STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Pre-diploma Seminar		**1010512321010510863**

Field of study	Profile of study (general academic, practical)	Year /Semester
Computing	**(brak)**	**1 / 2**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Software Engineering	**English**	**obligatory**

Cycle of study:	Form of study (full-time,part-time)
Second-cycle studies	**full-time**

No. of hours				No. of credits
Lecture: **-**	Classes: **30**	Laboratory: **-**	Project/seminars: **-**	**2**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**2 100%**
Technical sciences	**2 100%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	Student starting this course should have a basic domain knowledge related to the topics cosindered for Master thesis in the field of science and they should know the basic methods, techniques and tools used in solving the tasks of the field.
2	**Skills**	Student should be able to solve the basic problems of the selected area and to integrate knowledge from different areas of computing science and the ability to obtain information from the recommended sources.
3	**Social competencies**	Student should also understand the need to expand own competences. In addition, in the social attitudes area the student must present such attitudes as honesty, responsibility, perseverance, curiosity, creativity, manners, respect for other people.

Assumptions and objectives of the course:

1. Provide students with basic knowledge of the methodology of writing and presenting scientific papers in the field of computer science.
2. Develop students? ability to present results of research in computer science by technical papers and presentations.
3. Develop students' ability to solve problems related to the acquisition of knowledge from selected sources, integration and interpretation of the acquired information and the presentation of research results. Increasing knowledge about the methods, techniques, and tools related to conducting research in a particular field.
4. Prepare students for choosing the Master thesis topic.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. student has detailed theoretical knowledge related to the field of computer science in the area of the chosen topic of the thesis - [K_W5+++]
2. student has knowledge regarding trends and the most important new achievements in selected area of computer science and selected related science disciplines - [K_W6+++]
3. student knows the fundamental methods, techniques and tools used to solve complex engineering tasks in the selected area of computer science - [K_W8+]

Skills:

1. student is able to acquire, combine, interpret and evaluate information from literature, databases and other information sources (in native language and English); draw conclusions, and formulate opinions based on it. - [K_U1+++]
2. student is able to communicate in native language and English, using different techniques in professional environment, also with the use of IT tools - [K_U2+++]
3. student is able to prepare an elaboration in native language and a short research report in English presenting the results of research - [K_U3+]
4. student is able to prepare and give an oral presentation in English regarding specific computer science problems - [K_U4+++]
5. student is able to plan and arrange self-education process - [K_U5++]
6. student has language skills at B2+ level in accordance with the requirements set out for level B2+ Common European Framework of Reference for Languages - [K_U6++]
7. student is able to employ analytical, simulation, and experiment methods to formulate and solve engineering tasks and basic research problems - [K_U9+]
8. student is able to combine knowledge from different areas of computer science (and if necessary from other scientific disciplines) to formulate and solve engineering tasks; and use system approach that also incorporates nontechnical aspects - [K_U10+]
9. student is able to formulate and test hypotheses regarding engineering problems and basic research problems - [K_U12+]
10. student is able to assess usefulness and possibility of employing new developments (methods and tools) and new IT products - [K_U13++]
Social competencies:
1. student understands that knowledge and skills related to computer science quickly become obsolete - [K_K1+++]
2. 12. is able to correctly assign priorities for implementing tasks specified by himself or others, divide the work into stages and develop a schedule, to categorize the stages of importance, urgency and impact on other stages and the whole task - [K_K6+]

Assessment methods of study outcomes
Formative assessment:
? based on completeness and accuracy of prepared presentations (with own work and reporting state of the art on the given topic),
? based on the active presence during the presentations prepared by other students,
? based on the current progress of the tasks in accordance with the schedule.
Summative assessment:
? assessment of student preparation for each presentation and their compliance with the initial plan,
? continuous evaluation for each seminar (oral response) - based on substantive activity during other people presentations,
? on the basis of a prepared short paper/report
? based on timely realization of work,
? discussion on additional aspects of the subject,
? effective use of knowledge in solving problems.
Course description

Seminars are conducted in the form of 15 2-hour meetings. During seminar classes, the students are to prepare and give three presentations in English related to the topic considered for the prospective Master thesis.

The first presentation aims to provide:

? the motivation for selecting this topic

? practical impact of the topic

? the proposed activities related with solving the problem discussed

? pre-selected tools and methods,

? possible topics for the Master thesis

The second presentation covers:

? the current state of the art

? literature overview

? overview of typical methods and approaches reported in literature

The third presentation should focus on presenting a short paper/report on one of the aspects already solved or defined within the scope of the problem. The paper should be distributed among other students prior to presentation in order to help them participating in discussion. They are expected to read it, understand it and prepare questions to be asked.

During each presentation the other students are to:

? actively participate in the class,

? evaluate selection of the proposed methods for solving the problem

? identify concerns / uncertainties in the presented material and solutions,

? make suggestions for possible improvements and deepening the subject,

Basic bibliography:

1. The Non-Designer's Presentation Book, Williams R., Peachpit Press, San Francisco, 2009.

2. The Craft of Scientific Presentations: Critical Steps to Succeed and Critical Errors to Avoid, Alley M., sha-rif.edu/~namvar/index_files/Scientific-Presentation.pdf, 2002.

Additional bibliography:

1. Rethinking PowerPoint: Designing & Delivering Presentations That Engage The Mind, Galloway R., Method Content LLC, Chica-go/NYC, 2011.

Result of average student's workload

Activity	Time (working hours)
1. participating in seminars: 15 x 2 hours,	30
2. preparation for seminars: 2 x 3 + 4 hours	10
3. consulting issues related to the subject of the course.	5
4. studying literature / learning aids (10 pages = 1 hour), 50 pages	5

Student's workload

Source of workload	hours	ECTS
Total workload	50	2
Contact hours	35	1
Practical activities	45	2