

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Introduction to computer science [N1Trans1>Wdl]

Course

Field of study Year/Semester

**Transport** 1/1

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements part-time compulsory

Number of hours

Lecture Laboratory classes Other 0

9

**Tutorials** Projects/seminars

0 0

Number of credit points

2.00

Coordinators Lecturers

dr inż. Maciej Siedlecki dr inż. Maciej Siedlecki

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### **Prerequisites**

The student knows the concept of a computing machine

#### Course objective

The aim of the course is to provide students with information on the necessary basic IT tools that are used during studies in the field of transport.

#### Course-related learning outcomes

#### Knowledge:

The student has ordered and theoretically founded general knowledge in the field of key issues of technology and detailed knowledge in the field of selected issues in this discipline of transport engineering

#### Skills:

The student is able to obtain information from various sources, including literature and databases (both in Polish and in English), integrate it properly, interpret it and critically evaluate it, draw conclusions, and comprehensively justify his/her opinion.

The student can properly use information and communication techniques, applicable at various stages of the implementation of transport projects

#### Social competences:

Understands that in technology, knowledge and skills very quickly become obsolete

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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Assessment taking into account the activity of students during lectures and a test on the material studied (checking the understanding of basic concepts and knowledge of the issues covered by the program of the subject).

### Programme content

Operating systems, Windows and Linux command line, CAD systems, CAE systems, CFD analysis tools. Free alternatives to office. Free development environments for solving math and engineering problems.

### Course topics

The program includes a discussion of the operation of computer components and the use of computer programs to solve engineering problems. The processing of experimental results, their graphical presentation and inference based on the obtained results are presented.

# **Teaching methods**

Lecture with multimedia presentation and software presentation.

# **Bibliography**

Basic

Dasi

Additional

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## Breakdown of average student's workload

	Hours	ECTS
Total workload	39	2,00
Classes requiring direct contact with the teacher	9	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,50