## 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

Computer aided design of mode of transportation

**Course** 

Field of study Year/Semester

Transport 3/5

Area of study (specialization) Profile of study

Food transport general academic

Level of study Course offered in First-cycle studies polish

Form of study Requirements

full-time elective

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

30 15 (

Tutorials Projects/seminars

0 0

Number of credit points

4

# Lecturers

Responsible for the course/lecturer: Responsible for the course/lecturer:

dr hab. inż. Przemysław Tyczewski dr hab. inż. Arkadiusz Stachowiak, prof. PP

Faculty of Civil and Transport Engineering Faculty of Civil and Transport Engineering

### **Prerequisites**

Basic knowledge of techniques, methods and tools used in the process of designing means of transport.

# **Course objective**

Use of AutoCAD as a support tool in technical development project documentation. Developing the ability to create tools supporting design calculations.

# **Course-related learning outcomes**

Knowledge

The student has an ordered, theoretically founded general knowledge of technology, transport systems and various means of transport

The student knows the basic techniques, methods and tools used in the process of solving tasks in the field of transport, mainly of an engineering nature engineering

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Skills

The student is able to design elements in the field of transport engineering and construct simple machines

## Social competences

Correctly identifies and resolves dilemmas related to the profession of a transport engineer.fe

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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

The student correctly identifies and solves dilemmas related to the profession of a transport engineer

## **Programme content**

Learning the basic features and functions of AutoCAD. Knowledge of drawing and modification tools. Working with functions: hatch, fill. Getting to know the tools supporting dimensioning. Using the objectoriented programming environment to create software tools supporting design. Creating program code in an object-oriented programming environment. Using compound statements in the program. Development of a computer program on the basis of an exemplary calculation algorithm.

# **Teaching methods**

- 1. Lecture with multimedia presentation
- 2. Laboratory exercises solving problems

# **Bibliography**

### **Basic**

- 1. Pikoń A., AutoCAD 2007 PL. Helion, Warszawa 2007
- 2. Biernat J., Tworzenie prostych programów użytkowych w Delphi. Mikom, Warszawa 2003.

#### Additional

1. Dietrych J., Rysunek techniczny jako zapis konstrukcji. Wyd. Polit. Śląskiej, Gliwice, 1979

# Breakdown of average student's workload

	Hours	ECTS
Total workload	90	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for	45	2,0
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