



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Introduction to computer science

### 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 studies

Form of study

Requirements

full-time

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

15

Tutorials

Projects/seminars

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

dr inż. Jędrzej Mosiężny

Instytut Energetyki Ciepłej

jedrzej.mosiezny@put.poznan.pl

### 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:

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.

#### Teaching methods

Lecture with multimedia presentation and software presentation.

#### Bibliography

Basic

-

Additional

-

#### Breakdown of average student's workload

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 40    | 2,0  |
| Classes requiring direct contact with the teacher                           | 15    | 1,0  |
| Student's own work (literature studies, preparation for tests) <sup>1</sup> | 25    | 1,0  |

<sup>1</sup> delete or add other activities as appropriate