



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Technology for handling means of transport

Course

Field of study

Year/Semester

Transport

2/3

Area of study (specialization)

Profile of study

- general academic

Level of study

Course offered in

First-cycle studies

Polish

Form of study

Requirements

full-time

compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

15

0

0

Tutorials

Projects/seminars

0

0

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

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Faculty of Civil and Transport Engineering

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Prerequisites

Knowledge: The student has basic knowledge of physics, mechanics, machine science as well as construction and operation of means of transport

Skills: The student is able to integrate the obtained information, interpret it, draw conclusions, formulate and justify opinions

Social competences: The student is aware of the importance and understands the non-technical aspects and effects of servicing of means of transport



Course objective

To acquaint students with the basic issues related to the operation of technical means of transport and with the existing technologies of servicing specific units and nodes of these means.

Course-related learning outcomes

Knowledge

1. Has a structured and theoretically founded general knowledge in the field of key technical issues and detailed knowledge of selected issues in this discipline of transport engineering.
2. Has a basic knowledge of the life cycle of means of transport, both hardware and software, and in particular about the key processes taking place in them.
3. Knows the basic techniques, methods and tools used in the process of solving tasks in the field of transport, mainly of an engineering nature.

Skills

1. Can obtain information from various sources, including literature and databases, both in Polish and in English, integrate them properly, interpret and critically evaluate them, draw conclusions, and exhaustively justify their opinions.
2. Is able to formulate and solve the tasks in the field of transport, apply appropriately selected methods, including analytical, simulation or experimental methods.

Social competences

1. Is aware of the importance of knowledge in solving engineering problems, knows examples and understands the causes of malfunctioning transport systems, which have led to serious financial and social losses, or to a serious loss of health and even life.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

A credit, which consists in checking the basic knowledge related to the operation of means of transport and technology of its implementation, taking into account the existing operating systems, European directives and national regulations as well as modern organizational forms in relation to individual and collective means of transport.

Programme content

1. Introduction and organization of the subject - organizational and formal matters; departments of means of transport; the place of operation in the life cycle of the means of transport and the basic concepts related to the handling of the means of transport; maintenance and repair of means of transport.
2. Genesis, systems and rules of operation - justification of the operation of means of transport; wear and deterioration of parts and consumables; handling systems; types of service; organizational methods of servicing against the background of the national maintenance system.



3. Handling collective means of transport - modern methods of handling collective means of transport; contracts and service packages in authorized and independent service stations, leased and owned means of transport, taking into account the European Union GVO directive.
4. Types of servicing - single and multiple, daily, adaptive, seasonal, warranty and warranty service; periodic technical maintenance (OT); technology of periodic technical maintenance of means of transport.
5. Cosmetic service technology - cosmetic and maintenance service; functions and methods of cosmetic service; washing of means of transport; washing preparations; car washes and their types; technology of cosmetic service of various means of transport; car wash recirculation systems.
6. Service quality - the quality of means of transport and the factors determining this quality, taking into account the technology used, service station equipment, organization, qualifications, skills and motivation of the operating personnel.
7. Maintenance infrastructure and variable - technical facilities and equipment for servicing means of transport; operating health and safety, varia related to the operation of means of transport. Service inspection, trends in servicing means of transport and transport companies.

Teaching methods

Lecture with multimedia presentation

Bibliography

Basic

1. Kozłowski M. (ed.): Budowa i eksploatacja pojazdów, t. II Obsługa, diagnostyka i naprawa zespołów i podzespołów / Construction and operation of vehicles, vol. II Service, diagnostics and repair of assemblies and subassemblies. Ed. Vogel Business Media, Wrocław, 2008 and later (in Polish).
2. Trzeciak K. : Wyposażenie warsztatów samochodowych / Car workshop equipment. Ed. Auto, Warsaw, 2005 (in Polish).
3. Uzdowski M., Abramek K., Garczyński K. : Pojazdy samochodowe. Eksploatacja techniczna i naprawa / Motor vehicles. Technical operation and repair. WKiŁ, Warsaw, 2008 and later (in Polish).
4. Lewicki J. : Wybrane zagadnienia technologii obsługi i napraw / Selected issues of maintenance and repair technology. Ed. University of Technology in Szczecin, Szczecin, 1990 (in Polish).

Additional

1. Orzełowski S. : Naprawa i obsługa pojazdów samochodowych / Repair and maintenance of motor vehicles. WSiP, Warsaw, 2008 and later (in Polish).
2. Zimowa obsługa samochodu / Winter car service. Auto Expert, 2015, No. 12, pp. 27-30 (in Polish).



Breakdown of average student's workload

	Hours	ECTS
Total workload	30	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	15	0,5

¹ delete or add other activities as appropriate