



## Subject card

Subject name and code	Environment Protection and Management, PG_00060682						
Field of study	Transport and Logistics						
Date of commencement of studies	October 2023	Academic year of realisation of subject			2026/2027		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study 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	4	Language of instruction			Polish		
Semester of study	7	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Zakład Mechaniki i Konstrukcji Morskich -> Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr Anna Dembicka				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	15.0	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		5.0		15.0	50
Subject objectives	Learning about the directions of environmental protection in transport						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K6_K03] understands non-technical aspects and effects of activity in the profession of an engineer and its impact on the environment; is aware of the responsibility for decisions made	The student understands the effects of environmental impact. He is responsible for the decisions made as an engineer.			[SK1] Assessment of group work skills [SK3] Assessment of ability to organize work [SK5] Assessment of ability to solve problems that arise in practice		
	[K6_U04] is skilled in self-educating in order to develop his professional qualifications, is prepared to work in an industrial environment, applies the principles of occupational health and safety	The student is able to develop his/her competences and work in accordance with occupational health and safety rules			[SU3] Assessment of ability to use knowledge gained from the subject [SU4] Assessment of ability to use methods and tools [SU5] Assessment of ability to present the results of task [SU2] Assessment of ability to analyse information		
[K6_W08] has knowledge of the principles of sustainable development	The student acquired knowledge about the principles of sustainable development			[SW3] Assessment of knowledge contained in written work and projects			

Subject contents	<p>Environmental protection then and now</p> <p>Circular economy (circular economy)</p> <p>Contemporary environmental management in transport Ecology and transport Sustainable transport development strategy until 2030 (reducing the negative impact of transport on the environment) Low and zero emissions in transport Smart city and automobility goals and barriers</p> <p>Artificial intelligence in supporting ecology</p>											
Prerequisites and co-requisites												
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="454 754 796 786">Subject passing criteria</th> <th data-bbox="799 754 1141 786">Passing threshold</th> <th data-bbox="1144 754 1482 786">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="454 790 796 866">aboratory - assessment in accordance with the instructor's guidelines</td> <td data-bbox="799 790 1141 866">60.0%</td> <td data-bbox="1144 790 1482 866">50.0%</td> </tr> <tr> <td data-bbox="454 871 796 898">lecture - test</td> <td data-bbox="799 871 1141 898">60.0%</td> <td data-bbox="1144 871 1482 898">50.0%</td> </tr> </tbody> </table>			Subject passing criteria	Passing threshold	Percentage of the final grade	aboratory - assessment in accordance with the instructor's guidelines	60.0%	50.0%	lecture - test	60.0%	50.0%
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Example issues/ example questions/ tasks being completed	ecology, sustainable transport, green supply chain, green transport											
Work placement	Not applicable											