



## Subject card

Subject name and code	Construction and design of water turbines, wind turbines and pumps, PG_00055906						
Field of study	Power Engineering, Power Engineering, Power Engineering						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2024/2025		
Education level	first-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	3	Language of instruction			Polish		
Semester of study	6	ECTS credits			9.0		
Learning profile	general academic profile	Assessment form			exam		
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Paweł Dymarski				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	60.0	30.0	0.0	15.0	0.0	105
	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	105		9.0		111.0	225
Subject objectives							
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_W10] knows the basic installations in the field of renewable energy sources and their impact on the environment						
	[K6_W09] knows the dangers of electrical devices and the principles of protection against them, has basic knowledge of heat exchangers, has basic knowledge of power equipment such as pumps, compressors, turbines, combustion engines, boilers, pipelines and their accessories and methods of their selection depending on the needs						
	[K6_U11] Can design and properly dimension basic foundations in hydrotechnical construction facilities; can evaluate and list the loads acting on constructions, knows the codes of modern geotechnical investigations and technologies, knows the principles of foundations and safe design of foundations of typical buildings						
Subject contents							
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
			0.0%		0.0%		
Recommended reading	Basic literature						
	Supplementary literature						
	eResources addresses						

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable