



## Subject card

Subject name and code	Electrical and Software Systems Engineering, E:41020W0						
Field of study	Space and Satellite Technologies						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2023/2024		
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			English		
Semester of study	1	ECTS credits			2.0		
Learning profile		Assessment form			assessment		
Conducting unit	Katedra Inteligentnych Systemów Sterowania i Wspomagania Decyzji -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Tomasz Zubowicz				
	Teachers		dr inż. Tomasz Zubowicz dr inż. Bartosz Puchalski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	0.0	0.0	30
	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	30		0.0		0.0	30
Subject objectives	To familiarise students with basic concepts and principles of electrical systems engineering.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_K03] Can analyse and implement assigned tasks while maintaining high technical standards. Is able to work and interact in a group, taking on different roles. Adheres to the principles of professional ethics and respects the diversity of views and cultures.		Student implements his tasks related to control design maintaining high technical standards.		[SK5] Assessment of ability to solve problems that arise in practice		
	K7_U07		He is able to estimate costs in software and electrical engineering.		[SU2] Assessment of ability to analyse information		
	K7_W06		Student has the knowledge on development trends in electric systems and software engineering.		[SW1] Assessment of factual knowledge		
	K7_W07		Student has knowledge of the typical steps and milestones in software and electrical engineering.		[SW1] Assessment of factual knowledge		
	K7_W10		He knows technical standards in software and electrical engineering.		[SW1] Assessment of factual knowledge		
K7_U08		Student can implement tasks from software and electrical engineering.		[SU1] Assessment of task fulfilment			
Subject contents	Basic concepts of systems engineering; Principles of electrical systems engineering; Principles of software systems engineering for electrical systems.						
Prerequisites and co-requisites	-						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	exam	50.0%	50.0%
	laboratory	50.0%	50.0%
Recommended reading	Basic literature	Students will receive a reading list at the beginning of the semester.	
	Supplementary literature	-	
	eResources addresses	Adresy na platformie eNauczenie: Electrical and Software Systems Engineering [WIMiO][2023/24] - Moodle ID: 38636 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=38636">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=38636</a>	
Example issues/ example questions/ tasks being completed	-		
Work placement	Not applicable		