# POZNAN UNIVERSITY OF TECHNOLOGY



Course name

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

# **COURSE DESCRIPTION CARD - SYLLABUS**

#### Seminar [S1SI1E>SEM] Course Field of study Year/Semester Artificial Intelligence 4/7 Area of study (specialization) Profile of study general academic Level of study Course offered in first-cycle English Form of study Requirements full-time compulsory Number of hours Lecture Laboratory classes Other 0 n 0 Tutorials Projects/seminars 15 0 Number of credit points 1.00 Coordinators Lecturers dr hab. inż. Robert Susmaga robert.susmaga@put.poznan.pl

### **Prerequisites**

Knowledge: basic field knowledge related to the selected topic of the thesis as well as methods, techniques and tools used in solving tasks in this field. Skills: the ability to: -- solve basic problems in the selected field, integrate knowledge from various areas of computer science and obtain relevant information from the various indicated sources, -- work in teams. Additionally, welcome is an inclination to constantly expand one's competences and (as part of general social competences) cognitive curiosity, perseverance in the pursuit of expanding one's knowledge, and a large dose of honesty and personal culture.

## Course objective

1. Providing basic knowledge on preparing and presenting scientific papers, in particular: diploma theses in the field of computer science. 2. Developing problem solving skills related to integrating and interpreting data, information and knowledge from various sources. 3. Expanding knowledge about methods, techniques and tools related to scientific research in the selected field.

### **Course-related learning outcomes**

Knowledge: Students:

-- have knowledge of the development trends and new achievements in the selected area of computer science related to the implementation of the diploma thesis

-- know advanced methods, techniques and tools used in solving complex engineering tasks related to the implementation of the diploma thesis

-- are familiar with the life cycle of IT systems and know the tools used in the software development process

Skills:

Students:

-- possess a good grasp of team work and are able to set priorities of implemented tasks -- are able to obtain information related to the implementation of the diploma thesis from literature, databases and other sources, integrate this information, make their interpretation and critical assessments, draw conclusions, formulate and justify opinions

-- can communicate in a professional environment and in other environments, also with the proper use of advanced IT tools

-- can prepare and present scientific studies, presenting the results of scientific research and create presentations on specific issues in the field of computer science related to the implementation of the diploma thesis

Social competences:

Students:

-- understand that in IT knowledge and skills become obsolete relatively quickly

-- appreciate the importance of using the latest knowledge in the field of computer science in solving engineering problems, taking into account not only their technical, but also socio-economic aspects -- understand the importance of popularizing activities concerning the latest achievements in the field of computer science

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The learning outcomes presented above are verified on the basis of the prepared and delivered presentations, in which the following may be taken into account:

- -- completeness and formal correctness,
- -- completeness and substantive correctness,
- -- presence and relevance of potential research content,
- -- informative and educational values.

An important role is also played by the ability to conduct effective argumentation, in particular to defend research hypotheses, conducted experiments and derived conclusions during the discussion that follows each presentation (the purpose of which is not only to submit potential critical remarks to the presented content, but also to prepare the presenter for a potentially defensive role). Activity during the presentations of other speakers is also welcome.

## Programme content

The completion of the diploma thesis and the participation in the diploma seminar, in addition to practical skills, are aimed at developing in students engineering skills mainly (which are key at the first cycle of studies). As part of seminar classes, students learn about various techniques of solving practical engineering problems. They are also familiarized with the form of the diploma exam and further education opportunities (e.g. the second-cycle studies) at the home Faculty/University.

The subject matter of the course covers basically two basic issues: creating documents (indirectly, together with the thesis supervisors) and preparing and giving presentations (directly).

As part of the classes, students prepare and present two detailed presentations on the issues raised in diploma theses, and then answer questions and participate in a discussion on these issues (main goal: to acquire the ability to communicate and justify the developed solutions).

The first presentation aims to present:

- -- selected topic of work, its purpose and scope,
- -- justification for the choice of a given topic and the purposefulness of its implementation,
- -- the current state of knowledge in a given field,
- -- pre-selected tools and methods of task implementation,
- -- the expected schedule for the implementation of individual stages.

The second presentation includes the presentation of:

-- current progress in the implementation of the tasks,

- -- compliance with the planned schedule,
- -- the results achieved,

-- possible modifications of initial plans and assumptions.

If completed in time, both presentations (after appropriate merging) can become the nucleus of the presentation given as part of the defense of the thesis.

An additional goal of the course is to make students aware of the social role of a graduate of a technical university, and in particular to understand the need to formulate and provide information to the public on the achievements of technology and other aspects of engineering activity.

### **Course topics**

none

## **Teaching methods**

Short presentations and talks on selected topics; consultations on the topics of the theses, answers to questions and discussions about the delivered presentations

## Bibliography

Basic:

1. P. Lenar: "Profesjonalna prezentacja multimedialna (jak uniknąć 27 najczęściej popełnianych błędów?)", Helion, Gliwice, 2010.

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

Additional:

1. Jay, R. Jay: "Skuteczna prezentacja", Zysk i S-ka, Poznań, 2001.

2. R. Williams: "Prezentacja, która robi wrażenie. Projekty z klasą", Helion, Gliwice, 2011

### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	15	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,50