

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Diploma seminar I [S1MNT1>SD1]

Course

Field of study Year/Semester

Mathematics of Modern Technologies 3/6

Area of study (specialization) Profile of study

general academic

0

Level of study Course offered in

first-cycle Polish

Form of study Requirements full-time compulsory

**Number of hours** 

Lecture Laboratory classes Other

0 0

Tutorials Projects/seminars

0 15

Number of credit points

4,00

Coordinators Lecturers

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#### **Prerequisites**

The student has basic knowledge of the subjects covered by the study program. Ability to effectively self-study in the chosen field of study, ability to work in a team and awareness of the need to expand one's knowledge and competences.

# Course objective

Learning about selected issues regarding the collection of the necessary materials and rules for the preparation of engineering thesis. Learning the rules of conducting research and editing the diploma thesis.

# Course-related learning outcomes

Knowledge:

- the student has the extended knowledge related to the investigated topic of the dissertation [K\_W04(P6S\_WG)];
- the student knows the latest development trends in technology based on professional literature [K\_W01(P6S\_WG), K\_W11(P6S\_WG)],

Skills:

- is able to use printed and electronic literature sources, integrate the acquired information and make their interpretation and draw conclusions [K U08(P6S UW), K U14(P6S UK)];
- can work individually and in a team, can estimate the time needed to accomplish the tasks provided for in the diploma thesis [K U12(P6S UW)];
- has the skills of self-education to improve professional competence in the field of the chosen field of study and specialization [K U15(P6S UK), K U17(P6S UU)],

#### Social competences:

- the student is a ware of the limitations of his knowledge and the need to constantly improve it [K\_K01(P6S\_KK), K\_K02(P6S\_KK)];
- students awareness of the value of their knowledge and work, and also the readiness of submitting to the principles of the work in the team cooperating in the range of realized tasks [K K04(P6S KR), K K05(P6S KR)].

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Projects/seminars: knowledge and skills acquired as part of the seminar classes are verified by:

- observation and assessment of class activity, especially during discussions on analyzed issues;
- assessment of the content and presentation form of the overall topic of engineering work;
- observation and assessment of student work regularity.

#### **Programme content**

Projects/seminars: Definition and essence of the diploma thesis, including team work and its connection with the provisions of study regulations of Poznan University of Technology. Discussion of the thematic scope of engineering theses. Rules for the implementation of works, individual consultations and the use of literature resources. Guidelines and recommendations for editing engineering works. Principles of preparing the presentation of the thesis and preliminary discussing how to implement the selected topic. Discussing the principles of citation as well as copyright and related law when writing theses.

# Course topics

Projects/seminars: Definition and essence of the diploma thesis, including team work and its connection with the provisions of study regulations of Poznan University of Technology. Discussion of the thematic scope of engineering theses for the field of energy. Rules for the implementation of works, individual consultations and the use of literature resources. Guidelines and recommendations for editing engineering works (document formatting, graphic elements, document correction). Principles of preparing the presentation of the thesis and preliminary discussing how to implement the selected topic (as part of the course, students prepare one paper on the issues raised in their thesis). Discussing the principles of citation as well as copyright and related law when writing theses.

# **Teaching methods**

Projects/seminars: Multimedia presentation supplemented with comments and examples given on the board, analysis /discussion of various methods (including unconventional) solutions of examplary problems and specific problems indicated in the topics of theses of individual students.

# **Bibliography**

#### Basic:

- Polecana przez promotora bibliografia z zakresu tematyki pracy dyplomowej;
- Vademecum autora, zalecenia przygotowania publikacji opracowane przez Wydawnictwo Politechniki Poznańskiei:
- Szczegółowe wytyczne dotyczące redagowania pracy dyplomowej opracowane w instytucie promotora;
- Specjalistyczna literatura (książki, artykuły, materiały konferencyjne, broszury techniczne);
- Leksykony, encyklopedie, poradniki techniczne, słowniki.

#### Additional:

- Bibliografia wyszukana przez studenta;
- Przykładowe, wzorcowe prace dyplomowe.

# Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
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)	85	3,50