



## Subject card

Subject name and code	Rocket Science, E:41049W0						
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			3.0		
Learning profile		Assessment form			assessment		
Conducting unit	Department of Geoinformatics -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Marek Chodnicki				
	Teachers		dr inż. Marek Chodnicki				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	30.0	0.0	45
	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	45	10.0		20.0		75
Subject objectives	Knowledge and understanding (extension, consolidation and understanding of knowledge) - The student knows the construction of rockets - The student has knowledge of mechanics, in particular, the knowledge necessary to understand the basic phenomena physical phenomena occurring in external ballistics objects related to rocket technology. - The student has knowledge of how to take measurements on rockets and estimate the obtained results.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_K82] is equipped to participate actively in lectures, seminars and laboratory classes conducted in foreign language	The student communicates in English and prepares all projects and reports in English.			[SK4] Assessment of communication skills, including language correctness		
	[K7_K81] is able to cooperate in international team at her/his own university, during work placement and during study abroad	Student współpracuje z kolegami z zagranicy			[SK1] Assessment of group work skills		
	[K7_K04] Can show resourcefulness and ingenuity in dealing with professional tasks.	The student demonstrates an entrepreneurial spirit			[SK2] Assessment of progress of work		
	K7_U09	The student knows the tools of the field of study and the subject of rocket science			[SU4] Assessment of ability to use methods and tools		
K7_W04	Student can design rocket functions and plan its mission			[SW1] Assessment of factual knowledge			
Subject contents	Rocket Science Fundamentals; Nozzle; Rocket equation; Propulsive; Rocket engines; Orbits; Rocket dynamic and motions; Payload						
Prerequisites and co-requisites	Basic engineering knowledge						
Assessment methods and criteria	Subject passing criteria	Passing threshold			Percentage of the final grade		
	test	56.0%			100.0%		
Recommended reading	Basic literature	-					
	Supplementary literature	-					

	eResources addresses	Adresy na platformie eNauzanie:
Example issues/ example questions/ tasks being completed	-	
Work placement	Not applicable	