



COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [S1Energ2>JA1]

Course

Field of study

Power Engineering

Year/Semester

1/2

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

30

Projects/seminars

0

Number of credit points

2,00

Coordinators

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Lecturers

Prerequisites

Language competence compatible with level B1(CERF). The ability to use vocabulary and grammatical structures required on the high school graduation exam regarding productive and receptive skills. The ability to work individually and in a group. The ability to use various sources of information and reference works.

Course objective

To help the student achieve the ability to use general and field-specific language effectively, with respect to the following language skills: listening, reading, writing, speaking. To improve the student's ability to function effectively on the international job market and in everyday life.

Course-related learning outcomes

Knowledge:

The student has acquired field-specific vocabulary related to the following issues: models of atom, electrical charge, static electricity, direct and alternating current, basic laws and electrical quantities,

components of a circuit and their functions, electrical materials, maths.

Skills:

The student is able to use English to provide definitions of terms, and explain phenomena and processes referred to in the programme; express basic mathematical formulas; interpret source materials.

Social competences:

The student is able to communicate effectively in general and field-specific area, and communicate in English in public.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: regular assessment of in-class performance and home assignments, quizzes.

Summative assessment: two 60-minute written quizzes featuring a battery of tests. Successful completion of home assignments and a 50% score on quizzes are required to obtain a pass.

Programme content

Basic mathematical notions

Electricity

Static electricity

Electrical circuits

Properties of electrical materials

Course topics

Basic mathematical notions

Bohr's model structure of atom

Static electricity, electrical charges, Coulomb's Law

Flow of current, electrical circuits

Types of electrical circuits, components of electrical circuits, Kirchhoff's Laws

Electrical resistance, Ohm's Law

Types and properties of electrical materials.

Teaching methods

Classroom activities guided by the communicative approach.

Bibliography

Basic:

Dubis, A. and Firganek, J. 2006. English through Electrical and Energy Engineering. Kraków: Studium Praktycznej Nauki Języków Obcych Politechniki Krakowskiej.

Gajewska-Skrzypczak, I. and Sawicka, B. 2013. English for Electrical Engineering. Poznań: Publishing House of Poznan University of Technology

Additional:

Brieger, N, and Pohl, A. 2002. Technical English Vocabulary and Grammar. Summertown Publishing.

Kubot, A. and Maćków, W. 2015. Mathematics and Graphs Vocabulary Practice for Academic English Studies. Poznan: Publishing House of Poznan University of Technology.

Murphy, R. 2012. English Grammar in Use. Cambridge: Cambridge University Press. (all levels)

Pople, S. 1999. Complete Physics. Oxford: Oxford University Press.

Taylor, L. 1996. International Express. Oxford: Oxford University Press. (all levels)

Internet sources - howstuffworks, sciencedaily, BBC (technology, science), Wikipedia

Breakdown of average student's workload

	Hours	ECTS
Total workload	55	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)	25	1,00