# POZNAN UNIVERSITY OF TECHNOLOGY



EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Transport of special goods [N2Trans1-TrCh>TTS]

Course			
Field of study Transport		Year/Semester 1/2	
Area of study (specialization) Refrigerated Transport		Profile of study general academic	>
Level of study second-cycle		Course offered in Polish	
Form of study part-time		Requirements compulsory	
Number of hours			
Lecture 18	Laboratory classe 9	es	Other (e.g. online) 0
Tutorials 0	Projects/seminar 0	S	
Number of credit points 3,00			
Coordinators dr inż. Karolina Perz karolina.perz@put.poznan.pl		Lecturers	

#### **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 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:

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)

### **Course topics**

none

#### **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.

ADR Umowa europejska dotycząca międzynarodowego przewozu towarów niebezpiecznych

3. CMR Umowa o międzynarodowym przewozie drogowym towarów.

4. D. Starkowski, K. Bieńczak, W. Żwierzycki Samochodowy transport krajowy i międzynarodowy kompendium wiedzy praktycznej T. 1, Zabezpieczenia ładunków oraz zagadnienia technicznoeksploatacyjne 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	57	3,00
Classes requiring direct contact with the teacher	27	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,50