilities.
"Hard" and „soft" elements in creating a new quality of housing.
Architecture dedicated to housing communities. Creating community spaces in residential buildings:
• cohousing,
• green structures - urban farm,
• universal design.
Alternative housing construction - best practices.
Sustainable development in housing construction. Use of ecological materials.
Developing the ability to develop an architectural design in a clear and graphically attractive way.

Calculation of ECTS points

Activity form	Activity hours
Project	60
Preparation of a project	60
Credit/Exam	2
Self-study of class topics	3
Student workload	**Hours** 125

Wrocław University of Science and Technology

Designing for People with Disabilities

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03747.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands the relationships between humans and architecture and between architecture and the environment surrounding it, as well as the need to adapt architecture to human needs and human scale;	1.1.5)
PEU_W02	The graduate knows and understands the principles of collecting information and its interpretation as part of preparing a design concept;	1.1.11)
PEU_W03	The graduate knows and understands the principles of professional presentation of architectural and urban planning concepts;	1.1.12)

PEU_W04	The graduate knows and understands the principles of professional presentation of architectural and urban planning concepts, from simple tasks to objects with a complex function in a complex context, in particular: simple objects taking into account the basic needs of users, single- and multi-family housing, service facilities in residential building complexes, public utility facilities and their complexes of various scales and complexity in an open landscape or urban environment;	A.W1.
PEU_W05	The graduate knows and understands the principles of universal design, including the idea of designing spaces and buildings accessible to all users, in particular people with disabilities, in architecture, urban planning and spatial planning, as well as the principles of ergonomics, including the ergonomic parameters necessary to ensure full functionality of the designed space and facilities for all users, in particular people with disabilities;	A.W5.
PEU_W06	The graduate knows and understands advanced analysis methods, tools, techniques and materials necessary to prepare design concepts in an interdisciplinary environment, with particular emphasis on inter-industry cooperation;	A.W6.
In terms of skills		
PEU_U01	The graduate can use interdisciplinary knowledge and skills acquired during their studies in order to design a complex architectural object or urban complex that meets aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U02	The graduate can prepare an advanced graphic, written, and oral presentation of his/her own design concepts in the field of architecture and urban planning, meeting the requirements of professional notation appropriate for architectural and urban design;	1.2.3)
PEU_U03	The graduate can design a simple and complex architectural object, creating and transforming space in order to give it new values – in accordance with a given or adopted program, taking into account the requirements and needs of all users, the spatial and cultural context, technical and non-technical aspects;	A.U1.
PEU_U04	The graduate can evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks typical of architecture, urban planning, and spatial planning, and select and apply appropriate methods and tools in design;	A.U5.
PEU_U05	The graduate can integrate information obtained from various sources, interpret and critically analyze them in detail, and draw conclusions from them, as well as formulate and justify opinions and demonstrate their relationship to the design process, based on the available scientific achievements in the discipline;	A.U9.
PEU_U06	The graduate can communicate using a variety of techniques and tools in a professional and interdisciplinary environment within the scope appropriate to architectural and urban design and spatial planning;	A.U10.
PEU_U07	The graduate can implement the principles and guidelines of universal design in architecture, urban planning, and spatial planning;	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to undertake and perform work in a professional manner, including compliance with the principles of professional ethics and taking responsibility for the undertaken actions;	1.3.1)

PEU_K02	The graduate is ready to effectively use imagination, intuition, creative attitude, and independent thinking to solve complex design problems;	A.S1.
PEU_K03	The graduate is ready for public speaking and presentations,	A.S2.

Program content ensuring learning outcomes

Familiarizing students with: the basic issues of designing various types of rooms and their equipment in terms of the comfort of work and rest of disabled people, the classification of disabilities in terms of architectural design, the conditions for adapting rooms to the basic functional and spatial needs of people with reduced psychophysical abilities, directions of development in the design of interior architecture for the disabled.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparaton for classes	18
Conducting literature research	5
Preparation of a project	16
Self-study of class topics	12
Prepararation for an exam/credit	12
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Community Planning Process in Practice

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03748.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	A.W2., A.W3., A.W5., A.W8.
PEU_W02	The graduate knows and understands spatial planning and spatial policy tools;	A.W2., A.W3., A.W5., A.W8.

PEU_W03	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	A.W2., A.W3., A.W5., A.W8.
In terms of skills		
PEU_U01	The graduate is able to elaborate planning studies related to spatial development and interpret them to the extent that is necessary for urban and architectural design;	A.U1., A.U13., A.U3., A.U4., A.U5., A.U8., A.U9.
PEU_U02	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations;	A.U1., A.U13., A.U3., A.U4., A.U5., A.U8., A.U9.
PEU_U03	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U1., A.U13., A.U3., A.U4., A.U5., A.U8., A.U9.
PEU_U04	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U1., A.U13., A.U3., A.U4., A.U5., A.U8., A.U9.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1., A.S2., A.S3.
PEU_K02	The graduate is ready to speak and make presentations in public;	A.S1., A.S2., A.S3.
PEU_K03	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S1., A.S2., A.S3.

Program content ensuring learning outcomes

The course content covers:

- the role, legal requirements, and methods of public participation in the context of urban and architectural design,
- the importance of involving stakeholders in design processes,
- the benefits of actively engaging local communities,
- the impact of participation on quality of life and social integration,
- techniques for conducting public participation,
- basic methods for involving citizens in design processes, such as workshops, public consultations, surveys, and needs mapping,
- designing a participation process and developing an urban concept for a selected area, taking into account theoretical foundations, legal requirements, and an analysis of best practices in participation.

Calculation of ECTS points

Activity form	Activity hours
Project	60
Preparaton for classes	60
Credit/Exam	2
Self-study of class topics	3
Student workload	**Hours** 125

Wrocław University of Science and Technology

Waterfront - Urban Waterside Zones

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03749.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 60 h, 5 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands urban design related to completing tasks that vary in scale and level of complexity, in particular building complexes, and local development plans that take local conditions and relations into account;	A.W2.
PEU_W02	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	A.W5.
In terms of skills		

PEU_U01	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	A.U1.
PEU_U02	The graduate is able to design a simple and compound urban complex;	A.U2.
PEU_U03	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations;	A.U4.
PEU_U04	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U8.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K02	The graduate is ready to speak and make presentations in public;	A.S2.
PEU_K03	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.

Program content ensuring learning outcomes

Content presented and discussed during classes 1-15, concerning design in waterside areas, with particular emphasis on riverside areas.

Calculation of ECTS points

Activity form	**Activity hours**
Project	60
Preparation of a project	60
Self-study of class topics	3
Credit/Exam	2
Student workload	**Hours** 125

Wrocław University of Science and Technology

Social and Service Architecture

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03751.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings	1.1.1)
PEU_W02	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W03	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies	1.1.3)

PEU_W04	The graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents.	1.1.4)
PEU_W05	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.	1.1.5)
PEU_W06	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project	1.1.6)
PEU_W07	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment	1.1.7)
PEU_W08	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design.	1.1.9)
PEU_W09	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W10	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept.	1.1.11)
PEU_W11	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts.	1.1.12)
PEU_W12	The graduate knows and understands the nature of the architectural profession and its role in society.	1.1.13)
PEU_W13	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment	A.W1.
PEU_W14	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design	A.W4.
PEU_W15	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities	A.W5.
PEU_W16	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration	A.W6.
PEU_W17	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		

PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
PEU_U02	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design.	1.2.3)
PEU_U04	The graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study.	1.2.4)
PEU_U05	The graduate is able to organize the work including all phases of design concept development.	1.2.5)
PEU_U06	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects	A.U1.
PEU_U07	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations	A.U4.
PEU_U08	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing.	A.U5.
PEU_U09	The graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values.	A.U7.
PEU_U10	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
PEU_U11	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline	A.U9.
PEU_U12	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U13	The graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams.	A.U11.

PEU_U14	The graduate is able to estimate the time needed to complete a complex design task	A.U12.
PEU_U15	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U16	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design.	A.U14.
PEU_U17	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)
PEU_K03	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems	A.S1.
PEU_K04	The graduate is ready to speak and make presentations in public.	A.S2.
PEU_K05	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects.	A.S3.
PEU_K06	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

The programme content of the course concerns:

- developing architectural functional-spatial concepts based on students' own conceptual assumptions and using building programming skills in architecture as a theoretically and technically advanced, socially sensitive architectural tool to solve contemporary social, environmental and cultural problems.
- a functional-utility programme (feasibility study with functional programs) which complies with the Public Procurement Act (architectural part), as well as the execution of a concept based on such a programme,
- tools for substantive assessment of the concept and architectural realisation (e.g. BPE, case studies, checklists),
- constructing interdisciplinary programme and spatial concepts of buildings with complex functions in an intricate context, in order to prepare them for the independent creation of substantive tools for architectural design.

The scope of the course includes the three initial phases of architectural design:

- pre-design studies with feasibility analysis,
- formulation of a building programme,
- extended conception of a building with a complex function.

Calculation of ECTS points

Activity form	**Activity hours**

Project	105
Preparation of a report/summary/presentation/paper	15
Conducting literature research	26
Preparation of a project	77
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Experimental Architecture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03752.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	In terms of knowledge, the graduate knows and understands structural, constructional and engineering problems associated with designing buildings	1.1.1)
PEU_W02	In terms of knowledge, the graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems	1.1.2)
PEU_W03	In terms of knowledge, the graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies	1.1.3)

PEU_W04	In terms of knowledge, the graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents	1.1.4)
PEU_W05	In terms of knowledge, the graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale	1.1.5)
PEU_W06	In terms of knowledge, the graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project	1.1.6)
PEU_W07	In terms of knowledge, the graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment	1.1.7)
PEU_W08	In terms of knowledge, the graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design	1.1.9)
PEU_W09	In terms of knowledge, the graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists	1.1.10)
PEU_W10	In terms of knowledge, the graduate knows and understands principles of collecting information and interpreting it when developing a design concept	1.1.11)
PEU_W11	In terms of knowledge, the graduate knows and understands principles of professional presentation of architectural and urban planning concepts	1.1.12)
PEU_W12	In terms of knowledge, the graduate knows and understands the nature of the architectural profession and its role in society	1.1.13)
PEU_W13	In terms of knowledge, the graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment	A.W1.
PEU_W14	In terms of knowledge, the graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design	A.W4.
PEU_W15	In terms of knowledge, the graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities	A.W5.
PEU_W16	In terms of knowledge, the graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration	A.W6.

PEU_W17	In terms of knowledge, the graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines	A.W8.
In terms of skills		
PEU_U01	In terms of skills, the graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context	1.2.1)
PEU_U02	In terms of skills, the graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values	1.2.2)
PEU_U03	In terms of skills, the graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design	1.2.3)
PEU_U04	In terms of skills, the graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study	1.2.4)
PEU_U05	In terms of skills, the graduate is able to organize the work including all phases of design concept development	1.2.5)
PEU_U06	In terms of skills, the graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects	A.U1.
PEU_U07	In terms of skills, the graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations	A.U4.
PEU_U08	In terms of skills, the graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing	A.U5.
PEU_U09	In terms of skills, the graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values	A.U7.
PEU_U10	In terms of skills, the graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design	A.U8.

PEU_U11	In terms of skills, the graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline	A.U9.
PEU_U12	In terms of skills, the graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning	A.U10.
PEU_U13	In terms of skills, the graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams	A.U11.
PEU_U14	In terms of skills, the graduate is able to estimate the time needed to complete a complex design task	A.U12.
PEU_U15	In terms of skills, the graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning	A.U13.
PEU_U16	In terms of skills, the graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design	A.U14.
PEU_U17	In terms of skills, the graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning	A.U15.
In terms of social competences		
PEU_K01	In terms of social competence, the graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession	1.3.2)
PEU_K02	In terms of social competence, the graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage	1.3.3)
PEU_K03	In terms of social skills, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems	A.S1.
PEU_K04	In terms of social skills, the graduate is ready to speak and make presentations in public	A.S2.
PEU_K05	In terms of social skills, the graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects	A.S3.
PEU_K06	In terms of social skills, the graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe	A.S4.

Program content ensuring learning outcomes

The curriculum content of the course concerns:

- future trends in the development of architecture and innovative technologies
- complex and multi-layered research problems related to the extreme challenges facing architecture resulting from

the technological revolution and rapid changes occurring in the human living environment (e.g. conflicts between the techno- and the biosphere, climate catastrophes, environmental pollution, population migration, social conflicts, etc.)
- modern trends in architectural design in the digital era (e.g. interactive, generative, biomimetic, metamorphic, metabolic, kinetic forms, etc.)
- architectural experiment based on selected research tools
- innovative solutions for difficult-to-solve architectural and urban problems of the modern world at the interface between the techno-sphere and the biosphere (from high-tech to low-tech).

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparation of a project	90
Preparation of a report/summary/presentation/paper	8
Conducting literature research	10
Self-study of class topics	10
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Adaptive Architecture

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
Architecture and Urban Planning

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000AUPS.32PS.03753.25

Lecture languages
English

Mandatoriness
Elective

Block
Specialty subjects

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings.	1.1.1)
PEU_W02	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems.	1.1.2)
PEU_W03	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies.	1.1.3)

PEU_W04	The graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents.	1.1.4)
PEU_W05	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale.	1.1.5)
PEU_W06	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project.	1.1.6)
PEU_W07	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)
PEU_W08	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design.	1.1.9)
PEU_W09	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists.	1.1.10)
PEU_W10	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept.	1.1.11)
PEU_W11	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts.	1.1.12)
PEU_W12	The graduate knows and understands the nature of the architectural profession and its role in society.	1.1.13)
PEU_W13	The graduate knows and understands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment	A.W1.
PEU_W14	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design.	A.W4.
PEU_W15	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
PEU_W16	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration.	A.W6.
PEU_W17	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines.	A.W8.
In terms of skills		

PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
PEU_U02	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a convention that satisfies the requirements of professional architectural and urban design.	1.2.3)
PEU_U04	The graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study.	1.2.4)
PEU_U05	The graduate is able to organize the work including all phases of design concept development.	1.2.5)
PEU_U06	The graduate is able to design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects.	A.U1.
PEU_U07	The graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations.	A.U4.
PEU_U08	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing.	A.U5.
PEU_U09	The graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values.	A.U7.
PEU_U10	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design.	A.U8.
PEU_U11	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline.	A.U9.
PEU_U12	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U13	The graduate is able to work individually and in a team, including collaborating with specialists from other industries, and take on a leadership role in such teams.	A.U11.

PEU_U14	The graduate is able toestimate the time needed to complete a complex design task.	A.U12.
PEU_U15	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U16	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design.	A.U14.
PEU_U17	The graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession.	1.3.2)
PEU_K02	The graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)
PEU_K03	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K04	The graduate is ready to speak and make presentations in public.	A.S2.
PEU_K05	The graduate is ready to take on the role of coordinator of activities in the design processes, manage team work and use interpersonal skills (conflict resolution, negotiation, task delegation), follow teamwork principles and take responsibility for joint tasks and projects.	A.S3.
PEU_K06	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe.	A.S4.

Program content ensuring learning outcomes

Information about environmental threats already occurring or forecasted (in the natural and social sphere: climate change, depletion of non-renewable energy sources, diseases of civilization resulting from deterioration of air quality, migration, aging societies, weakening of social ties, etc.).
Deepening the scope of methodological studies and environmental analyses, including those based on available scientific literature, and using them in the design process.
Information about and implementation of principles, standards and good practices of sustainable development, and forecasts of changes in the structure of cities resulting from social, economic and environmental (climate) conditions;
Information about structural, material, construction and infrastructure innovations aimed at improving the quality of life in the city in the individual and social dimension; Indication and use of advanced architectural solutions (modifications of existing structures or creation of new ones) aimed at minimizing the negative effects of changes occurring in the environment;
Information about and implementation of architectural adaptability, i.e.: enabling conscious shaping, control and adjustment of the climate inside buildings and their immediate vicinity and adjusting the form of the building to the changing activities of users.
Familiarization with complex issues of sustainable architecture and analysis of their interdependencies: ecological baggage of the materials used, saving energy and other environmental resources, renewable energy sources, sustainable water management, integrated greenery and social accessibility.
Application of the Integrated Design Process. Participation in the process as an architect and coordinator.

Calculation of ECTS points

Activity form	Activity hours
Project	105
Preparaton for classes	45
Preparation of a project	57
Self-study of class topics	8
Preparation of a report/summary/presentation/paper	8
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Architectural Design - Service and Housing Development in the City

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03754.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		

PEU_W01	The graduate knows and understands the structural, construction, and engineering challenges associated with building design; possesses detailed knowledge and understanding of architectural and urban planning issues relevant to solving complex design problems; The graduate is familiar with advanced issues in architecture and urban planning that are essential for designing architectural structures and urban complexes, considering social, cultural, environmental, historical, economic, legal, and other non-technical conditions of engineering activity, integrating the knowledge acquired during studies; The graduate knows and understands the principles of physics, technology, and building functionality in a way that ensures user comfort and protection from atmospheric factors; The graduate understand the relationships between humans and architecture, as well as between architecture and its surrounding environment, recognizing the need to adapt architecture to human needs and scale; The graduate is well-versed in legal regulations and procedures necessary for implementing building projects and integrating them with overall planning frameworks; The graduate is knowledgeable about methods and strategies for implementing ecologically responsible sustainable design and for protecting and conserving the surrounding environment; The graduate understand the principles, solutions, constructions, and materials used in executing complex engineering tasks in architectural and urban design; The graduate recognizes architectural and urban planning issues in the context of the multidisciplinary nature of these fields and the necessity of collaboration with other professionals; The graduate understands the principles of collecting and interpreting information in preparing design concepts; The graduate know and understand the principles of professional presentation of architectural and urban planning concepts; The graduate is aware of the nature of the architect’s profession and their role in society; The graduate is skilled in architectural design at varying levels of complexity, ranging from simple tasks to projects with complex functions in challenging contexts, specifically: simple structures addressing basic user needs, single-family and multi-family housing developments, service facilities within residential complexes, public utility buildings, and their complexes at various scales and complexities in open landscapes or urban environments; The graduate understands the provisions of local spatial development plans necessary for architectural design; The graduate know and understand the principles of universal design, including the concept of creating spaces and buildings accessible to all users, particularly people with disabilities, in architecture, urban planning, and spatial planning; The graduate understand ergonomics principles, including ergonomic parameters essential for ensuring the full functionality of designed spaces and facilities for all users, especially those with disabilities; The graduate is familiar with advanced analysis methods, tools, techniques, and materials necessary for developing design concepts in interdisciplinary environments, with a particular emphasis on cross-disciplinary collaboration; The graduate understand the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other fields while applying it in the design process in cooperation with specialists from those disciplines;	1.1.1), 1.1.10), 1.1.11), 1.1.12), 1.1.13), 1.1.2), 1.1.3), 1.1.4), 1.1.5), 1.1.6), 1.1.7), 1.1.9), A.W1., A.W4., A.W5., A.W6., A.W8.
In terms of skills		

PEU_U01	The graduate is capable of applying the experiences gained during their studies to critically analyze conditions and formulate conclusions for design in a complex, interdisciplinary context. The graduate is able to utilize interdisciplinary knowledge and skills acquired during their studies to design a complex architectural object or urban ensemble that meets aesthetic and technical requirements, creating and transforming space to imbue it with new values. The graduate is proficient in preparing advanced graphic, written, and oral presentations of their architectural and urban design concepts, adhering to professional standards required for architectural and urban design documentation. They can employ analytical methods to formulate and solve design tasks, present the theoretical background and justification for proposed solutions in the form of a scientific study. The graduate is skilled in organizing work to encompass all phases of developing a design concept. They can design both simple and complex architectural objects, creating and transforming space to imbue it with new values in accordance with a given or adopted program that accounts for the needs and requirements of all users, the spatial and cultural context, as well as technical and non-technical aspects. The graduate is capable of conducting a critical analysis of conditions, including evaluating the state of land development and buildings; formulating conclusions for design and spatial planning; forecasting transformation processes in the settlement structure of cities and villages; and predicting the social effects of such transformations. The graduate can assess the applicability of advanced methods and tools for solving simple and complex engineering tasks typical for architecture, urban planning, and spatial planning, as well as select and apply the appropriate methods and tools in design. They are able to critically analyze and evaluate projects and their implementation methods in the context of modernizing and supplementing architectural and urban structures with cultural value. The graduate demonstrates creative thinking and action, considering the complex and multifaceted conditions of design activity, while also expressing their own artistic concepts in architectural and urban design. They can integrate information from various sources, interpret it critically and in detail, draw conclusions, formulate and justify opinions, and establish their relevance to the design process, relying on available scientific achievements in the field. The graduate communicates effectively using various techniques and tools within professional and interdisciplinary environments in the field of architectural and urban design as well as spatial planning. They can work both independently and in teams, including with specialists from other fields, and assume a leading role in such teams. The graduate can estimate the time required to complete a complex design task. They are capable of formulating new ideas and hypotheses, analyzing and testing innovations related to engineering and research problems in architectural and urban design and spatial planning. The graduate can prepare architectural and construction documentation at appropriate scales based on a conceptual architectural design. They are adept at implementing the principles and guidelines of universal design in architecture, urban planning, and spatial planning;	1.2.1), 1.2.2), 1.2.3), 1.2.4), 1.2.5), A.U1., A.U10., A.U11., A.U12., A.U13., A.U14., A.U15., A.U4., A.U5., A.U7., A.U8., A.U9.
In terms of social competences		

PEU_K01	The graduate is prepared to respect the diversity of opinions and cultures and to demonstrate sensitivity to the social aspects of the profession. The graduate is ready to take responsibility for humanistic, social, cultural, architectural, and urban values in the protection of the environment and cultural heritage. The graduate is prepared to effectively use imagination, intuition, a creative mindset, and independent thinking to solve complex design problems. They are ready for public speaking and presentations. The graduate is prepared to take on the role of coordinator in the design process, manage teamwork, and utilize interpersonal skills such as conflict resolution, negotiation, task delegation, adherence to teamwork principles, and accountability for shared tasks and projects. The graduate is prepared to take responsibility for shaping the natural environment and cultural landscape, including the preservation of the heritage of the region, the country, and Europe;	1.3.2), 1.3.3), A.S1., A.S2., A.S3., A.S4.

Program content ensuring learning outcomes

Topics from 1 to 15.

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparation of a project	50
Conducting literature research	20
Self-study of class topics	20
Preparation of a report/summary/presentation/paper	18
Preparaton for classes	10
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Hospitals and other healthcare facilities

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03755.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands structural, constructional and engineering problems associated with designing buildings;	1.1.1)
PEU_W02	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problem;	1.1.2)
PEU_W03	The graduate knows and understands advanced issues related to architecture and urban planning useful for designing structures in the context of social, natural, economic, legal and other non-technical conditions of engineering activities;	1.1.3)
PEU_W04	The graduate knows and understands issues related to the physics, technology and functions of buildings to the extent that ensures the comfort of their utilization and protection against atmospheric agents;	1.1.4)

PEU_W05	The graduate knows and understands relations between man and architecture and between architecture and the surrounding environment, and the necessity to adapt architecture to human needs and scale;	1.1.5)
PEU_W06	The graduate knows and understands regulations and procedures that are necessary to implement building projects and integrate buildings with the overall urban planning project.	1.1.6)
PEU_W07	The graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment;	1.1.7)
PEU_W08	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural design.	1.1.9)
PEU_W09	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	1.1.10)
PEU_W10	The graduate knows and understands principles of collecting information and interpreting it when developing a design concept;	1.1.11)
PEU_W11	The graduate knows and understands principles of professional presentation of architectural concepts;	1.1.12)
PEU_W12	The graduate knows and understands the nature of the architectural profession and its role in society;	1.1.13)
PEU_W13	The graduate knows and understands architectural design in a complex context, public use buildings in an urban environment	A.W1.
PEU_W14	The graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design;	A.W4.
PEU_W15	The graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, and the principles of ergonomics, necessary to provide full functionality of the space and structures under design;	A.W5.
PEU_W16	The graduate knows and understands advanced methods of analysis, tools, techniques and materials necessary to develop design concepts in an interdisciplinary environment, with particular emphasis on cross-industry collaboration;	A.W6.
PEU_W17	The graduate knows and understands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines;	A.W8.
In terms of skills		
PEU_U01	The graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context;	1.2.1)
PEU_U02	The graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values;	1.2.2)
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture;	1.2.3)

PEU_U04	The graduate is able to evaluate the usefulness of advanced methods and tools for solving simple and complex engineering tasks that are typical in architecture, urban planning and spatial planning, and choose and apply appropriate methods and tools in designing;	1.2.4)
PEU_U05	The graduate is able to perform a critical analysis and assessment of a project and its implementation with respect to the modernization and reconstruction of architectural and urban structures that have cultural values;	1.2.5)
PEU_U06	The graduate is able to think and act creatively, with an understanding that designing is a complex and multi-faceted endeavor, and express his or her own artistic concepts in architectural and urban design;	A.U1.
PEU_U07	The graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline;	A.U4.
PEU_U08	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design;	A.U5.
PEU_U09	The graduate is able to work individually and in a team, including collaborating with specialists from other industries;	A.U7.
PEU_U10	The graduate is able to estimate the time needed to complete a complex design task;	A.U8.
PEU_U11	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design;	A.U9.
PEU_U12	The graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design;	A.U10.
PEU_U13	The graduate is able to work individually and in a team, including collaborating with specialists from other industries;	A.U11.
PEU_U14	The graduate is able to estimate the time needed to complete a complex design task;	A.U12.
PEU_U15	The graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design;	A.U13.
PEU_U16	The graduate is able to prepare architectural and construction documentation using appropriate scales and in relation to the conceptual architectural design;	A.U14.
PEU_U17	The graduate is able to implement the principles and guidelines of universal design in architecture;	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to respect the diversity of views and cultures and demonstrate sensitivity to the social aspects of the profession;	1.3.2)
PEU_K02	The graduate is ready to take responsibility for social, architectural and urban planning values in the protection of the environment;	1.3.3)

PEU_K03	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	A.S1.
PEU_K04	The graduate is ready to speak and make presentations in public.	A.S2.
PEU_K05	The graduate is ready to follow teamwork principles and take responsibility for joint tasks and projects;	A.S3.
PEU_K06	The graduate is ready to take responsibility for shaping the natural environment;	A.S4.

Program content ensuring learning outcomes

To familiarize with the development of hospital architecture and the influence of medical technologies on its development.
To familiarize with the principles of shaping space for the health protection function.
Getting to know the impact of the requirements of technological processes on the spatial organization of a hospital or outpatient clinic.
Teaching the design of healthcare facilities in relation to medical technology, the needs of patients and staff.
Developing the ability to develop and present architectural designs of high complexity

Calculation of ECTS points

Activity form	**Activity hours**
Project	105
Preparaton for classes	21
Preparation of a report/summary/presentation/paper	10
Conducting literature research	17
Self-study of class topics	22
Preparation of a project	48
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Multifunctional Complexes - Housing, Education, Culture

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.32PS.03756.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Elective
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 2	• Project: 105 h, 9 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understanands architectural design that varies in the level of complexity, ranging from simple tasks to structures with complex functions in a complex context, in particular simple buildings that satisfy basic needs of users, single-family and multi-family residential buildings, service facilities in residential complexes, public use buildings and complexes of such buildings with a varying scale and level of complexity in an open landscape or in an urban environment;	1.1.1), 1.1.2), 1.1.6), 1.1.7), 1.1.9), A.W1.
PEU_W02	The graduate knows and understanands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities;	1.1.13), 1.1.5), A.W5.

PEU_W03	The graduate knows and understanands the interdisciplinary nature of architectural and urban design and the need to integrate knowledge from other disciplines and to apply it in the designing process in cooperation with specialists in these disciplines;	1.1.10), 1.1.11), 1.1.12), 1.1.3), 1.1.4), 1.1.9), A.W4., A.W6., A.W8.
In terms of skills		
PEU_U01	The graduate is able to use design a simple and complex architectural structure, creating and transforming space so as to give it new values – in accordance with the assigned or adopted program which takes into account the requirements and needs of all users, the spatial and cultural context, and the technical and non-technical aspects;	1.2.1), 1.2.2), 1.2.3), A.U1., A.U14., A.U4.
PEU_U02	The graduate is able to use formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning;	1.2.1), 1.2.4), 1.2.5), A.U10., A.U11., A.U12., A.U13., A.U5., A.U7., A.U8., A.U9.
PEU_U03	The graduate is able to use implement the principles and guidelines of universal design in architecture, urban planning and spatial planning;	A.U15.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	1.3.2), A.S1., A.S2.
PEU_K02	The graduate is ready to take responsibility for shaping the natural environment and cultural landscape, including preservation of the heritage of the region, the country and Europe;	1.3.2), 1.3.3), A.S3., A.S4.

Program content ensuring learning outcomes

C1 Development of creative and workshop skills in the field of designing the architecture of pro□social multifunctional complexes in an urbanized environment.
C2 Getting acquainted with the basic issues of designing the architecture of multifunctional complexes in relation to the existing spatial order and cultural heritage of the place.
C3 Presentation of issues related to pro-social trends (co-living, cooperative) in the process of shaping architectural objects and the universal design trend in relation to multifunctional complexes
C4 Presentation of the contemporary needs of shaping multifunctional complexes as social and center-forming catalysts.
C5 Showing the integrating role of multifunctional complexes in the functioning of the local community and the functional and spatial structure of the city.
C6 Getting acquainted with the principles of designing and verifying the correctness of functional spatial and structural-technical solutions for the architecture of multifunctional complexes as well as the issues of energy efficiency and economic efficiency of architectural solutions.
C7 Presenting the aesthetic canons of designing multifunctional complexes in an urbanized environment.
C8 Developing the ability to develop and present the architectural design of a multifunctional building in a clear and graphically attractive manner.
C9 Presenting knowledge on innovation in architecture, innovative material and technological solutions - in relation to the formation of multifunctional complexes.
C10 Presentation and implementation of solutions based on universal design assumptions into the design process.

Calculation of ECTS points

Activity form	**Activity hours**
Project	105

Preparaton for classes	50
Preparation of a project	52
Conducting empirical studies	8
Self-study of class topics	8
Credit/Exam	2
Student workload	**Hours** 225

Wrocław University of Science and Technology

Diploma thesis

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
-

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000S.34PD.03706.25

Lecture languages
English

Mandatoriness
Obligatory elective

Block
Diploma thesis

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 3	• Diploma thesis: 15 h, 16 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems;	D.W1.
PEU_W02	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies;	D.W2.
PEU_W03	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design;	D.W3.

PEU_W04	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	D.W4.
PEU_W05	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts;	D.W5.
In terms of skills		
PEU_U01	The graduate is able to perform a critical analysis of existing conditions, an assessment of the condition of land use and architectural development, and formulate conclusions for designs in a complicated, interdisciplinary context;	D.U1.
PEU_U02	The graduate is able to design a complex architectural structure or urban complex, creating and transforming space so as to give it new values – in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during university studies;	D.U2.
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a method of recording that satisfied the requirements of professional architectural and urban design;	D.U3.
PEU_U04	The graduateis able to apply analytical methods in formulating and solving design tasks;	D.U4.
PEU_U05	The graduate is able to present the theoretical background and the justification for the presented solutions in the form of a scientific study;	D.U5.
PEU_U06	The graduate is able to organize the work including all phases of design concept development;	D.U6.
In terms of social competences		
PEU_K01	The graduate is ready toeffectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	D.S1.
PEU_K02	The graduate is ready speak and make presentations in public;	D.S2.
PEU_K03	The graduate is ready accept criticisms of the solutions he or she presents and respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	D.S3.
PEU_K04	The graduate is ready formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work; communicate opinions in a generally understandable manner;	D.S4.
PEU_K05	The graduate is ready properly prioritize activities that lead to the completion of the task;	D.S5.

Program content ensuring learning outcomes

Completion of a diploma project.

Calculation of ECTS points

Activity form	Activity hours
Diploma thesis	15
Preparation of the thesis	383
Credit/Exam	2
Student workload	**Hours** 400

Wrocław University of Science and Technology

Diploma thesis - lecture

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
-

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000S.34PD.03707.25

Lecture languages
English

Mandatoriness
Obligatory

Block
Diploma thesis

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 3	• Lecture: 15 h, 1 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems;	D.W1.
PEU_W02	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies;	D.W2.
PEU_W03	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design;	D.W3.

PEU_W04	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	D.W4.
PEU_W05	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts;	D.W5.
In terms of skills		
PEU_U01	The graduate is able to perform a critical analysis of existing conditions, an assessment of the condition of land use and architectural development, and formulate conclusions for designs in a complicated, interdisciplinary context;	D.U1.
PEU_U02	The graduate is able to design a complex architectural structure or urban complex, creating and transforming space so as to give it new values – in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during university studies;	D.U2.
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a method of recording that satisfied the requirements of professional architectural and urban design;	D.U3.
PEU_U04	The graduate is able to apply analytical methods in formulating and solving design tasks;	D.U4.
PEU_U05	The graduate is able to present the theoretical background and the justification for the presented solutions in the form of a scientific study;	D.U5.
PEU_U06	The graduate is able to organize the work including all phases of design concept development;	D.U6.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	D.S1.
PEU_K02	The graduate is ready to speak and make presentations in public;	D.S2.
PEU_K03	The graduate is ready to accept criticisms of the solutions he or she presents and respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	D.S3.
PEU_K04	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work; communicate opinions in a generally understandable manner;	D.S4.
PEU_K05	The graduate is ready to properly prioritize activities that lead to the completion of the task;	D.S5.

Program content ensuring learning outcomes

Preparation for the diploma exam.

Calculation of ECTS points

Activity form	**Activity hours**
Lecture	15
Prepararation for an exam/credit	8
Credit/Exam	2
Student workload	**Hours** 25

Wrocław University of Science and Technology

Diploma thesis - workshops

Educational subject description sheet

Basic information

Field of study
Architecture

Speciality
-

Organizational unit
Faculty of Architecture

Study level
second degree 3 semesters

Study form
full-time studies

Education profile
general academic profile

Education cycle
2025/2026

Subject code
W1ARC/000S.34PD.03708.25

Lecture languages
English

Mandatoriness
Obligatory elective

Block
Diploma thesis

Subject related to scientific research
Yes

Semester	Activities, hours, ECTS and examination
Semester 3	• Project: 70 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	The graduate knows and understands detailed issues in the field of architecture and urban planning related to solving complex design problems;	D.W1.
PEU_W02	The graduate knows and understands advanced issues related to architecture and urban planning which are useful in designing structures and urban complexes in the context of social, cultural, natural, historical, economic, legal and other non-technical conditions of engineering activities, integrating the knowledge acquired during university studies;	D.W2.
PEU_W03	The graduate knows and understands principles, solutions, structures and building materials used in complex engineering tasks related to architectural and urban design;	D.W3.

PEU_W04	The graduate knows and understands issues related to architecture and urban planning in the context of the interdisciplinary nature of architectural and urban design as well as the need to cooperate with other specialists;	D.W4.
PEU_W05	The graduate knows and understands principles of professional presentation of architectural and urban planning concepts;	D.W5.
In terms of skills		
PEU_U01	The graduate is able to perform a critical analysis of existing conditions, an assessment of the condition of land use and architectural development, and formulate conclusions for designs in a complicated, interdisciplinary context;	D.U1.
PEU_U02	The graduate is able to design a complex architectural structure or urban complex, creating and transforming space so as to give it new values – in accordance with the adopted program, taking into account non-technical aspects and integrating interdisciplinary knowledge and skills acquired during university studies;	D.U2.
PEU_U03	The graduate is able to prepare an advanced graphic, written and oral presentation of his or her original design concepts in the field of architecture and urban planning, using a method of recording that satisfied the requirements of professional architectural and urban design;	D.U3.
PEU_U04	The graduate is able to apply analytical methods in formulating and solving design tasks;	D.U4.
PEU_U05	The graduate is able to present the theoretical background and the justification for the presented solutions in the form of a scientific study;	D.U5.
PEU_U06	The graduate is able to organize the work including all phases of design concept development;	D.U6.
In terms of social competences		
PEU_K01	The graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems;	D.S1.
PEU_K02	The graduate is ready to speak and make presentations in public,	D.S2.
PEU_K03	The graduate is ready to accept criticisms of the solutions he or she presents and respond to such criticisms in a clear and factual manner, also by using arguments that refer to the achievements in the scientific discipline, and to make creative and constructive use of criticisms;	D.S3.
PEU_K04	The graduate is ready to formulate information and opinions and inform the society about the achievements of architecture and urban design, their complex determinants, and other aspects of an architect’s professional work; communicate opinions in a generally understandable manner;	D.S4.
PEU_K05	The graduate is ready to properly prioritize activities that lead to the completion of the task;	D.S5.

Program content ensuring learning outcomes

Preparation of a diploma project.

Calculation of ECTS points

Activity form	Activity hours
Project	70
Credit/Exam	2
Self-study of class topics	3
Student workload	**Hours** 75

Wrocław University of Science and Technology

Spatial planning

Educational subject description sheet

Basic information

Field of study Architecture	**Education cycle** 2025/2026
Speciality Architecture and Urban Planning	**Subject code** W1ARC/000AUPS.34PS.03757.25
Organizational unit Faculty of Architecture	**Lecture languages** English
Study level second degree 3 semesters	**Mandatoriness** Obligatory in specialty
Study form full-time studies	**Block** Specialty subjects
Education profile general academic profile	**Subject related to scientific research** Yes

Semester	Activities, hours, ECTS and examination
Semester 3	• Project: 45 h, 3 ECTS, Graded credit

Subject's learning outcomes

Subject's outcome	Content	Learning outcome
In terms of knowledge		
PEU_W01	In terms of knowledge, the graduate knows and understands methods and measures for the implementation of ecologically responsible and sustainable design and the protection and conservation of the surrounding environment.	1.1.7)
PEU_W02	In terms of knowledge, the graduate knows and understands spatial planning and spatial policy tools.	A.W3.
PEU_W03	In terms of knowledge, the graduate knows and understands provisions of local land-use plans to the extent that is necessary for architectural design.	A.W4.

PEU_W04	In terms of knowledge, the graduate knows and understands the principles of universal design, including the concept of designing spaces and buildings accessible to all users, in particular to people with disabilities, in architecture, urban planning and spatial planning, and the principles of ergonomics, including ergonomic parameters necessary to provide full functionality of the space and structures under design to all users, in particular for people with disabilities.	A.W5.
In terms of skills		
PEU_U01	In terms of skills, the graduate is able to use the experience acquired during studies to critically analyze the conditions and formulate conclusions for designing in a complex, interdisciplinary context.	1.2.1)
PEU_U02	In terms of skills, the graduate is able to use interdisciplinary knowledge and skills acquired during studies to design a sophisticated architectural structure or urban complex that meets the aesthetic and technical requirements, creating and transforming space and giving it new values.	1.2.2)
PEU_U03	In terms of skills, the graduate is able to apply analytical methods in formulating and solving design tasks, present the theoretical background and the justification for the presented solutions in the form of a scientific study.	1.2.4)
PEU_U04	In terms of skills, the graduate is able to elaborate planning studies related to spatial development and interpret them to the extent that is necessary for urban and architectural design.	A.U3.
PEU_U05	In terms of skills, the graduate is able to perform a critical analysis of conditions, including the assessment of land use and development; formulate conclusions for design and spatial planning, forecast the processes of transformation of the settlement structure of cities and villages and predict the social effects of these transformations.	A.U4.
PEU_U06	In terms of skills, the graduate is able to integrate information obtained from various sources, interpret and critically analyze it in detail and use it to draw conclusions, as well as formulate and justify opinions and demonstrate their relationship with the designing process on the basis of available scientific achievements in the discipline.	A.U9.
PEU_U07	In terms of skills, the graduate is able to communicate by means of various techniques and tools in a professional and interdisciplinary environment to the extent that is appropriate for architectural and urban design and spatial planning.	A.U10.
PEU_U08	In terms of skills, the graduate is able to formulate new ideas and hypotheses, analyze and test novelties related to engineering and research problems in the field of architectural and urban design and spatial planning.	A.U13.
PEU_U09	In terms of skills, the graduate is able to implement the principles and guidelines of universal design in architecture, urban planning and spatial planning.	A.U15.
In terms of social competences		
PEU_K01	In terms of social competence, the graduate is ready to take responsibility for humanistic, social, cultural, architectural and urban planning values in the protection of the environment and the cultural heritage.	1.3.3)

PEU_K02	In terms of social skills, the graduate is ready to effectively use imagination, intuition, creative attitude and independent thinking to solve complicated design problems.	A.S1.
PEU_K03	In terms of social skills, the graduate is ready to speak and make presentations in public.	A.S2.

Program content ensuring learning outcomes

The curriculum content of the cours concerns:

- Providing rudimentary knowledge and developing basic skills in constructing urban spatial policy and planning the spatial development of cities.
- Teaching elementary skills in applying knowledge and theories in the field of spatial planning for urban development.
- Teaching general principles of conducting studies and analyzes of city subsystems and the conditions of its spatial development.
- Teaching the use of selected tools for implementing urban spatial policy.

Calculation of ECTS points

Activity form	**Activity hours**
Project	45
Preparaton for classes	7
Preparation of a project	5
Preparation of a report/summary/presentation/paper	8
Prepararation for an exam/credit	3
Self-study of class topics	5
Credit/Exam	2
Student workload	**Hours** 75