

### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

English for technology [S2Eltech2>JAwT]

Course

Field of study Year/Semester

Electrical Engineering 1/1

Area of study (specialization) Profile of study

Microprocessor Control Systems in Electrical general academic

Engineering

Level of study Course offered in

second-cycle Polish

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other

0

Tutorials Projects/seminars

30 0

Number of credit points

2,00

Coordinators Lecturers

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### **Prerequisites**

Language competence compatible with level B2 (CEFR); knowledge of selected field-specific (electrical engineering) vocabulary; ability to use various sources of information. Readiness to follow group work rules and to work in a team.

# Course objective

To develop the student's ability to use academic and field-specific (electrical engineering) language effectively in speech and writing, in a number of complex tasks. To develop the student's ability to analyze critically field-specific texts. To encourage buildup of field-specific vocabulary.

## Course-related learning outcomes

#### Knowledge:

The student understands the differences between written and spoken forms of English. The student has

acquired field-specific vocabulary related to renewable energy sources and sustainable growth, energy storage, smart and environmentally-friendly solutions - smart home, passive house, modern cars.

#### Skills:

The student is able to write an email, an abstract of their diploma thesis, a summary of a scientific article in English, using an appropriate linguistic and grammatical repertoire. The student is able to give a presentation on a field-specific or popular science topic (in English), and discuss general and field-specific issues, analyzing constraints and feasible solutions. The student is able to understand and analyze international, field-specific literature, assess the merit of resource materials, and use incomplete/partially unreliable resources. The student is able to participate in a discussion on a field specific/professional topic, using 'ad rem' arguments.

#### Social competences:

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

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Regular assessment of in-class performance and home assignments: individual and/or group presentations, written tasks, participation in a debate. Optionally, a written quiz featuring a battery of tests. Successful completion of assignments is required to obtain a pass.

### Programme content

Writing emails, abstracts and summaries. Presentations. Specialist topics. The structure of a research paper.

## **Course topics**

Modern ways of generating electrical energy. Energy harvesting. Energy storage. Electric/hybrid/zero-emission vehicles. Comparison of selected types of electrical plants. Advances/smart solutions in electrical engineering. Energy policies in Poland and the EU.

## **Teaching methods**

Classroom activities guided by the communicative approach.

### **Bibliography**

Basic:

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

#### Additional:

Banks, T. 2012. Writing for Impact. Cambridge: Cambridge University Press

Bonamy, D. 2011. Technical English. Pearson Education Limited. (Level 3, Level 4)

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

Campbell, S. 2009. English for the Energy Industry.Oxford: Oxford University Press.

Esteras, S. R., and Fabré, E. M. 2007. Professional English in Use for Computers and the Internet. ICT. Cambridge: Cambridge University Press.

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

Murphy, R. 2012. English Grammar in Use. Cambridge: Cambridge University Press. (all levels) Oshima, A. and Hogue, A. 2006. Writing Academic English. White Plains: Pearson Education, Inc. Internet sources.

## 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