



Subject card

Subject name and code	Ethics in science and technology, PG_00062744						
Field of study	Technologies for Industry 5.0						
Date of commencement of studies	October 2024		Academic year of realisation of subject		2026/2027		
Education level	first-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	3		Language of instruction		Polish		
Semester of study	6		ECTS credits		1.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Institute of Nanotechnology and Materials Engineering -> Faculty of Applied Physics and Mathematics						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Aleksandra Mielewczyk-Gryń				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	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	15		1.0		9.0	25
Subject objectives	The aim of the course is to provide students with fundamental knowledge of the ethical principles applicable in both scientific work and research and development.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_K71] is conscious of 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 how their ethical stance can affect their professional and scientific work		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_W71] has general knowledge in humanistic, social, economic or legal sciences		The student has knowledge of ethical issues related to their future professional and scientific work.		[SW3] Assessment of knowledge contained in written work and projects		
Subject contents	By the end of the course, students will be able to: • Understand key ethical principles and theories applicable to scientific research. • Analyze ethical dilemmas and conflicts in scientific practice • Evaluate the impact of scientific work on society and the environment. • Apply ethical decision-making models to real-world scientific scenarios. • Develop a personal ethical framework for their professional and academic careers.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	written essey		50.0%		100.0%		
Recommended reading	Basic literature		Ethics: The Fundamentals Driver Julia Blackwell Publ, Wiley-Blackwell, John Wiley And Sons Ltd.				

	Supplementary literature	The Ethics of Science An Introduction By David B. Resnik Copyright 1998
	eResources addresses	Podstawowe https://open.umn.edu/opentextbooks/textbooks/797 - Table of Contents 1. Aren't Right and Wrong Just Matters of Opinion? On Moral Relativism and Subjectivism 2. Can We Have Ethics without Religion? On Divine Command Theory and Natural Law Theory 3. How Can I Be a Better Person? On Virtue Ethics 4. What's in it for Me? On Egoism and Social Contract Theory 5. Utilitarianism 6. Kantian Deontology 7. Feminism and Feminist Ethics 8. Evolutionary Ethics Adresy na platformie eNauczenie:
Example issues/ example questions/ tasks being completed	What is ethics, and what are its main theories? What are the ethical aspects of conducting scientific research? Does technological development always lead to social progress?	
Work placement	Not applicable	

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