



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [S1EiT1E>JANG1]

### Course

Field of study

Electronics and Telecommunications

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

English

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

60

Projects/seminars

0

### Number of credit points

2,00

### Coordinators

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### Lecturers

### Prerequisites

According to the national curriculum it is assumed that the already acquired language competence is compatible with the minimum B1 level. The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to 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

1. Advancing students' language competence towards at least the B2 level. 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).

### Course-related learning outcomes

Knowledge:

As a result of the course in the first semester of the foreign language, the student acquires field specific vocabulary related to the following issues: Description and interpretation of graphs and diagrams, mathematical terms, Mobility and convergence in digital technology, digital electronics, electronic equipment in operation. Computer technology and selected electronic components, computing history and future development – five generations of computers and the Internet. In the other semester, the student acquires knowledge on selected aspects of data centres, cyber security, advantages and disadvantages of outsourcing, telecommunications media of transmission and local/global networking. The student has the knowledge enabling him to define and explain associated terms, phenomena and processes.

#### Skills:

As a result of the course, the student is able to express basic mathematical formulas and to interpret data presented on graphs/diagrams, to give a short talk on field specific or popular science topic, and discuss general and field specific issues using an appropriate linguistic and grammatical repertoire. In the other semester, the student is able to prepare and deliver a presentation, to formulate a text where he/she explains/describes a selected field specific topic, describes in writing a short technical process or a particular appliance.

#### Social competences:

As a result of the course, the student is able to communicate effectively in a field specific/professional area, express opinions on the development of electronics and telecommunications and to give a successful presentation in English. The student is able to recognize and understand dilemmas related to work within the scope of electronics and telecommunications, understands cultural differences in a professional and private conversation, 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 the other semester- credit, as well as the final exam 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](http://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.
8. Cybersecurity.

### 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. Cloud computing.
12. Operation System.
13. Programming and programming languages.
14. Internet.
15. Online security.
16. Cybercrime.

## Teaching methods

Students carry out a program based on selected chapters from the primary and secondary literature and based on the sources of information from the Internet. Students analyze the source material presented by the teacher in the form of tutorials, work individually, in pairs and groups. They also do lexical and grammatical exercises individually at the computer.

## Bibliography

Basic:

Richards\_Sopranzi, S., Flash on English for Mechanics and Electronics, 2nd edition, Loreto:Tecnostampa 2017.

Additional:

- Bailey, S., Academic Writing: A handbook for international students, wyd. 3, Routledge, Nowy Jork 2011.
  - Banks T., Writing for Impact, Cambridge University Press 2012.
  - Dignen B., Communicating Across Cultures, Cambridge University Press 2011.
  - Evans V., FCE Use of English, Express Publishing, wyd. 2, Express Publishing, Cambridge 1998. (lub inne dostępne repetytorium gramatyczne)
  - Fitzgerald P., McCullagh M., Tabor C., English for ICT Studies in Higher Education Studies, Garnet Publishing Ltd. 2011.
  - Grzeżożek M., Starmach I., English For Environmental Engineering, Politechnika Krakowska, Kraków 2004.
  - Hewings, M., Cambridge Academic English, Upper Intermediate, Cambridge University Press 2012.
  - Kubot, A., Maćków, W., Mathematics and Graphs Vocabulary Practice for Academic English Studies, PHPUT, Poznań 2015.
  - McCarthy M., O'Dell F., Academic Vocabulary in Use, Cambridge University Press 2015.
  - O'Malley K., English for New Technology Electricity, Electronics, IT and Telecoms, Pearson, Mediolan - Turyn 2012.
  - Oshima A., Hogue A., Writing Academic English, wyd. 4, Longman, Nowy Jork 2006.
  - Ricca-McCarthy T. Duckworth M. English for Telecoms and Information Technology. Oxford 2018.
  - Evans V. FCE Use of English, Express Publishing, Swansea 1998.
  - [http://www.webopedia.com/DidYouKnow/Hardware\\_Software/FiveGenerations.asp](http://www.webopedia.com/DidYouKnow/Hardware_Software/FiveGenerations.asp)
  - <https://www.webopedia.com/TERMRichards-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	180	6,00
Classes requiring direct contact with the teacher	120	4,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	60	2,00