



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Diploma seminar [N1Inf1>SEM]

### Course

Field of study

Computing

Year/Semester

4/8

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

part-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

12

Projects/seminars

0

### Number of credit points

1,00

### Coordinators

dr inż. Rafał Klaus

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### Lecturers

### Prerequisites

A student starting this subject should have basic knowledge, skills and competences acquired in earlier years of studies, enabling him to pursue individual or team engineering diploma thesis.

### Course objective

The aim of the course is to present students with the principles of preparing a diploma thesis from the perspective of substantive and editorial, regulations and principles relevant to the implementation of IT projects constituting the subject of a diploma thesis, opportunities for further education and experience awareness of the social role of a technical university graduate, the importance of knowledge in solving engineering problems and finding commercial applications for the created software. An equally important goal of the course is to develop students' skills creating technical documents and the ability to publicly present related content practicing the profession of engineer using appropriate technical means and modern audiovisual aids. The goal is also to acquire the ability to clearly and precise formulation and expression of the transmitted content, in accordance with the 5C principle (Clear, Complete, Correct, Courteous, Concise).

### Course-related learning outcomes

### Knowledge:

The student has general and detailed knowledge in the field of computer science regarding the issues it concerns

diploma thesis in progress; has knowledge about development trends and the most important new ones achievements in IT related to the completion of the diploma thesis; has basic knowledge about the cycle life of IT systems (including: stages of designing such systems in accordance with the principles software engineering) carried out as part of a diploma thesis; knows basic techniques, methods and tools used in the process of solving IT engineering tasks, in the field of issues related to the implementation of the diploma thesis; has knowledge of ethical principles related to the implementation of the diploma thesis

### Skills:

The student is able to look for useful sources of information (including English-language ones), methods and techniques

properly use them, necessary to complete the engineering diploma thesis, integrate them, interpret and critically evaluate them, draw conclusions and formulate them comprehensively

justify opinions; is able to use information and communication techniques

application at various stages of engineering diploma thesis; preparing a speech seminar student can communicate in Polish and English using a specialized language

terminology, using various techniques, including the use of IT tools; has ability to present the results of work performed (working IT application), i.e.

prepare and present, in Polish or English, an oral presentation regarding detailed issues in the field of IT related to the implementation of the diploma thesis, incl

formulate conclusions and present results in a way that is understandable to a wide audience;

has the ability to create technical documents (project documentation) using appropriate technical measures; is able to share tasks with team members

diploma and appropriately assign roles during the presentation of the project results

diploma and is able to properly define priorities for the implementation of the one he or she has chosen or other tasks; is able to plan and implement the process of his own permanent learning and knows

opportunities for further education based on information provided during classes seminars.

### Social competence:

The student understands that in IT, knowledge and skills become obsolete very quickly; has awareness of the importance of knowledge in solving engineering problems, such as those implemented in

as part of a diploma thesis; is aware of the social role of a university IT graduate

technical, in particular understands the need to provide information and opinions to the public regarding engineering activities, achievements in the field of computer technology, as well as the achievements of i

tradition of the IT profession; correctly identifies and resolves dilemmas related to work implementation engineering diploma.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: in the scope of the seminar: based on the assessment of the current progress in the implementation of tasks.

Summative assessment: checking the assumed learning outcomes is carried out by assessment presentations prepared on selected issues implemented as part of the project - work

engineering; this assessment also includes the ability to use information and communication and knowledge of social, economic and legal aspects and risks related to an IT project.

## Programme content

The compulsory course "Introduction to writing methodology" is directly related to this subject scientific work, bibliographic description", carried out by employees of the Main Library of PUT.

Implementation

thesis and diploma seminar, in addition to the practical skills that are provided here

crucial, they develop students' research skills, among others, through the analysis of a given literature

topics. During seminar classes, students learn sample solving techniques research problems, the basics of problem solving methodology are presented, e.g. based learning, design thinking. Supervision is provided as part of the diploma seminar organizational supervision over diploma theses prepared by students. Topics of these classes covers two basic issues: creating documents (documentation) and methodology preparing and giving presentations. This includes, among others: the following issues: principles of editing a diploma thesis, planning the document preparation process, elements graphics, document formatting, checking and correcting documents, principles of presentation spoken language, preparation of a presentation, technical means and their use, method of presentation. IN As part of the course, students prepare one or two papers on the issues discussed in their course diploma theses, the goal here is to acquire the ability to clearly and precisely formulate and expressing the transmitted content, in accordance with the 5C principle (Clear, Complete, Correct, Courteous, Cnoncise).

Students are presented with opportunities for further education (e.g. second and third cycle studies, studies postgraduate). During workshops related to the presentation of diploma projects, the lecturers try to make students aware of the social role of a technical university graduate, and, in particular, understanding the need to formulate and communicate to society, in particular through the mass media, information and opinions regarding technological achievements and other aspects engineering activities. Teaching methods: consultations on ongoing projects and discussions regarding the presented diploma projects.

### Course topics

none

### Teaching methods

Seminar exercises using multimedia materials, based learning techniques, design thinking, tools for creating film statements in accordance with the 5C principle (Clear, Complete, Correct, Courteous, Cnoncise).

### Bibliography

Basic

1. Klaus Rafał, Engineering thesis editing pattern, <http://www.cs.put.poznan.pl/rklaus/wzorzec/wzorzec.pdf>
2. PN-ISO 690: 2002 Documentation. Bibliographic notes. Content, form and structure.
3. PN-ISO 690-2: 1999 Information and documentation – Bibliographic notes – Sheet 2: Documents electronics and their parts

Supplementary

1. Dudziak A., Żejmo A., Editing diploma theses. Difin. Warsaw, 2008

### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	12	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	13	0,50