



Subject card

Subject name and code	History and monuments of technology, PG_00059438						
Field of study	Chemical Technology, Civil Engineering, Chemistry, Technical Physics, Environmental Engineering, Electrical Engineering, Power Engineering, Electronics and Telecommunications, Biotechnology, Geodesy and Cartography, Biomedical Engineering, Electronics and Telecommunications, Chemistry in Construction Engineering, Biomedical Engineering, Biomedical Engineering, Nanotechnology, Spatial Development, Engineering and Technologies of Energy Carriers, Corrosion, Nanotechnology, Automation, Robotics and Control Systems, Green Technologies, Green Technologies, Spatial Development, Power Engineering, Power Engineering						
Date of commencement of studies	February 2022	Academic year of realisation of subject			2022/2023		
Education level	second-cycle studies	Subject group			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	Zakład Systemów i Urządzeń Energetyki Ciepłej -> Institute of Energy -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Michał Klugmann				
	Teachers		dr hab. inż. Michał Klugmann				
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	Introducing students to the general history of technology with a broader discussion of selected fields. Explaining the role of technical progress as a key factor in human development. Discussion of controversies, doubts as well as ethical and ecological aspects of progress. Sensitivity to the value of heritage, its culture-forming role and the need to protect. Familiar with the formal, legal and practical issues of protection of technical monuments.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[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 the historical heritage for the development of both the technology itself and the wider awareness - ethical, ecological, aesthetic. Is aware of the importance of the humanistic foundation in the work of an engineer.			[SK4] Assessment of communication skills, including language correctness [SK5] Assessment of ability to solve problems that arise in practice	
	[K7_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems		The student knows the history of the basic branches of technology encountered in everyday life. Is aware of the historical value of objects, can place them in the chronology of development.			[SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools	
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications		The student is able to perform basic activities related to the inventory and formal protection of historical items. He knows the principle of operation and the historical context of the basic objects of technology to the extent that allows them to be classified and described.			[SW1] Assessment of factual knowledge	

Subject contents	<p>1. Introduction - defining concepts, classification.</p> <p>2. The uniqueness of man and civilization against the background of the Earth and the universe.</p> <p>3. Different views on technical progress - determinants, effects, historical perception and evaluation, controversy, doubts, astray, future perspectives. (1 + 2 + 3 = 4 hours)</p> <p>4. Technique chronology (10 hours):</p> <ul style="list-style-type: none"> • Epochs and technological breakthroughs; conditions, philosophical foundation, political context and climate, • Key inventions of individual epochs, • People of technology - biographical threads. <p>5. Thematic block (14 hours):</p> <ul style="list-style-type: none"> • Construction and architecture, • Photography, • Cinematography, • TV, • Water supply and sewage systems, • Computers, • Nuclear energy. <p>6. Formal and legal aspects of technical monuments protection (2 hours).</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written exam	56.0%	100.0%
Recommended reading	Basic literature	No english literature yet.	
	Supplementary literature	No english literature yet.	
	eResources addresses		
Example issues/ example questions/ tasks being completed	<p>1. Are we unique and unique in the world and the universe?</p> <p>2. The industrial revolution - what shaped our world?</p> <p>3. Fire, water and other foundations of civilization.</p> <p>4. The Venetian Card - why don't we (re) build cities from old photos?</p> <p>5. Epidemics - a sudden return of a forgotten past on the example of the Covid-19 pandemic.</p> <p>6. Russo - Ukrainian war - clash of technical epochs.</p>		
Work placement	Not applicable		