



## Subject card

Subject name and code	Fundamentals of Natural Naval Resources, PG_00043678						
Field of study	Ocean Engineering, Ocean Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2020/2021		
Education level	first-cycle studies		Subject group				
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	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 hab. inż. Damian Bocheński				
	Teachers		dr hab. inż. Damian Bocheński prof. dr hab. inż. Czesław Dymarski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	0.0	0.0	30
	E-learning hours included: 0.0						
	Adresy na platformie eNauczanie: Podstawy morskich zasobów naturalnych cz. 2 - Moodle ID: 15780 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=15780">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=15780</a>						
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	Learn the basic knowledge of marine natural resources						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U04] has self-education skills in order to improve professional qualifications, is ready to work in industrial environment, adheres to HSE rules and regulations		The student has acquired the skills of self-education to expand knowledge of marine natural resources		[SU1] Assessment of task fulfilment		
	[K6_W05] has an organized knowledge on design, construction and operation of ocean technology objects and systems		The student has a basic knowledge of marine natural resources and methods of obtaining them		[SW1] Assessment of factual knowledge		
Subject contents	The concept and division of natural resources. The genesis and geology of the oceans. Metallic raw materials - genesis and areas of occurrence, deposit distribution, forecast of development of polymetallic nodules deposits. Energy resources - oil and gas deposits, coal deposits. Properties of crude oil and its products. Non-metallic raw materials - chemical raw materials, rock raw materials, deposits of precious stones. Other raw materials obtained from seawater. The geology and minerals of the Baltic Sea.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Test		60.0%		100.0%		
Recommended reading	Basic literature		Depowski S., Kotliński R., Ruhle E., Szamanek K.: Surowce mineralne mórz i oceanów. Wyd. Scolar, Warszawa 1998				
			Jastrzębska G.: Energia ze źródeł odnawialnych i jej wykorzystanie. WKŁ 2017				
	Supplementary literature		internet				

	eResources addresses	Podstawy morskich zasobów naturalnych cz. 2 - Moodle ID: 15780 <a href="https://enauczanie.pg.edu.pl/moodle/course/view.php?id=15780">https://enauczanie.pg.edu.pl/moodle/course/view.php?id=15780</a>
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	