COURSE DESCRIPTION CARD - SYLLABUS

Course name
Passing project [N2MiBP1-PS>PP]

Course

Field of study
Mechanical and Automotive Engineering

Year/Semester
1/2

Area of study (specialization)
Motor Vehicles

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
part-time

Requirements
compulsory

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
4

Number of credit points

5,00

Coordinators

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Lecturers

Prerequisites

Knowledge: The student has a well-established knowledge of construction and operation engineering and the methodology of designing cars and their components, legal requirements for motor vehicles, analysis, synthesis, modeling and testing of vehicle dynamics, as well as the functioning and methodology of using vehicle dynamics control system design tools. Skills: The student is able to use the selected computer text editor and correctly uses the language in which the work is to be written. The student is able to selectively use the published scientific and research papers and knows how to use the tools to support the work at the master's level in the areas covered by the study program. Social competences: The student is aware of the proper documentation and reliable presentation of the results of their own transitional work, complementary to the master's thesis, taking into account the copyrights of the source scientific and research works in the field of construction and operation.

Course objective

Preparing the student for independent work, synthesizing the entirety of the acquired knowledge in the field of construction or operation of motor vehicles, proper linking it with the future master's thesis and preparation of a written work on a given topic, in accordance with the applicable rules of written and graphic documentation of the results of master's thesis.

Course-related learning outcomes

Knowledge:
Has general knowledge of standardization, EU recommendations and directives, national, industry and international standards systems, and industrial standards.
Has extended knowledge of modern construction materials such as carbon plastics, composites, ceramics, in terms of their construction, processing technology and applications.
He knows the main development trends in the field of mechanical engineering.

Skills:
He can correctly select the optimal material and its processing technology for typical parts of working machines, taking into account the latest achievements in material engineering.
Can perform a medium complex design of a working machine or its assembly using modern CAD tools, including tools for spatial modeling of machines and calculations using the finite element method.
He can design the technology of exploitation of a selected machine with a high degree of complexity.

Social competences:
He is ready to critically assess his knowledge and received content.
Is ready to recognize the importance of knowledge in solving cognitive and practical problems and to consult experts in case of difficulties in solving the problem on its own.
It is ready to fulfill social obligations, inspire and organize activities for the benefit of the social environment.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:
A credit for a diploma seminar with a grade is issued on the basis of a set of presentations that have been planned as part of the seminar, paper or co-presentation. The amount of the grade depends on the level of presentations, the course of master's work and its level, and estimated by the lecturer the progress of work. Additionally, the evaluation is influenced by the activity of the seminar participants in discussions on seminar and their attendance.

Programme content

The module programme covers the following topics:

Lecture:
Formal, legal, methodological and editorial aspects of promotional work

Project:
1. Introduction and organization of the subject
2. Fundamentals of the methodology presentation, concerning the subject of master's thesis
3. Individual presentations of master's thesis using Power-Point
4. Presentation of the realization of the master's thesis in a text editor
5. Summary of the stage of master's thesis
6. Preparation for the defense of an master's diploma work

Course topics

The lecture programme covers the following topics:
Types of promotion theses, including diploma theses, and rules for their implementation. Requirements for diploma theses. Formulation of a scientific problem and purpose of the thesis. Literature study, development of source materials and citation rules. Methodical part of the thesis, presentation of research results, development of observations and conclusions. Principles of editing the thesis, development of graphic elements, preparation of the thesis for printing and archiving.

The project programme covers the following topics:
1. A repetition of the formal, legal and methodological foundations for the preparation and realization of the master's diploma thesis and setting the dates of individual speeches of graduates in accordance with the subject of the diploma thesis.

2. Presentation of the subject of the master's work, its genesis, the purpose, the tasks, the way of achieving the goal, and the scope in the form of a diploma work plan, and literature related to the subject of master's work (presentation in Power Point, used to a large extent for the preparation of the thesis durin the defense).
3. Individual speeches of graduates with presentations of the subject, genesis, goal and diploma plan; discussion of the structure of the master's work and substantive issues of the work and own original contribution; comments and summary of students' speeches by the teacher.
4. Individual reporting on the progress of diploma work, written in a text editor, containing graphic objects, and results of own master"s studies, testing, research, both completed activities and in progress. Reporting the obtained results and their interpretation, presentation of possible problems with the realization of the master's work; discussion.
5. Summary of individual speeches graduate students related to the realization of master's diploma work; discussion with current presenters and other seminar participants.
6. Reminding of formal requirements for work at the Faculty as well as for documents and preparatory procedures for the defense of the diploma thesis and the examination from field of study.

Teaching methods

Lecture, project: observations, remarks of the lecturer, discussion of the participants, presentations of students, in particular:
1. Individual multimedia presentations of the graduates in Power Point of the subject, genesis, goal and master's diploma work plan.
2. Individual multimedia presentations of graduates in a text editor (Word) of the progress of writing the master's diploma work.
3. Discussion on the speeches with the participation of graduate students and summary by the lecturer.

Bibliography

Basic:
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9. Kaczmarek S. and others: How to like a diploma thesis / Jak polubić pracę dyplomową. Ed. University of Lodz, 2012 (in Polish).

Additional:
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2. Przechowalski T.: Master"s and diploma theses with the LaTeX program / Prace magisterskie, dyplomowe z programem LaTeX. Publishing company Wolters Kluwer Biznes, Warsaw, 2011 (in Polish).
3. Wojciechowska R.: Methodical guide to writing a thesis / Przewodnik metodyczny pisania pracy dyplomowej. Ed. DiFir SA, 2010 (in Polish).
4. Boc J.: How to write a thesis? (philological consultation by J. Miodek) / Jak pisać pracę magisterską? (konsultacja filologiczna J. Miodek). Ed. Cologne Limited, Wroclaw, 2009 (in Polish).

5. Zenderowski J.: Master's thesis. How to write and defend? - methodological guidelines / Praca magisterska. Jak pisać i obronić? - wskazówki metodologiczne. Ed. CeDeWu Publishing House, Warsaw, 2007 (in Polish).
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7. Kolman R.: Gaining of knowledge. A guide to improving qualifications / Zdobywanie wiedzy. Poradnik podnoszenia kwalifikacji. Publishing company Brandt, Bydgoszcz, 2004.
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Breakdown of average student's workload

	Hours	ECTS
Total workload	75	5,00
Classes requiring direct contact with the teacher	4	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	71	4,00