



Subject card

Subject name and code	Industrial Revolution, PG_00060397						
Field of study	Mechanical Engineering						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group					
Mode of study	Part-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	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	18.0	0.0	0.0	0.0	0.0	18
	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	18	0.0		0.0	18	
Subject objectives	Discussion of the industrial revolution as a process that shaped the modern world - that is, the period from the eighteenth century to modern times, against the background of the timeline of the universal history of technology. Discussion of selected fields of technology developed in this period, profiles of technical people and selected inventions. Explanation of the role of technical progress as a key factor in the development of humanity. Discussion of controversies, doubts and ethical and ecological aspects of progress.						
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 is able to perform basic activities related to the inventory and formal protection of historical objects. 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.			[SU3] Assessment of ability to use knowledge gained from the subject		
	[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 listener is aware of the importance of historical heritage for the development of both the technology itself and a wider awareness - ethical, ecological, aesthetic. He is aware of the importance of the humanistic foundation in the work of an engineer.			[SK5] Assessment of ability to solve problems that arise in practice		
	[K7_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	The student knows the history of the basic branches of technology encountered in everyday life. He is aware of the value of historical objects, is able to place them in the chronology of development.			[SW1] Assessment of factual knowledge		

Subject contents	<p>1. Introduction to the general history of technology, from the Stone Age to the end of the 17th century (2 hours).</p> <p>2. Industrial revolution - genesis, pillars, stages, the most important inventions, people of the era, effects (2 hours).</p> <p>3. 19th century (2 hours).</p> <p>4. 20th century (2 hours).</p> <p>5. Gdansk against the backdrop of the industrial revolution, Gdansk University of Technology as the heritage and icon of the industrial revolution (4 hours).</p> <p>6. History of selected fields of technology: construction and architecture, photography, cinematography, television, water supply and sewage systems, computers, nuclear energy (6 hours).</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="456 730 794 752">Subject passing criteria</th> <th data-bbox="799 730 1137 752">Passing threshold</th> <th data-bbox="1142 730 1481 752">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="456 759 794 781">Essay</td> <td data-bbox="799 759 1137 781">56.0%</td> <td data-bbox="1142 759 1481 781">100.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	Essay	56.0%	100.0%			
Subject passing criteria	Passing threshold	Percentage of the final grade										
Essay	56.0%	100.0%										
Recommended reading	<table border="1"> <tbody> <tr> <td data-bbox="456 801 794 824">Basic literature</td> <td colspan="2" data-bbox="799 801 1481 824">No english literature yet.</td> </tr> <tr> <td data-bbox="456 831 794 853">Supplementary literature</td> <td colspan="2" data-bbox="799 831 1481 875">[1] Act of 23 July 2003 on the protection and care of monuments, Journal of Laws 2003 No. 162 item 1568</td> </tr> <tr> <td data-bbox="456 882 794 904">eResources addresses</td> <td colspan="2" data-bbox="799 882 1481 904">Adresy na platformie eNauczanie:</td> </tr> </tbody> </table>			Basic literature	No english literature yet.		Supplementary literature	[1] Act of 23 July 2003 on the protection and care of monuments, Journal of Laws 2003 No. 162 item 1568		eResources addresses	Adresy na platformie eNauczanie:	
Basic literature	No english literature yet.											
Supplementary literature	[1] Act of 23 July 2003 on the protection and care of monuments, Journal of Laws 2003 No. 162 item 1568											
eResources addresses	Adresy na platformie eNauczanie:											
Example issues/ example questions/ tasks being completed	<p>1. Description of the history of the selected field of technology.</p> <p>2. Biography of a selected person associated with the development of technology.</p>											
Work placement	Not applicable											