# POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name Pre-diploma Seminar [S2Inf1-PB>SEMPD]

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Coordinators		Lecturers	
Number of credit points 2,00			
Tutorials 0	Projects/seminars 30	;	
Number of hours Lecture 0	Laboratory classe 0	S	Other (e.g. online) 0
Form of study full-time		Requirements compulsory	
Level of study second-cycle		Course offered in polish	
Area of study (specialization) Edge Computing		Profile of study general academic	;
Course Field of study Computing		Year/Semester 1/2	

#### **Prerequisites**

A student should have basic knowledge on computing science gained during the studies. Should possess the ability to present knowledge and ideas in logical and substantively correct way, preparing multimedia presentations using tools such as Power Point, composing text in text editors and gaining information from various sources. A student should be aware of the necessity to gain new competences following advances of science and technology.

# **Course objective**

Presentation of general rules of preparing the diploma thesis and the graduation procedure. Ongoing control and stimulation of systematic work on the diploma thesis. Enabling students to present the initial assumptions of their diploma projects, based on a properly conducted literature review related to the chosen topic, including a preliminary structured abstract of the future thesis. Improving students' ability to publicly present their own concepts and results of work using modern technologies and tools. Developing students' ability to precisely formulate and express their thoughts and to conduct conclusions.

#### 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 bibiographical 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.

Cumulative evaluation based on preparing and giving multimedia presentations as well as completion of tasks related to the subject content (literature review, abstracts and summaries, simple scientific texts).

Grading according to the scale given in "Study Regulations".

# Programme content

Diploma rules. Basic requirements for diploma theses. Ways to use source materials and an overview of the main sources of scientific publications available online. Principles of conducting a literature review. Rules for creating abstracts and summaries. Methodology of conducting research, especially in the field of computer science. Planning and performing research experiments. Basic rules for writing scientific articles. Principles of preparing multimedia presentations. Basic rules for presenting a scientific report.

# **Teaching methods**

Multimedia presentations, discussions with students, tasks related to the analysis of scientific texts, conducting a literature review, using bibliographic sources, creating abstracts and summaries, preparing simple scientific texts.

#### Bibliography

Basic

1. M. Węglińska, Jak pisać pracę magisterską: poradnik dla studentów, Kraków, Oficyna Wydawnicza Impuls, 2005.

2. J. Maćkiewicz, Jak pisać teksty naukowe?, Gdańsk, Uniwersytet Gdański, 2001.

3. 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 4. K. Wisłocki, Metodologia i redakcja prac naukowych, Wyd. PP, 2013.

Additional

1. M. Krajewski, O metodologii nauk i zasadach pisarstwa naukowego, 2010.

2. D. Lindsay, Dobre rady dla piszących teksty naukowe, Wrocław: Politechnika Wrocławska, 1995.

3. P. Oliver, Jak pisać prace uniwersyteckie: poradnik dla studentów, Kraków, Wydawnictwo Literackie, 1999.

4. J. Zieliński, Metodologia pracy naukowej, Wyd. ASPRA, 2012.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00