

#### POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

English [N1EiT1>JANG2]

Course

Field of study Year/Semester

Electronics and Telecommunications 3/5

Area of study (specialization) Profile of study

general academic

Level of study Course offered in

first-cycle english

Form of study Requirements part-time compulsory

**Number of hours** 

Lecture Laboratory classes Other (e.g. online)

0 0

Tutorials Projects/seminars

15 0

Number of credit points

1,00

Coordinators Lecturers

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### **Prerequisites**

Language competence corresponding to the B1 level according to the description of the levels of language proficiency, mastering the grammatical structures and general vocabulary required in the basic level of the final exam in a foreign language in terms of productive and receptive skills, the ability to work independently and in a team and to use various sources of information.

#### Course objective

1. Bringing the language competences of students to the minimum of B2 level. 2. Developing the ability to use effectively a general academic language and a specialist language appropriate for a given field of study, within the scope of four language skills. 3. Improving the ability to work with a technical text (familiarizing students with the basic translation techniques).

## Course-related learning outcomes

#### Knowledge:

In the first semester, as a result of the course, the student should master technical vocabulary related to the following topics: description and interpretation of graphs and charts, mathematical terms and concepts, convergence and mobility in digital technology and telecommunications, history and future

development of information technology - five generations of computers and the Internet. In the second semester - the process of implementing software for companies, cloud computing, and selected components of electronic circuits (semiconductors, transistors). In the third semester, the student learns the advantages and disadvantages of digital electronics, learns the telecommunications vocabulary related to networks (transmission channels, local and global networks). In the fourth semester, he learns the vocabulary related to the data processing center, as well as selected cybersecurity issues, advantages and disadvantages of using external IT services. The student is also able to define and explain terms, phenomena and processes related to them.

#### Skills:

In the first semester, the student is able to express basic mathematical operations in English and interpret the data presented in the diagram / graph, as well as produce a short text in English and an oral statement explaining / describing a selected specialist issue (convergence, mobility in communication). In the second semester, he/she can briefly describe a technical process or given components in writing, and give a presentation in English on a technical or popular science topic. In the third semester, he can express himself on general and technical topics, using the appropriate vocabulary and grammatical structures. In the fourth semester, he can identify and solve technical problems related to the data processing center and cybersecurity.

#### Social competences:

As a result of the course in four semesters, the student is able to communicate effectively in English in a professional environment and in typical everyday situations, formulate opinions on the development of electronics and telecommunications, as well as deliver a speech in public. The student is able to recognize and understand dilemmas, as well as to work out issues concerning working in the field of electronics and telecommunication; he/she understands cultural differences in behavior and in business or private conversations in English, and in a different cultural environment.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

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The knowledge acquired during the classes is verified in the fourth semester by two 30-minute written tests including test questions, where the passing grade is> 50%, 1 oral test including a description of the technical issue (the content of the message, linguistic correctness, richness of vocabulary are assessed). on a scale of 2-5). Assessment summary of the fourth semester: credit. There are two test questions in the fifth semester with the passing grade >50%. Assessment summary of the fifth semester: credit. In the sixth semester there are two test questions where the passing grade is > 50%, and the grade from the presentation prepared by the student and presented to the group (on a scale of 2-5). Summary of the sixth semester: credit. In the final semester (seventh): two 30-minute written tests covering test questions, where the pass threshold is> 50%, 1 oral test including a description of the technical issue (the content, linguistic correctness, richness of vocabulary are assessed on a scale from 2 to 2). 5). Summary assessment of the seventh sem: credit. After the seventh semester, the course ends with an examination, which consists of a written and an oral part. The written part is in the form of a test to check four language competences (listening, reading, writing a short language form, vocabulary), and the oral part is in the form of an answer to a randomly selected technical question (covering the issues provided during the tutorials) and a general language question (self-description prepared by the student). Achieving > 60% of the points in the entire exam means that the knowledge is mastered at least to a sufficient degree.

# Programme content

In the fourth semester, the ability to interpret graphs and charts as well as mathematical operations is developed. Reading technical texts and learning general technical vocabulary. Practical learning of terms and functions related to computer technology, mobility, and the history of computing and the Internet. In the fifth semester: learning the elements of electrical and electronic circuits. Introduction of vocabulary related to the advantages and disadvantages of data processing in the cloud, analysis of the content illustrating the implementation of custom software and texts showing the historical development of transistors. In the sixth semester - the exercise of language functions that help the student describe the characteristics and advantages and disadvantages of digital technology, laws and physical phenomena enabling the operation of electronic devices. Practicing language functions and

vocabulary that help the student describe the principles of operation, topology of teleinformatic networks. In the seventh semester, the structure of data processing centers and issues related to the security of data storage as well as the advantages and disadvantages of transferring services to third parties are discussed, as well as the formulation of an English text explaining / describing the selected specialist issue.

# **Teaching methods**

Students complete the course on the basis of selected chapters from basic and supplementary literature and on the basis of information sources from the Internet. They analyze the source materials provided by the tutor, work individually, in pairs and in groups under the guidance of the tutor, as well as deliver a multimedia presentation. They also perform vocabulary and grammar exercises in a stationary form in the classroom or on their own at their home computer.

# **Bibliography**

Basic

Ricca-McCarthy, Tom. Duckworth, Michael. 2009. English for Telecoms and Information Technology. Oxford: OUP.

Additional

Evans, Virgina. 1998. FCE Use of English, Swansea: Express Publishing

Grzegożek, Małgorzata. Starmach, Iwona. 2004. English For Environmental Engineering. Kraków: PK. Hanf, Bodo. 2001. Angielski w technice. Poznań: LektorKlett

Kubot, Aleksander. Maćków, Weronika. 2015. Mathematics and Graphs Vocabulary Practice for Academic English Studies. Poznan: PHPUT

Maksymowicz, Roman. 2010. Język angielski dla elektroników i informatyków. Rzeszów: WO Fosze. O'Malley, Kiaran. English for New Technology Electricity, Electronics, IT and Telecoms, 2012, Milano-Torino, Pearson

Richards-Sopranzi, Sabrina. Flash on English for Mechanics and Electronics, Second Edition, 2016. Loreto: Tecnostampa.

Źródła internetowe: ttps://www.newscientist.com/, https://www.technologyreview.com/

## Breakdown of average student's workload

	Hours	ECTS
Total workload	200	8,00
Classes requiring direct contact with the teacher	130	6,00
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation)	70	2,00