



Subject card

Subject name and code	Fluid Mechanics, PG_00056244						
Field of study	Design and Construction of Yachts						
Date of commencement of studies	October 2021	Academic year of realisation of subject			2021/2022		
Education level	first-cycle studies	Subject group			Obligatory subject group 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	practical profile	Assessment form			assessment		
Conducting unit	Department of Hydromechanics and Hydroacoustics -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Michał Krężelewski				
	Teachers		dr inż. Michał Krężelewski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	15.0	0.0	0.0	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	Formulates the basic problems flow and solve them on the basis of law and methods of fluid mechanics. Apply law and methods of fluid mechanics in the design and operation of ocean facilities .						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_U02		Formulates basic flow problems and solves them in based on laws and methods of fluid mechanics.		[SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools		
	K6_W02		Applies the laws and methods of Fluid Mechanics in design and operation of ocean engineering objects.		[SW1] Assessment of factual knowledge		
Subject contents	Fluid as a part of continuum mechanics. Physical properties of fluids. Models of fluids. Forces acting in fluids. Continuity equation. Navier-Stokes and Euler equations. Bernoulli's principle - applications for solving practical questions. Main problems of hydrostatics and one-dimensional flows.						
Prerequisites and co-requisites	knowledge of the subject Mathematics and Physics.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	tutorials: midterm colloquiums		60.0%		50.0%		
	lecture: end colloquium		60.0%		50.0%		
Recommended reading	Basic literature		1. Gryboś R.: Podstawy mechaniki płynów, t.1,2, PWN W-a 1998r.; 2. Gryboś R.: Zbiór zadań z technicznej mechaniki płynów, PWN W-wa 2002r.				
	Supplementary literature		1. Krężelewski M.: Hydromechanika ogólna i okrętowa, cz. I, strypt PG 1982r.,				
	eResources addresses						
Example issues/ example questions/ tasks being completed							
Work placement	Not applicable						