GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00057310		
Field of study	Ocean 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 Subject group related to scientific research in the field of study
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
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 inż. Daniel Piątek	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	9.0	0.0	0.0	18.0	0.0	27

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	27	10.0	38.0	75

Subject objectives

understanding of the functioning of the hydrostatic drive systems;

know the specifics of hydrostatic systems in ocean engineering;

knowledge of the workings of hydraulic components;

ability to design hydraulic systems structures;

the ability to calculate and matching system components;

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_U07] in compliance with a formulated specification and with the aid of appropriate tools and methods, is able to complete an advanced engineering task within the range of design, construction and operation of ocean technology objects and systems	student is able to optimize the operation of the hydrostatic system in terms of the selected criterion: energy efficiency, construction and operation costs, etc.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject
[K7_W06] has an organized, widened knowledge on engineering methods and design tools allowing the conducting of advanced projects within the construction and operation of ocean technology objects and systems	student using computer tools can design a complete hydraulic system for an ocean engineering object	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects
[K7_W05] has an organized, widened knowledge on design, construction and operation of ocean technology objects and systems	student is able to design a hydrostatic drive system and select its components	[SW1] Assessment of factual knowledge [SW3] Assessment of knowledge contained in written work and projects

Subject contents

Calculation of the components of the hydraulic system installation, pumps, motors, valves; selection of items from the directory, execute technical drawings;

Prerequisites and co-requisites

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	project	60.0%	100.0%
Recommended reading	Basic literature	1. STRYCZEK, S.: Napęd hydrostatyczny. T I i II. WNT, Warszawa 2005. 2. PASZOTA, Z.: Aspects Energetiques des Transmissions Hydrostatiques. Wyd PG, Gdańsk 2002 3. GÓRSKI, Z.: Budowa i działanie okrętowych urządzeń hydraulicznych. TRADEMAR, Gdynia 2008. 4. DYMARSKI, Cz.: Okrętowe śruby nastawne. Wyd. PG, Gdańsk 2009. 5. BALCERSKI, A., BOCHEŃSKI, D.: Układy technologiczne i energetyczne jednostek oceanotechnicznych. Wydawnictwo PG, Gdańsk 1998.	
	Supplementary literature	-	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		