



## Subject card

Subject name and code	Project 2, PG_00041793						
Field of study	Ocean Engineering						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2023/2024		
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	5		ECTS credits		3.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Marine Mechatronics -> Faculty of Ocean Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Daniel Piątek				
	Teachers		dr inż. Daniel Piątek				
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		5.0		40.0	75
Subject objectives	Ability to carry out the design course. Selection of elements of the electric and hydraulic system.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U06] in compliance with a formulated specification and with the aid of appropriate tools and methods, is able to complete a simple engineering task within the range of design, construction and operation of ocean technology objects and systems		The student is able to choose the appropriate tools to achieve the design goal		[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information		
	[K6_U02] can work individually and in a team, communicate through various techniques in professional environment and also record, analyse, and present the results of work, can estimate the time needed to complete a given task		The student is able to work on a part of the project in a team.		[SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems		The student has an organized knowledge of the design, construction and operation of hydraulic and electrical systems.		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	[K6_W06] has an organized knowledge on engineering methods and design tools allowing the conducting of projects within the construction and operation of ocean technology objects and systems		The student has a structured knowledge of engineering methods and design tools enabling the execution of the project.		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		

Subject contents	Electric drive and power systems for simple mechanisms.		
	Podstawowy układ napędu hydraulicznego (selection of pump and hydraulic motor)		
Prerequisites and co-requisites	Basic knowledge of electrical engineering and physics.		
	Basic knowledge of the basics of machine construction and the strength of materials and mechanics.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
		50.0%	50.0%
		50.0%	50.0%
Recommended reading	Basic literature	<i>Projektowanie napędów. Technika projektowa w praktyce. SEW EURODRIVE</i>	
		<i>Podstawy elektrotechniki i elektroniki. St.Bolkowski</i>	
		<i>Teoria obwodów elektrycznych. St.Bolkowski</i>	
		<i>Elektrotechnika i elektronika okrętowa - nowe wyd. R. BIAŁEK</i>	
		<i>STRYCZEK, S.: Napęd hydrostatyczny. T I i II. WNT, Warszawa 2016</i>	
		manufacturers' catalogs	
	Supplementary literature	Online producer catalogs.	
	eResources addresses	Adresy na platformie eNauczanie: PRACA PROJEKTOWA II, OCE, sem 5 (zimowy), MSiUO, 2023-24, PG_00041793 - Moodle ID: 29183 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=29183">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=29183</a>	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		