



## Subject card

Subject name and code	Team project, PG_00057403						
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		Optional subject group		
Mode of study	Full-time studies		Mode of delivery		at the university		
Year of study	1		Language of instruction		English		
Semester of study	2		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	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	0.0	0.0	0.0	30.0	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		10.0		60.0	100
Subject objectives	<p>The aim of the course is to acquire by students the skills of preparation the written work of a scientific nature - by oneself - and to present it in the form of a speech at the forum.</p> <p>The work can be carried out individually or in teams of two students.</p> <p>The topic is chosen by the students or proposed by the teacher, related to the broadly understood power industry in a modern approach or focused on historical research.</p> <p>The work must contain elements such as: aim of the thesis, review of the literature and the state of knowledge, analytical or design part and conclusions.</p>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_K01] is aware of the need for complementing the knowledge throughout the whole life, is able to select proper methods of teaching and learning	The effect of the work carried out by oneself.	[SK5] Assessment of ability to solve problems that arise in practice
	[K7_U01] is able to acquire information from specialist literary sources and other sources regarding the construction and operation of machines and related disciplines in polish and in a foreign language, is able to conduct a self-learning process, is able to synthesize the information, form conclusions and justify opinions	Ability to carry out by oneself a review of scientific literature on a selected topic.	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
	[K7_U08] is able to design a procedural equipment or device compliant with the specifications using a design aid system in the form of a design documentation, selecting the appropriate model, performing critical analysis with the proper selection of tools and technologies	The ability to fully describe an engineering project or to critically discuss and synthesize the gathered substantive knowledge.	[SU2] Assessment of ability to analyse information [SU4] Assessment of ability to use methods and tools
	[K7_K04] is able to establish professional contacts and is able to lead and work in a team assuming various roles in the team; is able to show resourcefulness and innovation when realizing professional projects	Motivation to search for knowledge in external sources and entities - scientific institutions, industry.	[SK3] Assessment of ability to organize work
	[K7_U04] is able to prepare and present a presentation of a solution of a construction or technological task and results of performed experiments including the analysis of the results and possible changes in Polish or in a foreign language, is able to organize and manage the work of a team, directing the tasks	The ability to present and discuss the effects of work in a public forum.	[SU1] Assessment of task fulfilment [SU5] Assessment of ability to present the results of task
Subject contents	<ul style="list-style-type: none"><li>Organizational meeting, establishing and discussing the topics of work.</li><li>Consultation meetings, individual discussion of progress and emerging questions with students.</li><li>Presentations of partial results of the work.</li><li>Presentation of the final version of the work with discussion and evaluation.</li></ul>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written work	56.0%	80.0%
	Presrentation	56.0%	20.0%
Recommended reading	Basic literature	Selected individually to the topic of work.	
	Supplementary literature	Selected individually to the topic of work.	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Selected individually to the topic of work.		
Work placement	Not applicable		