



## Subject card

Subject name and code	Space Security Technologies, PG_00050013						
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			Obligatory subject group in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	1	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit							
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Grzegorz Krasnodębski					
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	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	5.0		15.0		50
Subject objectives	Obtaining the knowledge on space technologies used in security and defense						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_K02] Understands the non-technical aspects of activities in the field of space and satellite technologies, including their social consequences and impact on the state of the environment. Expresses opinions on the development of technology and related risks.	Student understands the non-technical aspects of activities in the field of space safety technologies and systems, including their social consequences and impact on the state of the environment.			[SK3] Assessment of ability to organize work		
	K7_W10	Student has knowledge on construction of space and satellite applications in safety systems.			[SW1] Assessment of factual knowledge		
	K7_U14	Student is able to define requirements for space and satellite applications applied in safety systems.			[SU3] Assessment of ability to use knowledge gained from the subject		
	K7_U10	Student is able to take into account the safety aspects while solving an engineering problem in the field of space and satellite technologies.			[SU3] Assessment of ability to use knowledge gained from the subject		
[K7_W14] Knows the objectives, main programs and principles of functioning of the European (ESA) and national (POLSA) institutions regulating, supervising and stimulating activity in the space industry.	Student knows the rules of security and safety policy with respect to space and satellite technologies, on national and European level.			[SW1] Assessment of factual knowledge			
Subject contents	Space policy. Global Monitoring for Environment and Security. Satellite systems of monitoring and early warning. Satellite communications services for civil protection systems, e-government and search and rescue actions. Space systems for risk prevention. Military satellite systems.						
Prerequisites and co-requisites	none						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		50.0%	20.0%
		50.0%	30.0%
		50.0%	50.0%
Recommended reading	Basic literature	Specht C., System GPS (in Polish), Biblioteka Nawigacji series, Bernardinum, Pelplin 2007	
	Supplementary literature	Technical documentation of selected space and satellite systems used in security and defense	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		