

## GDAŃSK UNIVERSITY

## Subject card

Subject name and code	Social and Psychological Aspects of Robotics & Automatic Controls, PG_00064532								
Field of study	Automatic Control, Cybernetics and Robotics								
Date of commencement of studies			Academic year of realisation of subject			2026/2027			
Education level	second-cycle studies		Subject group			Obligatory subject group in the field of study			
Mode of study	Full-time studies		Modo of dolivory				Humanistic-social subject group at the university		
Year of study	1		Mode of delivery			English			
Semester of study	2		Language of instruction ECTS credits			3.0			
Learning profile	general academic profile		Assessment form				assessment		
Conducting unit	Department Of Decision Systems And Robotics -> Faculty Of Electronics Telecommunication: Informatics -> Wydziały Politechniki Gdańskiej					s And			
Name and surname	Subject supervisor	dr hab. inż. Michał Czubenko							
of lecturer (lecturers)	Teachers		dr hab. inż. N	lichał Czubenk					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM	
	Number of study hours	15.0	0.0	0.0	15.0		15.0	45	
	E-learning hours inclu								
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study SUM		SUM	
	Number of study hours	45		6.0		24.0		75	
Subject objectives	The aim of the subject is to familiarize participants with philosophical, psychological, and sociological aspects of the latest technological trends in the field of robotics, automation, and IT. The subject is carried out with the help of Oxford debates (concerning specific theses), student seminar presentations, and quasi- grant projects. The subject may cover topics such as: three laws of robotics, aspects of robot autonomy, and legal issues of artificial intelligence, and many others. The subject has been modernized as part of the IDUB project.								
Learning outcomes	Course outcome		Subject outcome		Method of verification				
	[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			
			Student has the basics of psychological and sociological knowledge in the aspect of RiA.			[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.			[SK4] Assessment of communication skills, including language correctness			
	[K7_W11] knows and understands, to an increased extent, the general principles of creation and development of forms of individual entrepreneurship and the economic, legal and other conditions of various types of activities related to the awarded qualification, including the principles of protection of industrial property and copyright law		Student has the foundations for performing technical and patent review of solutions; is able to design a project budget; knows contemporary grant programs.			[SW2] Assessment of knowledge contained in presentation [SW3] Assessment of knowledge contained in written work and projects			

Subject contents	<ul> <li>The subject will cover issues such as:</li> <li>the progressive development of artificial intelligence and its impact on society</li> <li>humanoid robotics</li> <li>can robots have emotions</li> <li>development of robotization in the context of human support</li> <li>development of vehicle autonomy and its effects</li> <li>the loss of society in social media</li> </ul>							
Prerequisites and co-requisites	Basic knowledge of Robotics and Artificial Intelligence.							
Assessment methods	Subject passing criteria	Passing threshold	Percentage of the final grade					
and criteria		60.0%	100.0%					
Recommended reading	Basic literature	Mori, Masahiro, Karl F. MacDorman, and Norri Kageki. "The uncanny valley." Robotics & Automation Magazine, IEEE 19.2 (2012): 98-100. Inoue, Hirochika, et al. "Overview of humanoid robotics project of METI." Proc. of the 32nd ISR (2001). Daisuke Chugo, Sho Yokota "Introduction to Modern Robotics" CreateSpace Independent Publishing Platform (2012)						
	Supplementary literature eResources addresses	Bekey, G. "Current trends in robotics: technology and ethics." Robotethics: the ethical and social implications of robotics. MIT Press, Cambridge (2012): 17-34. Balaguer, Carlos, and Mohamed Abderrahim. Trends in robotics ar automation in construction. INTECH Open Access Publisher, 2008 Adresy na platformie eNauczanie:						
Example issues/ example questions/ tasks being completed								
Work placement	Not applicable							

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