



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Pre-diploma seminar

### Course

Field of study

Mechatronics

Area of study (specialization)

Mechatronic design of machines and vehicles

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

elective

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

15

### Number of credit points

1

### Lecturers

Responsible for the course/lecturer:

Prof. Krzysztof Talaśka

email: krzysztof.talaska@put.poznan.pl

Tel. 61 224-4512, 61 665 2244

Faculty of Mechanical Engineering

Piotrowo Street 3, 61-138 Poznań

Responsible for the course/lecturer:

PhD Eng. Dominik Wilczyński

email: dominik.wilczynski@put.poznan.pl

Tel. 61 224-4512

Faculty of Mechanical Engineering

Piotrowo Street 3, 61-138 Poznań

### Prerequisites

Knowledge: Basic general knowledge and knowledge and skills in the field of studied specialty.



Skills: Fundamentals of computer and MS Office package.

He can acquire information from the Internet, libraries and reading rooms and from other resources. In particular, he can actually indicate the source of the information needed. He can determine the quality and suitability of sophisticated information and data. He also can also integrate the information obtained from various resources, make their interpretation, and draw conclusions and to formulate and justify opinions.

Social competences: The student understands the need to expand their competences, shows readiness to cooperate in the team.

### Course objective

The aim of the course is to familiarize students with the basic assumptions of science methodology. Preparation for independent diploma theses. Completing knowledge and skills in the field of conducting research and presenting their results.

### Course-related learning outcomes

#### Knowledge

He has knowledge of the protection of industrial property, copyright, management of intellectual property resources and can use the Patent Resources [K2\_W17].

He has knowledge necessary to understand social, economic, legal and non-technical conditions of engineering activities and to take them into account in engineering practice [K2\_W18].

#### Skills

He can prepare and present in Polish and English or another foreign language recognized for the language of communication international presentation on a detailed design or research task and conduct a discussion regarding the issues presented [K2\_U04].

He can determine the directions of further learning and realize the self-education process [K2\_U05].

#### Social competences

Understands the need for lifelong learning; He can inspire and organize the learning process of other people [K2\_K01].

He can set priorities for the implementation of the specified by himself or other tasks [K2\_K04].

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Project: Passing determines the performance and presentation of the presentation related to the subject of the diploma thesis and it constitutes 75% of the final grade component, the remaining 25% is the preparation of a draft of the topic sheet along with activity in the classroom.

### Programme content

Projects:



### Design classes 1

During the course, students will be introduced to the problem of writing a diploma thesis together with a discussion of the schedule for the implementation of individual stages (tasks) in order to submit the thesis on time, subject to its evaluation by the committee and defense. As part of the classes, the defense of the thesis will also be discussed.

### Design classes 2

The content of the course includes a discussion of the structure of the diploma thesis based on examples of already written diploma theses.

### Design classes 3

The content of the course covers the structure of the presentation of the thesis.

### Design classes 4-8

The content of the classes includes the presentations of individual people of their diploma thesis topics along with a joint discussion on each topic of the thesis / each presentation.

### Teaching methods

Design classes: Project method, Display, Workshop Method

### Bibliography

#### Basic

1. Boć J., Jak pisać pracę magisterską, Wyd. Kolonia, Wrocław 2003
2. Dietrich J., System i konstrukcja, WNT, Warszawa 1978
3. Oliver P., Jak pisać prace uniwersyteckie, Wyd. Literackie, Kraków 1999
4. Orczyk J., Zarys metodyki pracy umysłowej, PWN, Warszawa 1988
5. Pieter J., Ogólna metodologia pracy naukowej, Ossolineum, Wrocław 1967
6. Szkutnik Z., Metodyka pisania pracy dyplomowej, Wyd. Poznańskie, Poznań 2005

#### Additional

1. Tarnowski W., Podstawy projektowania technicznego, WNT, Warszawa 1997
2. Żółtowski B., Seminarium dyplomowe; zasady pisania prac dyplomowych, Wyd. ATR, Bydgoszcz



### Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	15	0,5
Student's own work (literature studies, preparation for project classes) <sup>1</sup>	10	0,5

<sup>1</sup> delete or add other activities as appropriate