COURSE DESCRIPTION CARD - SYLLABUS

Course name
English 2 [N2MiBP1>JA2]

Course

Field of study
Mechanical and Automotive Engineering

Year/Semester
1/2

Area of study (specialization)
Hybrid Powertrain Systems

Profile of study
general academic

Level of study
second-cycle

Course offered in
English

Form of study
part-time

Requirements
elective

Number of hours

Lecture
0

Laboratory classes
0

Other
0

Tutorials
18

Projects/seminars
0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

The already acquired language competence compatible with level B2 (CEFR). The ability to use general and field specific vocabulary, and grammatical structures required on the first level of studies. The ability to work individually and in a group; the ability to use various sources of information and reference works.

Course objective

Development of the ability to use field specific language effectively in both receptive and productive language skills. Improving the ability to understand field specific texts. Improving the ability to function effectively on an international market and on a daily basis.

Course-related learning outcomes

Knowledge:
Has extensive knowledge of selected departments of technical mechanics related to the selected specialization.
Has a general knowledge of the types of research and methods of testing working machines with the use of modern measurement techniques and data acquisition.
He knows the main development trends in the field of mechanical engineering.

Skills:
Can communicate on specialist topics with a diverse audience.
Can write a technical and scientific study in a foreign language on the basis of literature and other sources of information, including internet sources, and present an oral presentation.
Can use the international language in contacts with specialists in his field of study at the B2 + level.

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:

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Grades for a test and a presentation. Preparation for tutorials and active participation influence the final grade.

Programme content

Reaching high degree of academic, business and social communication. Revising and extending vocabulary within the scope of: general engineering (lasers, robotics, Maglev train), mechanical engineering (refrigerator).

Course topics

Lasers - applications/laser cutting; robotics - an industrial robot and its components/work volume and degrees of freedom/types of manipulator/mechanical wrist/stepper motors; refrigerator - components/ refrigeration process; portable generator - main parts,/4 -stroke cycle; Maglev train - differences between Maglev and a conventional train/advantages and disadvantages/levtation and propulsion

Teaching methods

The teaching methods focus on the development of the four basic language skills (listening, speaking, reading, and writing), which are used to expand substantive knowledge in technical fields.

Bibliography

Basic
Glendinning, E.H. and Glendinning, N. 2008. Oxford English for Electrical and Mechanical Engineering. Oxford: Oxford University Press.
Additional
Internet based materials

Breakdown of average student's workload

	Hours	ECTS
Total workload	30	2,00
Classes requiring direct contact with the teacher	18	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	12	1,00