# POZNAN UNIVERSITY OF TECHNOLOGY



Course name

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

English [S1MwT1>JAng2]			
Course			
Field of study Mathematics in Technology		Year/Semester 1/2	
Area of study (specialization)		Profile of study general academi	c
Level of study first-cycle		Course offered in polish	1
Form of study full-time		Requirements elective	
Number of hours			
Lecture 0	Laboratory classe	es	Other (e.g. online) 0
Tutorials 60	Projects/seminar 0	S	
Number of credit points 3,00			
Coordinators		Lecturers	
mgr Alicja Wegwerth-Kurpiewska alicja.wegwerth-kurpiewska@put.poznan.pl		mgr Alicja Lampe alicja.lamperska	
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#### **Prerequisites**

Update 21.06.2023 1. The already acquired language competence compatible with level B1 (CEFR) 2. The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 3. The ability to work individually and in a group; the ability to use various sources of information and reference works.

### **Course objective**

1. Advancing students' language competence towards at least level B2 (CEFR). 2. Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. 3. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). 4. Improving the ability to function effectively on an international market and on a daily basis.

#### **Course-related learning outcomes**

Knowledge

As a result of the course the student:

1. ought to acquire field specific vocabulary related to electrical machines: transformer, power transmission and distribution, smart grid and also be able to define and explain associated terms, phenomena and processes [K\_W03 (P6S\_WG)]

2. knows and understands English grammar and lexical rules and applies them successfully in various oral and written forms [K\_W03 (P6S\_WG)]

Skills

As a result of the course, the student is able to:

1. discuss general and field specific issues using an appropriate linguistic and grammatical repertoire [K\_U13 (P6S\_UK)]

2. communicate in English in general and professional environment using different techniques and also using mathematical tools [K\_U13 (P6S\_UK)]

3. prepare and give a presentation in English on field specific issues in the area of mathematics in technology [K U13 (P6S UK)]

4. read and understand mathematical texts and technical documents, manuals of electrical machines and similar documents [K\_U13 (P6S\_UK)]

Social competences

As a result of the course, the student will acquire the following competencies:

1. is able to communicate effectively in English in professional areas and in typical everyday situations and also to work in team [K\_K01 (P6S\_KK)]

2. is able to recognize and understand cultural differences in a professional and private conversation in English, and in a different cultural environment, understands social aspects of practical application of acquired competences and acts ethically [K\_K01 (P6S\_KK)]

3. is able to find specialist information in English literature sources [K\_K01 (P6S\_KK)]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment: assessment during language classes: oral performance, written assignments, speech/project, tests

Summative assessment: final oral and written examination

## **Programme content**

- 1. Electrical machines: transformer.
- 2. Power transmission and distribution.
- 3. Smart grid.
- 4. Renewable and non-renewable energy sources.

## **Teaching methods**

New vocabulary practice, e.g. multiple choice tests, matching definitions, dialogues, short written and oral tasks, speaking activities, learning and talking over the phrases being typical of giving multimedia presentations.

## **Bibliography**

Basic

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

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

Additional

1. Murphy, R. 2012. Essential English Grammar in Use. Cambridge: Cambridge University Press.

2. Źródła internetowe (howstuffworks, science daily, wikipedia, britannica)

#### Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	60	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	1,00