COURSE DESCRIPTION CARD - SYLLABUS

Course name
Preparation of the thesis work [S1Elmob1>PPD]

Course

Field of study
Electromobility

Year/Semester
4/7

Area of study (specialization)
–

Profile of study
general academic

Level of study
first-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
30

Number of credit points

12,00

Coordinators

Lecturers

Prerequisites

The student should have basic knowledge, skills and competences acquired in the previous years of study, enabling him to complete a team engineering diploma thesis.

Course objective

The aim of the diploma process is to deepen theoretical knowledge related to the selected topic of work, acquire the ability to solve practical engineering problems, including the team implementation of the application that is the subject of the work. The main goal is the student (students) to independently (team) carry out complex curriculum contents in accordance with the detailed tasks specified in the subject sheet of the engineering diploma thesis.

Course-related learning outcomes

Knowledge:
1. has a general knowledge of the life cycle, design and operation of hybrid and electric vehicles, as well as the infrastructure dedicated to their power and charging; knows and understands the principle of their operation
2. has knowledge and understands the processes taking place in the life cycle of electrical and electronic systems included in electromobility systems
3. has knowledge and understands the fundamental dilemmas of modern civilization related to the mass

use of electromobility; is aware of the latest development trends related to the field of study
4. has basic knowledge necessary to understand the social, ethical, economic, ecological, legal and other non-technical determinants of engineering activities

Skills:
1. knows how to use literature sources, integrate the obtained information, evaluate it, interpret it and draw conclusions in order to solve complex and unusual problems in the field of electromobility
2. is able to design, develop documentation of an engineering task, in accordance with the given specification and using appropriate methods, techniques, tools and materials, simple electrical and electronic systems and devices used in electric and hybrid vehicles and the infrastructure intended for their power supply and charging
3. knows how to prepare and present a presentation on a task related to the field of study, communicates using specialized terminology, presents and justifies various opinions and positions

Social competences:
1. understands the importance of improving professional, personal and social competences; is aware that knowledge and skills in the field of electromobility are evolving rapidly
2. understands the importance of knowledge in solving problems in the field of electromobility; is aware of the need to use the knowledge of experts when solving engineering tasks beyond their own competences
3.understands the need to formulate and transfer information and opinions to the society on the positive and negative aspects of electromobility, and is ready to act for the public interest
4. can think and act in an entrepreneurial way in the field of electromobility
5.understands the importance of their own work and the need to follow the rules of professional ethics, is ready to submit to the rules of teamwork and taking responsibility for jointly performed tasks, as well as caring for the achievements and traditions

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. continuous assessment, through systematic consultations checking the substantive correctness and the degree of advancement of engineering work
2. assessment of the increase in the ability to use the learned principles and methods
3. evaluation of the results of the implementation of the engineer diploma thesis

Programme content

The subject of the engineering diploma thesis is the implementation of the program content in accordance with the detailed tasks specified in the subject card of the engineering diploma thesis. The work is carried out individually or in groups (usually 2 people) under the supervision of the supervisor or the supervisor and the supervisor appointed by the promoter. The final result is the submission of the engineer diploma thesis to the Dean's Office. If required by the purpose of the work, it must have working software or a prototype as well as technical and operational documentation.

Course topics

The subject of the engineering diploma thesis is the implementation of the program content in accordance with the detailed tasks specified in the subject card of the engineering diploma thesis, defined by the thesis promoter or business entity cooperating with the University. The work is carried out individually or in groups (usually 2 people) under the supervision of the supervisor or the supervisor and the supervisor appointed by the promoter. The final result is the submission of the engineer diploma thesis to the Dean's Office. If required by the purpose of the work, it must have working software or a prototype as well as technical and operational documentation.

Teaching methods

Consultations on the subject of thesis with the supervisor, workshops / training, discussions within the team implementing the thesis, regarding the presented diploma theses

Bibliography

Basic:
Scientific and technical literature: textbooks, monographs, articles, catalogs, websites, documentation, guidelines and standards provided by those managing theses.

Additional:
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Breakdown of average student's workload

	Hours	ECTS
Total workload	305	12,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	275	11,00