



Subject card

Subject name and code	Designing of High-Speed Units 1, PG_00056259						
Field of study	Design and Construction of Yachts						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2024/2025		
Education level	first-cycle studies		Subject group				
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	practical 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. Michał Krężelewski				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	30.0	0.0	45
	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	45		5.0		25.0	75
Subject objectives	The aim of the course is to familiarize students with the issues of designing motor yachts and other high-speed crafts. The result is the execution of a conceptual design. The project is made with the use of a selected computer program.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_W06		The student has structured knowledge of engineering methods and design tools enabling the implementation of projects in the field of construction and operation of yachts		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
	K6_U03		The student is able to use methods of computer aided design, production and operation of yachts		[SU1] Assessment of task fulfilment		
	K6_U05		The student is able to formulate a simple engineering task and its specificity in the field of designing, manufacturing and operating yachts		[SU1] Assessment of task fulfilment [SU3] Assessment of ability to use knowledge gained from the subject [SU2] Assessment of ability to analyse information		
	K6_W05		The student has structured knowledge in the field of design, construction and operation of yachts		[SW3] Assessment of knowledge contained in written work and projects [SW1] Assessment of factual knowledge		
Subject contents	1. The goal and scope of work 2. The main and auxiliary design assumptions 3. Analysis of existing solutions 4. Determination of main dimensions and conceptual sketch 5. Hull shape design 6. Estimation of propulsion system parameters 7. Stability 8. Technical documentation (e.g. GA, LP,)						
Prerequisites and co-requisites							

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Test	60.0%	50.0%
	Project	100.0%	50.0%
Recommended reading	Basic literature	L. Larsson, R. E. Eliasson, M. Orych: Podstawy projektowania jachtów	
		W. L. Suska, Motorówki i małe kutry motorowe	
		J.Michalski, Podstawy projektowania okrętów	
	Supplementary literature	Przepisy Klasyfikacji i Budowy Jachtów Morskich, Części I VII, PRS	
Przepisy Klasyfikacji i Budowy łodzi motorowych, Części I-VI, PRS			
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		