



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [S1S1E>JANG]

### Course

Field of study

Artificial Intelligence

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

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

30

Projects/seminars

0

### Number of credit points

1,00

### Coordinators

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### Lecturers

### Prerequisites

Students should demonstrate language skills at the B1 level, according to the Common European Framework of Reference for Languages (CEFR). This includes knowledge of grammatical structures and the general vocabulary required for the basic 'matura' exam (upper secondary school leaving examination) in English, covering both productive and receptive skills. In terms of skills, they are expected to effectively use various information sources, work well in a team, and engage in self-directed learning. Furthermore, regarding social competencies, students should exemplify honesty, responsibility, empathy, perseverance, intellectual curiosity, appropriate personal conduct, respect for others, and an openness to cultural diversity.

## Course objective

The course objectives are to: 1. Elevate students' language proficiency to a minimum of B2 according to the Common European Framework of Reference for Languages (CEFR). 2. Develop the ability to effectively use both general academic language and specialised terminology pertinent to computer science, encompassing all four language skills. 3. Enhance skills in working with specialised technical texts. 4. Refine the ability to navigate the international job market and everyday situations, including honing presentation and academic writing skills.

## Course-related learning outcomes

### Knowledge

#### Students:

1. Have a general vocabulary in English at the B2 level according to the Common European Framework of Reference for Languages (CEFR) and specialised terminology related to selected areas of computer science and artificial intelligence.
2. Know the essential grammatical structures required for describing and translating phenomena and processes associated with these fields.

### Skills

#### Students:

1. Can search, analyse, and integrate information from various sources in English, critically assess it, and effectively formulate and justify their opinions on the subject [K1st\_U1].
2. Can deliver a presentation in English on a specialised computer science topic with particular emphasis on artificial intelligence or a popular science subject, and speak on general and technical topics using specialised terminology and an appropriate range of general vocabulary and grammatical structures [K1st\_U14, K1st\_U13].
3. Can express basic mathematical operations in English and interpret data presented in a diagram or graph [K1st\_U14].
4. Can compose a text in English explaining or describing a selected specialised topic from the field of computer science [K1st\_U14].
5. Demonstrate language skills in English that meet the criteria for the B2 level according to the Common European Framework of Reference for Languages (CEFR) [K1st\_U13].

### Social competences

#### Students:

1. Recognise the importance of proficiency in English for effectively communicating knowledge and opinions on engineering, technological achievements, and the role of computer scientists, especially those specialising in artificial intelligence, to the wider society [K1st\_K6].
2. Notice and adapt to cultural differences in behaviour and both professional and private communication in English within diverse cultural contexts [K1st\_K6].

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

### Formative Assessment:

1. Short control tests (e.g., assessing vocabulary or grammar)
2. Short written assignments
3. Presentations or oral statements on topics related to specialist English
4. Self-assessment or peer assessment in pairs or small groups

### Summative Assessment:

1. Final tests (written or oral)
2. Final project or presentation on a selected topic from the field
3. Assessment of class participation and contribution to group tasks

### General Assessment Criteria:

1. Linguistic accuracy, including the use of specialist vocabulary and terminology
2. Ability to present and logically convey information and arguments
3. Analysis and interpretation of source materials
4. Active participation in classes and interaction with other participants

## Programme content

2. Data analysis and presentation
3. The history of computers
4. Types of memory and storage
5. CPU architecture
6. Monitoring and control
7. Elements of academic English

### Course topics

1. Discussing basic mathematical concepts and operations
2. Describing and interpreting graphs and charts
3. Foundations of mechanical computing
4. Electronic revolution and miniaturisation
5. Modern computing era and global connectivity
6. Primary memory
7. Secondary storage devices
8. Components of the processor (CPU)
9. Registers
10. System buses
11. Fetch-execute cycle
12. Interrupts
13. Sensors and actuators
14. Monitoring systems
15. Control systems
16. Writing in paragraphs
17. Mechanics

### Teaching methods

1. Communicative exercises, i.e., discussions, debates, simulations, role-plays
2. Listening comprehension, written exercises, and lexical and grammatical exercises
3. Exercises using multimedia technology, language games
4. Presentation of materials and text analysis
5. Individual work, pair work, small group activities and projects

### Bibliography

Basic:

- Watson, D., & Williams, H. (2019). Cambridge International AS and A level Computer Science. Hodder Education Group.
- Brown, G., & Sargent, B. (2024). Cambridge International AS and A level Information Technology. Hodder Education Group.

Additional:

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- Boeckner, K., & Brown, P. Ch. (1993). Oxford English for Computing. Oxford University Press.
- Hanf, B. (2001). Angielski w technice. Poznań: LektorKlett.
- Kubot, A. & Maćków W.(2015). Mathematics and graphs : vocabulary practice for academic English studies. Poznań: Publishing House of Poznan University of Technology.
- Brookshear, J.G., & Brylow, D., (2018) Computer Science: An Overview. Pearson Educations.
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- Bailey, S. (2011). Academic Writing: A handbook for international students. Routledge.
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- Dignen, B. (2014). Communicating Across Cultures. Cambridge University Press.
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- Oshima, A., & Hogue, A. (2006). Writing Academic English (4th ed.). Longman.
- Banks, T. (2012). Writing for Impact. Cambridge University Press.
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- Emmerson, P. (2003). Email English. Macmillan.
- Jordan, R., R. (2008). Academic Writing Course. Longman.

### Breakdown of average student's workload

|                                                                                                                                         | Hours | ECTS |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| Total workload                                                                                                                          | 40    | 1,00 |
| 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) | 10    | 0,00 |