



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Preparation for scientific research

### Course

Field of study

Year/Semester

Computing

4/7

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)

0

0

0

Tutorials

Projects/seminars

0

8

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

Specialization supervisors

email: office\_cat@put.poznan.pl

tel: 61 6653420

Faculty of Computing and Telecommunications

Piotrowo 2, 60-965 Poznań

### Prerequisites

Students should have knowledge, skills, and competencies learned during the previous years of study, concerning basic domains of computer science. Moreover, they should follow current trends in computing and related disciplines. The students should understand the needs to extend their knowledge and competences. In terms of social competencies, the student must present attitudes such as honesty, responsibility, perseverance, cognitive curiosity, creativity, personal culture, respect for other people.

### Course objective

The course aims to provide the students basic knowledge on the current trends and selected research results in computer science and to prepare students for an active participation in scientific projects realized at Poznan University of Technology. The course emphasizes the need for further education during second-cycle studies.



## Course-related learning outcomes

### Knowledge

has a well-grounded knowledge of fundamental computer science problems

knows current trends in computer science

### Skills

is able to collect information from the appropriate sources of different natures and comprehensively justify the formulated opinions

can plan and carry out life-long learning, and is aware of the possibilities of further studies (with the emphasis on Master programs)

### Social competences

understands that in computer science knowledge and skills quickly become outdated, and perceives the need for constant additional training and raising one's qualifications

is aware of the importance of scientific knowledge and research related to computer science in solving practical problems which are essential for the functioning of individuals, firms, organizations as well as the entire society

is aware of the social role of a graduate of the university of technology and understands the need to inform society, in an intelligible way, on the engineering activities, achievements of computer science, and other aspects related to the work of an IT professional

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Seminars: The course is strongly based on interactive seminars with students. The verification procedures rely on the presence of students and evaluation of their activities during seminars, taking part in a discussion.

## Programme content

The course covers the following issues: current trends and major achievements of researchers working at Poznan University of Technology concerning computer science; elements of scientific research methodology in the field of computing; presentation of the Master programs on Computing offered at Poznan University of Technology.

## Teaching methods

Seminars: slide show presentations on different sub-fields of computer science; interactive discussions with students, Q&A sessions.

## Bibliography



Basic

Additional

M. Heller. How to be learned? (In Polish), Copernicus Center Press, 2017.

**Breakdown of average student's workload**

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 25    | 1,0  |
| Classes requiring direct contact with the teacher   | 8     | 0,5  |
| Student's own work (literature studies, preparation of questions and topics for expected discussions during classes) <sup>1</sup> | 17    | 0,5  |

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