GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00066691		
Field of study	Architecture		
Date of commencement of studies	October 2025	Academic year of realisation of subject	2025/2026
Education level	second-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of History of Architecture and Conservation of Monuments -> Faculty of Architecture -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. arch. Anna Orchowska	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	40.0	0.0	40

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	40	0.0	0.0	40

Subject objectives

The aim of the course is to develop students skills in identifying, analyzing, and solving complex problems related to key objects and phenomena characteristic of their field of study. Students deepen their theoretical and practical knowledge, learn to apply appropriate analytical and design methods, and enhance their ability to collaborate within a research team. The course is designed to prepare students for both independent and team-based work in addressing scientific and practical challenges while simultaneously improving their ability to present research findings.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W101] is able to make an in-depth identification of key objects and phenomena related to the field of study, as well as theories that describe them and applicable analytical and design methods	The student is able to identify key objects and phenomena related to the subject matter and conduct an in-depth analysis using appropriate theories and analytical or design methods. They demonstrate the ability to apply acquired knowledge in practice by proposing solutions tailored to the specifics of the studied issue.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects
[K7_K101] acknowledges the importance of knowledge related to the field of study in solving cognitive and practical problems, critically assessing the information obtained	The student is able to formulate a complex research problem and plan its resolution by selecting appropriate research methods and tools. They actively collaborate within a research team, taking on the role of either a leader or a team member, effectively communicating and carrying out tasks. This results in the development of innovative solutions and the presentation of findings in a scientifically acceptable format.	[SK1] Assessment of group work skills [SK3] Assessment of ability to organize work [SK2] Assessment of progress of work [SK5] Assessment of ability to solve problems that arise in practice
[K7_U101] is able to formulate complex research problems and adopts appropriate methods, obtaining innovative solutions, cooperating with other people, both as a leader and a team member	The student is able to identify and precisely formulate a complex research problem, plan actions leading to its resolution by selecting appropriate research methods and tools. They demonstrate effective teamwork skills, taking on the role of either a leader or a team member, and develop innovative solutions, presenting them in a format that meets scientific and/or practical requirements.	[SU1] Assessment of task fulfilment [SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task

Subject contents

Course content – project
According to the project requirements defined by the project supervisor.

The course begins with an **introduction to the research project**, during which the objectives, assumptions, and structure of the research team are discussed, including the division of roles and responsibilities. Students become familiar with **research methodology principles** and the selection of appropriate research methods and tools tailored to the specifics of the project.

The next stage involves the **analysis of the research problem**, which includes identifying and precisely formulating the research question, reviewing relevant literature and secondary sources, and examining both theoretical and practical contexts.

Following this, students engage in **planning and organizing the teams work**, developing an action schedule, and distributing tasks using **project management tools**. The research activities include **field studies, laboratory experiments, or computer simulations**, as well as **data collection, processing, and analysis**, incorporating hypothesis testing.

Throughout the project, students participate in **specialized seminars and expert workshops** aimed at expanding knowledge and refining the proposed solutions.

A key element is the **creation of innovative solutions**, including concept generation based on research findings, prototyping, and **developing strategies for implementation**. At the end of the project, students prepare a **final report and a multimedia presentation** of their results, such as a **presentation, scientific poster, or 3D visualization**. Additionally, an important aspect is the **publication of research results in a scientific journal or their presentation at a conference**.

The project concludes with an **evaluation phase** (research report/scientific article), which includes **assessing goal achievement, reflecting on the effectiveness of the methods used, analyzing team organization, and drawing conclusions and recommendations for the future**.

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<tr><td>Prerequisites and co-requisites</td><td>Students are expected to have a fundamental understanding of research and analytical methods relevant to their field of study, as well as teamwork and effective interpersonal communication skills. A basic knowledge of tools and software supporting the research process is also essential, including CAD software, statistical tools, and project management platforms.

An important aspect is the ability to critically analyze literature and data, as well as familiarity with scientific report writing and result presentation principles.

Additionally, students are encouraged to demonstrate openness to interdisciplinary collaboration and expert consultations, actively participate in specialized seminars and workshops, and take the initiative in independently solving research problems. Interest in developing innovative solutions within the project and proficiency in English at a level that enables the use of scientific literature and the presentation of research findings in an international forum will be considered additional advantages.</td></tr>
<tr><td>Assessment methods and criteria</td><td><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td></td><td>70.0%</td><td>25.0%</td></tr>
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<tr><td>Recommended reading</td><td><table>
<tr><td>Basic literature</td><td>According to the project supervisors recommendations.</td></tr>
<tr><td>Supplementary literature</td><td>According to the project supervisors recommendations.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>Według wymagan i założen projektowych.</td></tr>
<tr><td>Practical activites within the subject</td><td>Not applicable</td></tr>
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