GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Transport asset management, PG_00062423		
Field of study	Transport		
Date of commencement of studies	February 2027	Academic year of realisation of subject	2026/2027
Education level	second-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	1	Language of instruction	Polish
Semester of study	1	ECTS credits	3.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Transportation Engineering -> Faculty of Civil and Environmental Engineering -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Wojciech Kustra	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	15.0	15.0	0.0	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	10.0	20.0	75

Subject objectives

The aim of the course is to familiarise students with: general principles of transport asset (resource) management, detailed principles of TAM transport asset (resource) management, detailed principles of RAM road asset (resource) management, examples and practical aspects of asset management, RAM planning and implementation process.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_W02] explains the importance and interdependence of key components describing transport systems and processes and their environment, using in-depth knowledge in accordance with the main trends in the development of scientific disciplines related to the field of study	The student has an in-depth and structured knowledge of the principles, planning, implementation and use of asset management methods in transport.	[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge
[K7_U02] presents logical and solid arguments regarding the obtained results, through analysis, synthesis of information in various technical contexts, critically approaching their interpretation	The student has an in-depth and structured knowledge of the principles, planning, implementation and use of asset management methods in transport.	[SU5] Assessment of ability to present the results of task [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
[K7_U06] develops their potential using their own initiative and experience, taking personal responsibility for striving to achieve their goals and increasing opportunities for personal development as well as those of their colleagues	The student has an in-depth and structured knowledge of the principles, planning, implementation and use of asset management methods in transport.	[SU5] Assessment of ability to present the results of task [SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment
[K7_K02] makes competent and ethical decisions, caring for the public interest and maintaining economic, social and environmental values	The student has an in-depth and structured knowledge of the principles, planning, implementation and use of asset management methods in transport.	[SK5] Assessment of ability to solve problems that arise in practice [SK3] Assessment of ability to organize work [SK1] Assessment of group work skills

<table>
<tr><td>Subject contents</td><td colspan="2">Course content – lecture
Lecture/ Practical/laboratory: Definitions of resources (assets), resource management, transport resource (asset) management. Principles, planning, implementation, use, monitoring and improvement of multi-faceted transport resource (asset) management systems with particular emphasis on road transport (RAM).</td></tr>
<tr><td>Prerequisites and co-requisites</td><td colspan="2"></td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>Zaliczenie</td><td>80.0%</td><td>30.0%</td></tr>
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<tr><td>Zaliczenie</td><td>80.0%</td><td>40.0%</td></tr>
</table></td></tr>
<tr><td>Recommended reading</td><td>Basic literature</td><td>[1]. Road Asset Management Webinar IRF, New York 2020 (IRF 2020)

[2]. ISO 55000:2014 Asset management - Overview, principles and terminology

[3]. Zofka A.: Proaktywna strategia zarządzania elementami infrastruktury drogowej. IBDM, Warszawa 2019 (Zofka 2019)

[4]. Guide to Asset Management (GAM), Austroads, ISBN 978-1-925671-40-7, Sydney 2018

[5]. CEDR: Implementation Guide For An Iso 55001 Asset Management System. A Practical Approach For The Roads Sector In Europe. CEDR 2017

[6]. ITF: Policies to Extend the Life of Road Assets. International Transport Forum. Paris Cedex, Research Report 2018.

[7]. ERF: Road Asset Management. An erf position paper for maintaining and improving a Sustainable and efficient road network. European Road Federation. Brussels 2014.

[8]. Haas R., Hudson R. W. Pavement Asset Managment. ISBN 978-1-119-03870-2. Canada 2015

[9]. Generalna Dyrekcja Dróg Krajowych i Autostrad. Diagnostyka stanu nawierzchni i wybranych elementów otoczenia drogi Wytyczne stosowania. Warszawa, maj 2019

[10]. Haas R., Hudson W.R., Zaniewski J.: Modern Pavement Management, Krieger Publishing Company, Malabar, Florida 1994</td></tr>
<tr><td></td><td>Supplementary literature</td><td>[1]. PN-ISO 55000:2017-09 Zarządzanie aktywami Informacje ogólne, zasady i terminologia

[2]. PN-ISO 55001:2017-08 Zarządzanie aktywami Systemy zarządzania Wymagania

[3]. PN-ISO 55002:2017-10 Zarządzanie aktywami Systemy zarządzania Wytyczne dotyczące stosowania ISO 55001</td></tr>
<tr><td></td><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2">Building a database of road resources.Evaluation of the existing transport system in a selected province.</td></tr>
<tr><td>Practical activites within the subject</td><td colspan="2">Not applicable</td></tr>
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