GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Engineering project, PG_00062750						
Field of study	Technologies for Industry 5.0						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2028/2029		
Education level	first-cycle studies		Subject group		Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	4		Language of instruction		Polish		
Semester of study	7		ECTS credits		10.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Katedra Fizyki Atomowej i Luminescencji -> Faculty Of Applied Physics And Mathematics -> Wydziały Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Jacek Ryl				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	120.0	0.0	120
	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	120		10.0		120.0	250
Subject objectives	The aim of the course is to carry out research, analysis and interpretation of results, elements of a study for an engineering diploma.						

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<tr><td>Learning outcomes</td><td>
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<tr><th>Course outcome</th><th>Subject outcome</th><th>Method of verification</th></tr>
<tr><td>[K6_U04] has the ability to perceive and take into account non-technical aspects (legal, economic, ethical, environmental, human factor and others) of engineering problems and tasks and create solutions that take them into account</td><td>The student is able to analyze the solution he has proposed in terms of non-technical aspects.</td><td>[SU2] Assessment of ability to analyse information</td></tr>
<tr><td>[K6_U06] performs analysis, exploration and cleaning of data sets, can use statistical models and machine learning models, integrate various analytical, management and data storage tools</td><td>The student is able to use Industry 5.0 Technology tools, in particular selected data engineering tools, to solve practical problems.</td><td>[SU3] Assessment of ability to use knowledge gained from the subject
[SU4] Assessment of ability to use methods and tools
[SU5] Assessment of ability to present the results of task</td></tr>
<tr><td>[K6_K01] is aware of the need to constantly update and enrich knowledge and practical skills, and improve professional, personal and social competences</td><td>The student is aware of the continuous development of tools in the field of Industry 5.0 Technology and the need for continuous improvement</td><td>[SK4] Assessment of communication skills, including language correctness
[SK5] Assessment of ability to solve problems that arise in practice</td></tr>
<tr><td>[K6_K02] makes decisions independently, carries out a critical assessment of own actions and actions of managed teams, is ready to make decisions and accept responsibility for the consequences of these actions</td><td>The student acquires the ability to organize independent work, implement a project in the field of Industry 5.0 Technology and prepare a synthetic report from the conducted research/analysis.</td><td>[SK3] Assessment of ability to organize work
[SK4] Assessment of communication skills, including language correctness
[SK2] Assessment of progress of work</td></tr>
<tr><td>[K6_K03] effectively, clearly and unambiguously conveys information, describes activities and communicates their results and opinions of a specialist engineer using appropriate communication methods and tools</td><td>The student is able to present a synthetic description of the implemented project, the results obtained, the possibilities of implementing the solution, advantages and limitations.</td><td>[SK4] Assessment of communication skills, including language correctness
[SK5] Assessment of ability to solve problems that arise in practice</td></tr>
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<tr><td>Subject contents</td><td>The content of the course is individually selected for each student (depending on the chosen thesis topic)</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></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>diploma thesis</td><td>60.0%</td><td>100.0%</td></tr>
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<tr><td>Recommended reading</td><td>
<table>
<tr><td>Basic literature</td><td>original research articles, monogaphs and textbooks</td></tr>
<tr><td>Supplementary literature</td><td>Review articles</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
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<tr><td>Example issues/ example questions/ tasks being completed</td><td></td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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