POZNARO POZNAR

POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [S2MwT1>JAng]

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 Polish

Form of study Requirements

full-time elective

Number of hours

Lecture Laboratory classes Other (e.g. online)

0 0

Tutorials Projects/seminars

30 0

Number of credit points

2,00

Coordinators Lecturers

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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

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

Course topics

none

Teaching methods

Vocabulary practice, dialogues, multimedia presentations, debate

Bibliography

Basic

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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	2,00
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)	20	1,00