COURSE DESCRIPTION CARD - SYLLABUS

Course name
Diploma seminar

Course

Field of study
Mechanical Engineering

Year/Semester
3/6

Area of study (specialization)
Machine Design

Profile of study
general academic

Level of study
First-cycle studies

Course offered in
polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars
15

Number of credit points

3

Lecturers

Responsible for the course/lecturer:
Roman Staniek, professor

Responsible for the course/lecturer:

Prerequisites

Basic knowledge in the field of engineering graphics, mathematics, mechanics, strength of materials, basics of machine construction, mechanical technology, materials technology, automation and control.

Skills of logical thinking, texts understanding, technical drawings, mathematical formulas, usage of different knowledge sources, literature, the internet, self-learning and logical reasoning.

Understanding the need to learn, acquire new knowledge, the use of if as well as it presentation and the general social effects of engineering activities.

Course objective

Preparing, formulating and releasing the topics for the engineer thesis while maintaining an appropriate structure, goals, scope and linguistic correctness. Assistance and substantive advice in selecting thesis supervisor for particular topics.

Course-related learning outcomes

Knowledge

1. Has a knowledge connected with the construction and engineering graphic.

2. Has detailed knowledge of machines and technological equipment.

3. Has a detailed knowledge in the field of manufacturing techniques, in particular metalworking, used in technology of shaping and processing materials.

4. Has a detailed knowledge related to redaction of an engineering diploma thesis.

Skills

1. Can obtain information from literature, databases and other properly selected sources (also in English) in the field of mechanical engineering.

2. Can work individually and in a team; knows how to estimate the time needed for the implementation of the commissioned tasks.

3. Can prepare and give a short presentation on the task results in the field of mechanics and mechanical engineering.

Social competences

1. Understands the need for lifelong learning.

2. Is able to work in a group.

3. Realizes the importance of non-technical aspects and effects of engineering activities, including its impact on the environment.

4. Is aware of the social role of a technical college graduate.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Evaluation of the presentation of selected contemporary technical issues. Evaluation of the level of activity in the classes. Approval and issuing cards with topics of engineering diploma thesis.

Programme content

Characteristic of types of engineer theses (project, construction, technological, research, revive, theoretical). The layout and structure of the engineer thesis, editorial requirements (table of contents, introduction, purpose, scope, main part, conclusion, literature). Formulating problems, goals and scope of thesis, choosing methodology and methods of realisation of the research. Discussing current problems and technological innovations in worldwide technology.

Teaching methods

Seminars: Goal- and problem solution-oriented brainstorming and discussions.

Bibliography

Basic

1. Individually chosen to the topic.

2. Wojciechowska R., Przewodnik metodyczny pisania pracy dyplomowej. Wydawnictwo DIFIN, Warszawa 2010.

3. Opoka E., Uwagi o pisaniu I redagowaniu prac dyplomowych na studiach technicznych, Wydawnictwo Politechniki Śląskiej w Gliwicach, 2001.

Additional

1. Dietrich J., System i konstrukcja, WNT Warszawa, 1978.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,0
Classes requiring direct contact with the teacher	15	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	60	2,0

[1] delete or add other activities as appropriate