



Subject card

Subject name and code	Social Aspects of Modern Technology, PG_00060135						
Field of study	Civil Engineering, Environmental Engineering, Materials Engineering, Informatics, Mathematics, Transport, Management, Management, Materials Engineering, Informatics, Management, Economic Analytics, Economic Analytics, Space and Satellite Technologies, Automatic Control, Cybernetics and Robotics, Automatic Control, Cybernetics and Robotics, Green Technologies, Green Technologies, Coastal and Offshore Engineering, Mechanical and Medical Engineering, Mechatronics, Ocean Engineering, Mechanical Engineering, Materials Engineering, Space and Satellite Technologies, Coastal and Offshore Engineering, Ocean Engineering, Transport and Logistics, Ocean Engineering						
Date of commencement of studies	February 2022	Academic year of realisation of subject	2022/2023				
Education level	second-cycle studies	Subject group					
Mode of study	Full-time studies	Mode of delivery	e-learning				
Year of study	2	Language of instruction	Polish English				
Semester of study	3	ECTS credits	2.0				
Learning profile	general academic profile	Assessment form	assessment				
Conducting unit	Department of Metrology and Optoelectronics -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Marcin Gnyba					
	Teachers	dr hab. inż. Marcin Gnyba					
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: 30.0						
	Social Aspects of Modern Technology - Moodle ID: 28586 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28586						
Additional information: https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28586							
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 lecture series aim is development of students' knowledge in the field of the impact of modern technologies on the environment and society in sociological, medical, legal and cultural aspects. Particularly, it is assumed to analyze the different factors that threaten our civilization, and how these threats will shape and transform our society						
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	The student 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.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject				
	[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				
	[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 progress of work				

Subject contents	<ul style="list-style-type: none"> • The vision of the Internet of Things • Surveillance as a business model of the Internet. • Privacy loss 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. • Breaking codes. • The real price of a mobile - about the construction, construction process and social aspects of mobile device production. • 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? 								
Prerequisites and co-requisites	No preliminary requirements.								
Assessment methods and criteria	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Subject passing criteria</th> <th style="width: 30%;">Passing threshold</th> <th style="width: 30%;">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td>on-line test - questions with short descriptive answers</td> <td>50.0%</td> <td>100.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	on-line test - questions with short descriptive answers	50.0%	100.0%
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Recommended reading	Basic literature	<ol style="list-style-type: none"> 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	Will be added during the lecture.							
	eResources addresses	Uzupełniająca https://enauczanie.pg.edu.pl/moodle/course/view.php?id=28586 - eNauczanie - link							
Example issues/ example questions/ tasks being completed	<ul style="list-style-type: none"> • Advantages and disadvantages of the network society. • Provide definitions and examples of activities classified as cybercrime. • Give examples of direct effects of electromagnetic radiation on the human body. • List the discoveries that influenced the development of electronics. • Provide rules of ethical behavior on the Internet. • Describe the risks associated with the development and use of cryptocurrencies. 								
Work placement	Not applicable								