GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Team Project, PG_00038284		
Field of study	Automation, Robotics and Control Systems		
Date of commencement of studies	October 2022	Academic year of realisation of subject	2022/2023
Education level	second-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Control Engineering -> Faculty of Electrical and Control Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jacek Zawalich	
	Teachers	dr inż. Jacek Zawalich	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	0.0	20.0	0.0	20

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	20	6.0	74.0	100

Subject objectives

The student works out a project in the field of automation and robotics.
Uses software, hardware necessary to implement the project, catalogs and other sources to select equipment. Combines knowledge from various fields of technique. Accepts work in a group.

Learning outcomes

Course outcome	Subject outcome	Method of verification
K7_U13	The student knows and understands the rules of teamwork, improving professional, personal and social competences, is aware of the responsibility for his own work and in the team, has the ability to present the results of the task.	[SU5] Assessment of ability to present the results of task
K7_U02	Student individually and in group carries out work using the knowledge of various professional environments.	[SU1] Assessment of task fulfilment
K7_W01	Student identifies and classifies complex technical objects. Student presents the methods of modeling, identification and verification of complex physical objects for design aim.	[SW1] Assessment of factual knowledge

Subject contents

Solving a complex problem in the field of automation and / or robotics. Depending on the task carried out, the development of control algorithms, design and implementation of a selected automation or robotics system. Solving construction and technical problems from automation or robotics, designing control systems, including alarm and security systems.

Prerequisites and co-requisites

Knowledge from the Basics of Control Engineering

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	60.0%	100.0%

Recommended reading	Basic literature	1. Kaczorek T., Dzieliński A., Dąbrowski W. : Podstawy teorii sterowania. WNT Warszawa 2006. 2. Dębowski A. : Automatyka - podstawy teorii dla praktyków. WNT Warszawa 2008. 3. Mikulczyński T., Samsonowicz Z., Więcławek R. : Automatyzacja procesów produkcyjnych. WNT Warszawa 2015. 4. Tatjewski P.: Sterowanie zaawansowane obiektów przemysłowych. Struktury i algorytmy. EXIT Warszawa 2016. 5. Goodwin GC., Graebe S.F., Salgado M.E.: Control Systems Design, Prentice Hall. 2001.
	Supplementary literature	1. Ogata K.: Modern Control Engineering. 4th edition. Prentice Hall 2002. 2. Piegat A.: Modelowanie i sterowanie rozmyte. Warszawa, EXIT, 1999.
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Realization of partial phases of the project. Final presentation of the project.	
Work placement	Not applicable	