



Subject card

Subject name and code	Team Project, PG_00038284						
Field of study	Automation, Robotics and Control Systems						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2023/2024		
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						
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						
	Adresy na platformie eNauczenie:						
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_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		
	K7_U02	Student individually and in group carries out work using the knowledge of various professional environments.			[SU1] Assessment of task fulfilment		
	K7_U13	The student is able to work in a team implementing an advanced engineering project.			[SU5] Assessment of ability to present the results of task		
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 evaluation	60.0%		100.0%			
Recommended reading	Basic literature	1. Goodwin G.C., 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.					
	eResources addresses						

Example issues/ example questions/ tasks being completed	Realization of partial phases of the project. Final presentation of the project.
Work placement	Not applicable