



## Subject card

Subject name and code	Group Project, PG_00057263						
Field of study	Power Engineering, 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				Optional subject group Subject group related to scientific research in the field of study	
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 Ogrzewnictwa, Wentylacji, Klimatyzacji i Chłodziwnictwa -> Institute of Energy -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Marcin Jewartowski				
	Teachers		dr inż. Marcin Jewartowski				
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	2.0		18.0	50	
Subject objectives	The aim of the course is to verify the ability to use the acquired knowledge to design system, installation or a device and to create their technical documentation.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[K7_U05] is able to integrate technical and economic analysis of the use of various energy technologies, including technologies using renewable energy sources and conventional and nuclear energy		The student is able to analyse a given design task in order to find its solution.			[SU2] Assessment of ability to analyse information	
	[K7_K02] is able to work in a group and take on different roles		The student is able to divide tasks within the group to implement a given design task.			[SK1] Assessment of group work skills	
	[K7_U01] is able to acquire information from literature, databases and other sources, has the ability of self-education in order to improve his/her professional competence (also in English), is able to prepare a simple scientific paper and its summary in English, as well as an oral presentation		The student is able to search and use the data and tools needed to implement the given design task.			[SU4] Assessment of ability to use methods and tools	
	[K7_K03] is able to think and act creatively and entrepreneurially, is aware of the responsibility for his/her own work and takes responsibility for teamwork		The student is able to complete a given design task.			[SK2] Assessment of progress of work	
	[K7_U06] is able to apply basic and advanced knowledge of power equipment and transmission network and internal installations to the preliminary design of a modern power plant or part thereof		The student is able to use the knowledge acquired during the studies to implement the given design task.			[SU1] Assessment of task fulfilment	
Subject contents	Solving a research or construction task within a given scope. Presentation of the results.						

Prerequisites and co-requisites	Thermodynamics, fluid mechanics, heat transfer		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Execution of the project	56.0%	100.0%
Recommended reading	Basic literature	Individual bibliographic studies are part of the assignment	
	Supplementary literature	none	
	eResources addresses		
Example issues/ example questions/ tasks being completed	Analyse the task, determine the criteria, chose the solution, perform calculations, create technical documentation.		
Work placement	Not applicable		