



COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [N1EiT1>JANG]

Course

Field of study

Electronics and Telecommunications

Year/Semester

2/4

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

English

Form of study

part-time

Requirements

compulsory

Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

50

Projects/seminars

0

Number of credit points

2,00

Coordinators

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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:

There is on-going assessment, its particular methods may vary and remain for the teacher to decide. They may include: written and oral tests, presentations, projects, other tasks. Summative assessment in the first semester- credit. Summative assessment in other semesters- credit, as well as the final exam after the last semester consisting of two parts - the writing part (a test covering four competences: listening, reading, writing and lexis) as well as the oral part consisting of a short speech on a selected technical problem related to the issues analyzed in tutorials and a dialogue on the issue chosen from the list of accessible topics at

clc.put.poznan.pl (general English). The ACERT certificate at the B2 level is obtained if the requirements published at CLC PUT website are met.

Programme content

1. Mathematics.
2. Graph description and interpretation.
3. Teleinformatics and electronics: scope and interests.
4. Computer technologies: history and recent developments.
5. Information technology: computer architecture and operation.
6. Data storage.
7. Programming.

Course topics

1. Numbers and basic mathematical operations.
2. Geometry.
3. Visual representation of data.
4. Graph description and interpretation.
5. Teleinformatics: definition and scope of interests.
6. Electronics: definition and scope of interests.
7. Computer history: 5 generations of computers.

8. Quantum computers and AI.
9. Computer architecture, RAM, ROM, hardware and software.
10. Memory and data storage.
11. Operation System.
12. Programming and programming languages.

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

Richards-Sopranzi, Sabrina. 2016. Flash on English for Mechanics and Electronics, Second Edition. Loreto: Tecnostampa.
 Wright V., Taylor D., Cambridge IGCSE ICT, wyd. 2, Cambridge University Press 2016. Oxford: OUP.

Additional

Evans, Virginia. 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.
 Murphy, Raymond. 1994. English Grammar in Use. Cambridge: CUP
 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.
 Internet sources: <https://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