



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Sustainable development of automotive production [S1MiTPM1>ZRPM]

Course

Field of study

Materials and technologies for automotive industry

Year/Semester

2/4

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

0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Basic knowledge of materials science and materials technology Ability to solve simple material problems based on acquired knowledge, ability to obtain information from indicated sources. Understanding the need to expand your competences.

Course objective

Providing students with knowledge about sustainable development in automotive production,

Course-related learning outcomes

Knowledge:

Has basic knowledge of engineering design, in particular technological and material design in the automotive industry. Has knowledge of technical devices and systems and the principles of their operation in the automotive industry.

Skills:

Able to communicate using a variety of techniques in professional and other environments. For this purpose, he is able to select and use IT and quality management systems. Is able to use information and

communication techniques appropriate to perform tasks typical for engineering activities, including organizing team work.

Has the necessary preparation to work in an industrial environment and knows the safety rules related to this work; is able to use manufacturing technologies to shape parts of motor vehicles with specific properties, is able to design and implement material recycling techniques.

Social competences:

Is aware of the importance and understanding of non-technical aspects and effects of engineering activities, including its impact on the environment and the related responsibility for decisions made.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Assessment based on discussion during classes, students' activity in discussions and solving group tasks

Programme content

The lecture program covers issues such as sustainable development and related topics. This content will focus mainly on motorization and the automotive industry, technologies used to produce cars, as well as aspects related to the product life cycle, supply chains, environmental impact as well as the legal basis for sustainable development.

Course topics

The topics of the classes concern broadly understood sustainable development, with particular emphasis on the following topics:

sustainable development in the automotive industry,
sustainable supply chain,
circular economy,
environmental benefits,
product life cycle,
monitoring and reporting,
systemic approaches to sustainable development,
legal aspects of sustainable development

Teaching methods

Lecture: multimedia presentation, illustrated with examples given on the board.

Bibliography

Basic:

JCR publications provided by the teacher during classes

Additional:

JCR publications provided by the teacher during classes

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
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)	20	1,00