



COURSE DESCRIPTION CARD - SYLLABUS

Course name

English in technology

Course

Field of study

Year/Semester

Mathematics in technology

1/1

Area of study (specialization)

Profile of study

general academic

Level of study

Course offered in

Second-cycle studies

English

Form of study

Requirements

full-time

elective

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

30

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

Responsible for the course/lecturer:

Mgr Alicja Wegwerth-Kurpiewska

Prerequisites

1. Language competence compatible with level B2 (CEFR) (PRK4); knowledge of selected field specific (mathematics in technology) vocabulary (PRK6)

2. Ability to use general and field specific vocabulary, and grammatical structures required on the first level of studies; [K1_U01 (P6S_UK), K1_U08(P6S_UK)]

Ability to use various sources of information [K1_U05 (P6S_UW)]

3. Readiness to follow group work rules and work in a team. [K1_K03(P6S_KR)]

Course objective

1. To develop the student's ability to use academic and field specific (mathematics in technology) language effectively in speech and writing.

2. To develop the student's ability to analyze critically field specific texts.

3. To encourage buildup of field specific vocabulary.



Course-related learning outcomes

Knowledge

As a result of the course, the student ought to acquire field specific vocabulary related to the following issues:

1. Probability theory- events and their types
2. Sets- types, Cartesian product
3. Combinatorics- areas, application in technology
4. Abstract algebra

Skills

As a result of the course, the student is able to:

- 1 give a talk on a field specific or popular science topic (in English), and discuss general and field specific issues, analyze constraints and feasible solutions [K2_U04(P7S_UK), K2-U05(P7S_UK)]
- 2 use an appropriate linguistic and grammatical repertoire in speech and in writing [K2_U01(P7S_U0)]
- 3 formulate a text in English to explain/describe a selected field specific topic.
- 4 understand and analyze international, field specific literature [K2_U01 (P7S_UW)]
- 5 participate in a discussion on a field specific/professional topic, using arguments.
- 6 assess the merit of resource materials.

Social competences

As a result of the course, the student is able to communicate effectively in a field specific/professional area, and communicate in English in public.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

1. Formative assessment: regular assessment of in-class performance, written assignments, speech/presentation
2. Summative assessment: credit

Programme content

Topics:

Sets, probability theory, combinatorics, abstract algebra, The letter π ,



Teaching methods

Vocabulary practice, dialogues, multimedia presentations, debate

Bibliography

Basic

Łyczko, A., J. 2015. English For Mathematics. Kraków: SPNJO Politechniki Krakowskiej (SPK),

Additional

British Council, 2014. English For Academics. Cambridge: CUP (EFA)

Collins, T/Maples, M.J. 2008. Gateway to science Vocabulary and concepts. Thomson Heinle (GTS)

Kucharska-Raczunas, A./ Maciejewska, j. 2010. Mathematics for students of technical studies. Gdansk: WPG (Mfsots),

Kurkiewicz-Gacek, A./ Trzaska, A. 2012. English For Mathematics. Kraków: AGH (EfM),

Sang, D. 2014 Physics Course book. Cambridge: CUP (PCB)

Adams, S./Allday, J. 2000. Advanced Physics. Oxford: OUP (AP)

Gójska, G. 2004. Technical English Grammar. Gdańsk: Wydawnictwo Politechniki Gdańskiej (TEG)

The Internet

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (preparation for classes, preparation for tests, giving presentation) ¹	20	1,0

¹ delete or add other activities as appropriate