POZNAN UNIVERSITY OF TECHNOLOGY



Course name

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

German [S1Cybez1>JNIEM3]				
Course				
Field of study Cybersecurity		Year/Semester 2/3		
Area of study (specialization) –		Profile of study general academic	C	
Level of study first-cycle		Course offered in <mark>niemiecki</mark>	1	
Form of study full-time		Requirements elective		
Number of hours				
Lecture 0	Laboratory classe 0	es	Other 0	
Tutorials 30	Projects/seminars 0	6		
Number of credit points 2,00				
Coordinators		Lecturers		
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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 German, 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 cybersecurity, 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.

Knowledge:

1. Have a general vocabulary in German at the B2 level according to the Common European Framework of Reference for Languages (CEFR) and specialised terminology related to selected areas of cybersecurity. [K1 W00A]

2. Know the essential grammatical structures required for describing and translating phenomena and processes associated with these fields. [K1_W00B]

Skills:

Students:

1. Can search, analyse, and integrate information from various sources in German, critically assess it, and effectively formulate and justify their opinions on the subject [K1_U01]

2. Can deliver a presentation in German on a specialised cybersecurity science topic 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 [K1_U12]

3. Can express basic mathematical operations in German and interpret data presented in a diagram or graph [K1_U12]

4. Can compose a text in German explaining or describing a selected specialised topic from the field of cybersecurity [K1_U13]

5. Demonstrate language skills in German that meet the criteria for the B2 level according to the Common European Framework of Reference for Languages (CEFR) [K1_U14]

Social competences:

Students:

1. Recognise the importance of proficiency in German communication for effectively sharing knowledge and opinions about engineering, technological achievements, and the computer science and IT-specialist profession with the wider society. [K1_K03]

2. Notice and adapt to cultural differences in behaviour and both professional and private communication in English within diverse cultural contexts. [K1_K03]

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 German
- 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

The course completion rules and the exact passing thresholds will be communicated to students at the beginning of the semester through the university's electronic systems and during the first class meeting. Earning at least 50% of the possible points is a prerequisite for passing.

Programme content

- 1. Cybersecurity
- 2. Encryption
- 3. Ethics and property rights in IT
- 4. Elements of grammar
- 5. Elements of academic German
- 6. Preparation for the final exam

Course topics

- 1. Maintaining data security
- 2. Preventing misuse of personal data
- 3. Firewall and antivirus software
- 4. Types of malware and its uses
- 5. Consequences of malware for organizations and individuals
- 6. Malware Prevention
- 7. Applications of encryption
- 8. Legal, moral, ethical and cultural implications of using computers
- 9. The impact of software or hardware development on society at large
- 10. Software copyright and privacy
- 11. Elements of academic German
- 12. Key grammar structures for the ACERT exam
- 13. Analysis of a selected technical article

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:

Eichstädt, T., Spieker, S. (2024). 52 Stunden Informatik (2. Auflage). Springer Vieweg Steinmetz, M., Dintera, H. (2014). Deutsch für Ingenieure. Springer Vieweg

Additional:

Becky, U., Bewer, F., Fernandes, N., Hensch, J., Liske, M., Thommes, J. (2018). Einfach zum Studium! (3. Auflage). telc GmbH

Drenkert, P., Pinzhoffer, G., Grzunefeld, A. (2013). Uni Deutsch 2 Training Hörverstehen. Booksbaum Gerling, R., Gerling, S. (2022) IT-Sicherheit für Dummies. Wiley-VCH GmbH

Mathes, A. (2018). Uni? Sicher! Deutsch 3 (3. Auflage). Booksbaum

Morztz, U., Rodi, M., Rohrmann, L., Kaufmann, S. (2022). Linie 1 Beruf B2. Ernst Klett Sprachen Gerhard, C., Pohlschmidt, A., Schmitz, H., Schwieger, B. (2022). Aspekte Beruf B2. Ernst Klett Sprachen Kärchner-Ober, R. (2020). Im Beruf neu Fachwortschatztrainer Technik. Hueber Verlag Nissen, K. (2018). Grammatiktraining Deutsch für B2. telc gGmbH

Breakdown of average student's workload

	Hours	ECTS
Total workload	60	2,00
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)	30	1,00