



## Subject card

Subject name and code	Social and Psychological Aspects of Robotics & Automatic Controls, PG_00048422						
Field of study	Automatic Control, Cybernetics and Robotics						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2024/2025		
Education level	second-cycle studies	Subject group			Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Decision Systems and Robotics -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Michał Czubenko					
	Teachers	dr inż. Michał Czubenko					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	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	2.0		18.0		50
Subject objectives	The aim of the course is to familiarize participants with the philosophical, psychological and sociological aspects of the latest technological trends in the field of robotics, control systems and IT. The classes are based on oxford debates on specific topics. Content such as the three laws of robotics, aspects of robot autonomy, and legal issues of artificial intelligence, and many others may be discussed on the course. The course was modernized as part of the IDUB project.						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	Student has the basics of psychological and sociological knowledge in terms of the latest technologies related to ICT.			[SW1] Assessment of factual knowledge		
	[K7_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	Student can refer to certain socio-psychological values at work. Student can present arguments in a debate.			[SK4] Assessment of communication skills, including language correctness		
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	Student is able to assess the long-term social effects of the aspects of robotization.			[SU2] Assessment of ability to analyse information [SU5] Assessment of ability to present the results of task		
Subject contents	The following topics will be covered in the course: <ul style="list-style-type: none"><li>• The introduction of parity in politics and companies will make equality happen.</li><li>• Widespread access to drugs would reduce the number of addicts.</li><li>• The publication of false information on the Internet makes people believe it after some time.</li><li>• Social media makes people more lonely and prone to suicidal depression.</li><li>• The development of robotics (personal and production) will force us to use exoskeletons in the future.</li><li>• In the near future, robots will completely replace manual workers in developed countries.</li><li>• Electric cars are environmentally friendly.</li></ul>						
Prerequisites and co-requisites	Basic knowledge of Robotics and Artificial Intelligence.						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		Assessment of the debate	60.0%
Recommended reading	Basic literature	Mori, Masahiro, Karl F. MacDorman, and Norri Kageki. "The uncanny valley." <i>Robotics &amp; Automation Magazine</i> , IEEE 19.2 (2012): 98-100. Inoue, Hirochika, et al. "Overview of humanoid robotics project of METI." <i>Proc. of the 32nd ISR</i> (2001). Daisuke Chugo, Sho Yokota "Introduction to Modern Robotics" CreateSpace Independent Publishing Platform (2012)	
	Supplementary literature	Bekey, G. "Current trends in robotics: technology and ethics." <i>Robot ethics: the ethical and social implications of robotics</i> . MIT Press, Cambridge (2012): 17-34. Balaguer, Carlos, and Mohamed Abderrahim. <i>Trends in robotics and automation in construction</i> . INTECH Open Access Publisher, 2008.	
	eResources addresses	Adresy na platformie eNauzanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		