# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

# **COURSE DESCRIPTION CARD - SYLLABUS**

Course name				
Transport of special goods				
Course				
Field of study		Yea	r/Semester	
Transport		1/2		
Area of study (specialization)		Pro	file of study	
Refrigerated transportation		gen	eral academic	
Level of study		Cou	irse offered in	
Second-cycle studies		Poli	sh	
Form of study		Rec	luirements	
full-time		elec	ctive	
Number of hours				
Lecture	Laboratory clas	ses C	Other (e.g. online)	
30	15	C	)	
Tutorials	Projects/semir	ars		
0	0			
Number of credit points				
3				
Lecturers				
Responsible for the course/lecturer:		Responsible for the	course/lecturer:	
dr inż. Karolina Perz		prof.dr hab. Wiesła	w Zwierzycki	
email: Karolina.Perz@put.poznan.pl		Wieslaw.zwierzycki@put.poznan.pl		
ph. 61 6652391		ph. 6166522236		
Faculty of Civil and Transport Engineering		Faculty of Civil and Transport Engineering		
3 Piotrowo street, 60-965 Poznan		3 Piotrowo street, 6	3 Piotrowo street, 60-965 Poznan	

#### Prerequisites

Knowledge: The student has a basic knowledge of transport systems and processes; gained knowledge of various modes of transport

Skills: The student is able to analyze and evaluate transport processes; understands the phenomena occurring in them and is able to interpret them

Social competencies: understanding the need to acquire the transferred knowledge, is aware of the responsibility for their work

## **Course objective**

To acquaint students with the specificity of transport of special goods, processes and phenomena in it



# POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

appearing; presentation of the current regulations, rules and standards for the functioning of the transport of special goods in the world.

## **Course-related learning outcomes**

## Knowledge

Has ordered and theoretically founded general knowledge related to key issues in the field of transport engineering

Has knowledge of development trends and the most important new achievements of means of transport and other selected related scientific disciplines

## Skills

Can use information and communication techniques used in the implementation of projects in the field of transport

Can - when formulating and solving engineering tasks - integrate knowledge from various areas of transport (and, if necessary, also knowledge from other scientific disciplines) and apply a system approach, also taking into account non-technical aspects

## Social competences

Understands the importance of using the latest knowledge in the field of transport engineering in solving research and practical problems

Is aware of the need to develop professional achievements and adhere to the rules of professional ethics

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Completion of the course, final exam

## **Programme content**

Preparation of special loads for road transport, safety of transport of special loads, legal regulations in the transport of special loads, means of transporting special loads, trailers and semi-trailers for transporting non-standard loads, legal regulations regarding the transport of animals, organization of animal transport, loading and unloading devices (reloading, special cargo securing)

## **Teaching methods**

Lecture with a multimedia presentation, Laboratories - problem methods (case study, situational method, method of expert tables)

## Bibliography

Basic

1. L. Prochowski, A. Żuchowski Technika transportu ładunków. Wydawnictwo Komunikacji i Łączności Warszawa 20162.



# POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

ADR Umowa europejska dotycząca międzynarodowego przewozu towarów niebezpiecznych

3. CMR Umowa o międzynarodowym przewozie drogowym towarów.

4. D. Starkowski, K. Bieńczak, W. Zwierzycki Samochodowy transport krajowy i międzynarodowy kompendium wiedzy praktycznej T. 1, Zabezpieczenia ładunków oraz zagadnienia techniczno-eksploatacyjne w transporcie drogowym Poznań : Systherm D. Gazińska, 20105.

Przewóz i techniki mocowania ładunków ponadnormatywnych w transporcie / pod red. Wiesław Galor Akademia Morska, 2011

#### Additional

1. Pojazdy chłodnicze w transporcie żywności : praca zbiorowa / pod red. Wiesława Zwierzyckiego i Krzysztofa Bieńczaka, Poznań : Systherm D. Gazińska, 2006.

2. A.Korzeniowski, M. Skrzypek, G. Szyszka Opakowania w systemach logistycznych Biblioteka Logistyka Poznań 2010

3. Z. Korzeń (red): Logistyka w transporcie towarów Oficyna wydawnicza Politechniki Wrocławskiej 1998

### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for	30	1,0
laboratory classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>		

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