



## Subject card

Subject name and code	Social Aspects of Modern Technology									
Field of study	-----									
Date of commencement of studies	February 2026	Academic year of realisation of subject		2025/2026						
Education level	postgraduate studies		Subject group		Obligatory subject group in the field of study Subject group related to scientific research in the field of study					
Mode of study	Full-time studies		Mode of delivery		online					
Year of study	-----		Language of instruction		English					
Semester of study	-----		ECTS credits		2.0					
Learning profile	general academic / practical profile		Assessment form		assessment					
Conducting unit	Department of Metrology and Optoelectronics									
Name and surname of lecturer (lecturers)	Subject supervisor		Dr. hab. Marcin Gnyba E.E.							
	Teachers		Dr .hab. Marcin Gnyba E.E. Prof. Małgorzata Szczerska E.E. Dr. Katarzyna Karpienko E.E. Dr. Maciej Wróbel E.E.							
Lesson type and method 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: 30.0									
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										
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		Can collect information on the impact of information technology on the environment and society as part of cooperation in a student group and present it correctly.		[SU5] Assessment of the ability to present results the task [SU2] Assessment of information analysis skills					
	[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		The student is aware of the importance of non-technical aspects and effects of engineering activities, including the impact of electronic and telecommunications devices on the environment and society.		[SK2] Assessment of work progress					
Subject contents	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications		The student has basic knowledge of history, telecommunications and information technology, cybercrime, ethical aspects of using information technology, personal data security, as well as medical, economic and sociocultural aspects and effects of electromagnetic radiation.		[SW1] Assessment of factual knowledge					
	The origin and history of the development of selected modern technologies and their impact on the development of civilization. Network society. Health aspects of selected ITs (e.g. games, virtual reality) and electromagnetic radiation. Benefits and threats to the human psyche related to the use of IT. The ways in which the media integrate society and strengthen social ties. Criminological and legal issues related to the development of modern technologies. Influence of modern technologies on economy (e-commerce, cryptocurrencies, impact of other selected technologies) and society (administration, education etc.). Soft									

	skills and IT in the digital work environment.				
Prerequisites and co-requisites	No prerequisites				
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade		
	Test	50%	50%		
Recommended reading	Basic literature	1. Castells M.: Rise of the Network Society. John Wiley & Sons, 2009 2. Carr N.: The Shallows: What the Internet Is Doing to Our Brains, W.W. Norton 2011 3. Kremling J., Sharp Parker A. M.: Cyberspace, Cybersecurity, and Cybercrime SAGE Publications, Inc; 1st edition 2017 4. Spinello R. A.: Cyberethics: Morality and Law in Cyberspace: Jones & Bartlett Learning; 7th edition, 2020			
	Supplementary literature	It will be presented during the lecture.			
	eResources addresses				
Example issues/example questions/tasks being completed	The vision of the Internet of Things in economy and society Surveillance as a business model of the Internet. Privacy risks. Internet monitoring and surveillance of Internet users by state and international institutions. Internet threats to minors. Cryptocurrencies new opportunities and threats. Copyright protection of Internet content. Internet censorship. Right to quote and Creative Commons license Access to and Dissemination of Proprietary Information. Innovations. Problems and legal regulations regarding the use of drones. Criminal use of location data. Benefits and risks of 3D printing technology. Social aspects of using artificial intelligence. Driverless car - prospects for development. Development of electricity sources, social aspect. The origin and history of the development of selected devices and technologies and their impact on the development of civilization. Whistleblowers in the network society Interpretation of computer crime by Polish and foreign law enforcement agencies. Legal regulations describing computer crimes and ways of prosecuting them. The most common methods of committing computer crimes. Health aspects of the impact of electromagnetic radiation The influence of the computer on the user, psychological aspects. A man immersed in virtual reality. Psychological aspects of using information technologies. Does the use of information technology strengthen interpersonal relationships?				
Work placement	Not applicable				