



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-diploma Seminar

### Course

Field of study

Computing

Area of study (specialization)

Internet of Things

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

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Faculty of Computing and Telecommunications

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Responsible for the course/lecturer:

### Prerequisites

A student should have basic knowledge of mathematics allowing him/her to formulate and solve complex computer science tasks. A student should have structured, theoretically grounded general knowledge of algorithms and complexity theory, computer systems architecture, operating systems, networking technologies, programming languages and paradigms, graphics and human-computer communication, artificial intelligence, databases, software engineering, decision support, and embedded systems. He/she should be aware of the trends and the most important new achievements in IT and selected related scientific disciplines.

He/she should have the ability to employ information and communication techniques used in IT projects, analytical methods, perform simulation studies and experiments to formulate and solve engineering tasks and simple research problems, to formulate and test hypotheses related to engineering/research problems, to integrate knowledge from various areas of computer science, and



the ability to acquire information from the indicated sources and to give an oral presentation on specific issues in the field of computer science.

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

Preparing students for thesis work, with particular emphasis on literature studies.

### Course-related learning outcomes

#### Knowledge

The student has an in-depth knowledge of the issues concerning his/her future thesis. (K2st\_W4)

The student knows the structure of a "structured abstract" and the protocol of a systematic literature review. (K2st\_W6)

The student has basic knowledge of intellectual property and the phenomenon of plagiarism. (K2st\_W7)

#### Skills

The student is able to conduct a literature study based on a systematic literature review. (K2st\_U1)

The student is able to select appropriate bibliographical databases and formulate queries related to the research questions. (K2s\_U2)

The student is able to discuss in information technology topics (K2s\_U12).

The student is able to prepare and deliver a presentation. (K2s\_U13)

The student is able to act as a reviewer and point out possible weaknesses in the SLR protocol (K2s\_U15)

The student is able to independently acquire the knowledge needed to write a thesis. (K2st\_U16)

#### Social competences

The student realizes the rapid growth of knowledge and how quickly his achievements can become obsolete. (K2st\_K1)

The student realizes the importance - from a practical point of view - of using the latest knowledge. (K2st\_K2)

The student realizes how important it is - also for himself - to share knowledge with others. (K2st\_K3)

The student realizes the consequences of plagiarism. (K2st\_K4)

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative evaluation:

- based on participation in discussions.



Summative evaluation:

- development of a working version of a "structured abstract" for the future thesis (a prerequisite for credit),
- preparation of an SLR (Systematic Literature Review) protocol and development of a review of such a protocol for another member of the group (prerequisite for credit),
- slide-assisted presentations reporting on the progress of the thesis (grading on a scale in accordance with the "Study Regulations").

**Programme content**

Structured abstract.

Systematic Literature Review.

Presentations of own work progress.

**Teaching methods**

Multimedia presentation, discussion.

**Bibliography**

Basic

1. Guidelines for performing Systematic Literature Reviews in Software Engineering, ver. 2.3, University of Durham, UK, 2003,  
[https://www.elsevier.com/\\_\\_data/promis\\_misc/525444systematicreviewsguide.pdf](https://www.elsevier.com/__data/promis_misc/525444systematicreviewsguide.pdf)

Additional

1. Dobry rady dla piszących teksty naukowe, David Lindsay ; przeł. [z ang.] - Wrocław: Politechnika Wroclawska, 1995.
2. Jak pisać prace uniwersyteckie : poradnik dla studentów, Paul Oliver ; przekł. [z ang.] - Kraków : Wydaw. Literackie, 1999.
3. Jak pisać teksty naukowe?, Jolanta Maćkiewicz. - [Wyd.2 poszerz., dodr.] - Gdańsk: Uniwersytet Gdański, 2001.



### Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature study, preparation of presentations, preparation of a "structured abstract", preparation of SLR protocol and execution of the study, reviewing another person's protocol) <sup>1</sup>	20	1,0

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