

### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Commercial vehicle bodies [S2Trans1-TrD>NPU]

Course

Field of study Year/Semester

Transport 1/2

Area of study (specialization) Profile of study

Road Transport general academic

Level of study Course offered in

second-cycle Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

15 0

Tutorials Projects/seminars

0 0

Number of credit points

1,00

Coordinators Lecturers

dr hab. inż. Jakub Kowalczyk jakub.kowalczyk@put.poznan.pl

### **Prerequisites**

The student has general knowledge of the legal regulations governing the construction of commercial vehicles. The student has a basic knowledge of the general construction of vehicles and them destination. The student should demonstrate a general ability to identify problems related to commercial vehicles. The student should understand the basic principles of selecting commercial vehicles for specific goals. The student is willing to deepen the knowledge of interdisciplinary subjects. The student is open to learning about new engineering solutions.

### Course objective

The aim of the course is to familiarize students with the currently functioning bodies of commercial vehicles, to develop the skills of selecting bodies for specific transport needs, which will be used in practice.

# Course-related learning outcomes

#### Knowledge:

Student has advanced and in-depth knowledge of transport engineering, theoretical foundations, tools and means used to solve simple engineering problems.

Student has knowledge of development trends and the most important new achievements of means of

transport and other selected related scientific disciplines.

Student has advanced detailed knowledge of selected issues in the field of transport engineering.

#### Skills:

Student is able to make a critical analysis of existing technical solutions and propose their improvements (improvements)

Student is able - in accordance with a given specification, taking into account non-technical aspects - to design a complex device, system in the field of transport engineering or a process and implement this project - at least in part - using appropriate methods, techniques and tools, including adapting the existing or developing new ones tools

### Social competences:

Student understands that in the field of transport engineering, knowledge and skills very quickly become obsolete.

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

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Credit

# Programme content

The module program covers issues related to commercial vehicle bodies, particularly in the areas of:

Technical conditions and issues of technical testing

Means of transport for special types of cargo.

Means of transport for the needs of the units of the State Fire Service, the Police.

Trends in the development of commercial vehicle bodies.

# **Course topics**

In the framework of the classes, the following topics are discussed: Means of transport for animal transport vehicles - including legal regulations. Means of transport for waste transport vehicles and means of transport for ADR transport vehicles, including in tanks. Means of transport for loose material transport vehicles (fodder, grain, aggregates) and for the transport of concrete. Vehicles for controlled-temperature transport. Vehicles for abnormal transport. Means of transport for the needs of the State Fire Service units, the Police.

# **Teaching methods**

Lecture with a multimedia presentation, study classes

# **Bibliography**

Basic

Pojazdy samochodowe. Samochody ciężarowe i autobusy, Leon Prochowsk, WKŁ 2015 Additional

Podwozia i nadwozia pojazdów samochodowych. Podstawy budowym diagnozowania i naprawy. Marek Gabrylewicz, WKŁ, 2015

Akty normatyczne z zakresu pojazdów samochodowych (dokumnetacja homologacyjna, rozporządzenia oraz ustrawy).

## Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	10	0,50