COURSE DESCRIPTION CARD - SYLLABUS

Course name
Introduction to computing [S1SI1E>WdI]

Course

Field of study
Artificial Intelligence

Year/Semester
1/1

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
english

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
15

Laboratory classes
15

Other (e.g. online)
0

Tutorials
0

Projects/seminars
0

Number of credit points

3,00

Coordinators

dr hab. inż. Tomasz Żok
tomasz.zok@put.poznan.pl

Lecturers

dr hab. inż. Tomasz Żok
tomasz.zok@put.poznan.pl

Prerequisites

High school level knowledge is required.

Course objective

The subject introduces basic concepts in computer science and demonstrates their usefulness in practice.

Course-related learning outcomes

Knowledge
K1st_W2 has structured, theoretically supported basic knowledge regarding key areas of computer science

Skills
K1st_U2 has basic IT skills
K1st_U14 is able to use information and communication techniques and tools at various stages of implementation of IT projects

Competencies
K1st_K1 understands that in IT, with particular emphasis on artificial intelligence, knowledge and skills

become obsolete very quickly, recognizing the need for continuous education and improving one's own competences

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: multiple-choice test during the last classes, pass mark: 50% Laboratories: entrance tests that evaluate the knowledge from the previous classes (to pass the course you need to pass all of them), points for exercises performed during the classes (entitling to a higher grade)

Programme content

1. Digital circuits
2. Low-level programming
3. Numerical methods
4. Text processing
5. Databases
6. Parallel processing

Teaching methods

Lecture: multimedia presentation
Laboratory exercises: performing tasks on lecture content with the help of online tools

Bibliography

Matthew Justice "How computers really work"
Dale Dougherty, Arnold Robbins "Sed & Awk"
Michael J. Fitzgerald "Introducing regular expressions"
Anthony DeBarros "Practical SQL: A beginner's guide to storytelling with data"

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	30	1,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	45	1,50