

## GDAŃSK UNIVERSITY

## Subject card

Subject name and code	Geographic Information Systems (GIS), PG_00060663								
Field of study	Transport and Logistics								
Date of commencement of studies	October 2023		Academic year of realisation of subject			2025/2026			
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			5.0			
Learning profile	general academic profile		Assessment form			exam			
Conducting unit	Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						d Ship		
Name and surname	Subject supervisor		dr inż. Aleksander Kniat						
of lecturer (lecturers)	Teachers								
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	aboratory Project		Seminar	SUM	
	Number of study hours	30.0	30.0	0.0	0.0		0.0	60	
	E-learning hours included: 0.0								
Learning activity and number of study hours	Learning activity	Participation in classes includ plan	n didactic ed in study	Participation in consultation hours		Self-study		SUM	
	Number of study hours	60		5.0		60.0		125	
Subject objectives	Presentation of geographic information analysis and synthesis methods in a GIS system.								
Learning outcomes	Course outcome Subject outcome Method of verification								
	[K6_W06] has established knowledge of engineering methods and design tools enabling the implementation of projects in the field of construction and operation of transport means and systems		Student is able to apply tools and methods of GIS system to design a maritime transportation object or system.			[SW1] Assessment of factual knowledge			
	[K6_U03] is able to use computer methods to support the design, development and operation of transport means and systems		Student is able to perform a spatial analysis using GIS system concerning exploitation of maritime transportation objects or systems.			[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools			
Subject contents	Definition and applications of Geographic Information Systems (GIS). Data in GIS system: spatial data and attributes. Storing and using data, data sources. Vector vs. raster objects. Coordinate's systems. Standard data formats. Vizualization: maps, layers, symbols, labels. Data classification. Data analysis and synthesis, processing data from different sources.								
Prerequisites and co-requisites	Basic knowledge about operating system and file system usage.								
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade				
	project		60.0%			100.0%	, D		
Recommended reading	Basic literature		Davis D. GIS dla każdego 2009 Gaździcki J. Systemy Informacji przestrzennej 1990						
	Supplementary literature		Litwin L., Myrda G., Systemy Informacji Geograficznej. Zarządzanie danymi przestrzennymi w GIS, SIP, SIT, LIS. 2005						
	eResources addresse	Uzupełniające Adresy na platformie eNauczanie:							

Example issues/ example questions/ tasks being completed	<ol> <li>spatial analysis to select objects that satisfy some criteria</li> <li>cartogram presenting statistic data</li> </ol>
Work placement	Not applicable

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