



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Means of Long-Distance Transport

### Course

Field of study

Year/Semester

Transport

1/2

Area of study (specialization)

Profile of study

-

general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

part-time

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

18

0

0

Tutorials

Projects/seminars

0

0

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

dr inż. Grzegorz Gramza

Responsible for the course/lecturer:

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Wydział Inżynierii Lądowej i Transportu

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### Prerequisites

Knowledge:

The student has a basic knowledge of general education

Skills:

Student is able to use the acquired knowledge to the analysis of specific phenomena and processes in motion objects.

The student is able to solve specific problems arising in technical systems.



Social competencies:

Student is able to prioritize important in solving the tasks posed in front of him.

Student demonstrates self-reliance in solving problems, acquire and improve their knowledge and skills.

### Course objective

The aim of the course is to acquaint students with the broad issues of different modes of transport

### Course-related learning outcomes

Knowledge

The student has a structured, theoretically founded general knowledge in the field of technology, transport systems and various means of transport

The student has knowledge of important directions of development and the most important technical achievements and other related scientific disciplines, in particular transport engineering

Skills

The student is able to take into account in the process of formulating and solving tasks in the field of transport engineering also non-transport aspects, in particular social, legal and economic issues

Social competences

The student understands that in technology, knowledge and skills quickly become obsolete

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The written test

### Programme content

Subject is divided into 4 parts:

- Road transport,
- Maritime transport,
- Transport by rail,
- Air transport.

Basic legal requirements relating to road transport (STD) , a division of STD , STD basic systems - tasks and components . Friction vehicle - basic concepts . Traffic safety in road vehicles. Alternative sources of power .

Basic information on the types , construction, specific features and capabilities of maritime transport for freight , passenger , mixed and special assignments.

Basic information on the rolling stock : types of vehicles, elements of construction: wheel-rail system , body and chassis , types of traction .



Basic information about aviation : air transport division , the types of aircraft and helicopters , lift and aerodynamics , control , drives, fleet air .

### Teaching methods

Lecture with multimedia presentation

### Bibliography

Basic

1. Rydzkowski W., Wojewódzka-Król K. (red.): Transport. PWN, Warszawa 2009.

Additional

1. Stajniak M. i in.: Transport i spedycja. ILiM, seria Biblioteka Logistyka, Poznań 2008.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	48	2,0
Classes requiring direct contact with the teacher	18	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	30	1,0

<sup>1</sup> delete or add other activities as appropriate