

### POZNAN UNIVERSITY OF TECHNOLOGY

**EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)** 

### **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

English Course [S1MNT1>JAng1]

Course

Field of study Year/Semester

Mathematics of Modern Technologies 1/1

Area of study (specialization) Profile of study

- general academic

Level of study Course offered in

first-cycle Polish

Form of study Requirements

full-time elective

**Number of hours** 

Lecture Laboratory classes Other

0 0

Tutorials Projects/seminars

60 0

Number of credit points

2,00

Coordinators Lecturers

mgr Alicja Wegwerth-Kurpiewska alicja.wegwerth-kurpiewska@put.poznan.pl

### **Prerequisites**

the already acquired language competence compatible with level B1 (CEFR); 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.

0

# Course objective

advancing students' language competence towards at least level B2 (CEFR); development of the ability to use academic and field specific language effectively in both receptive and productive language skills; improving the ability to understand field specific texts (familiarizing students with basic translation techniques); improving the ability to function effectively on an international market and on a daily basis.

# Course-related learning outcomes

### Knowledge:

• oughttoacquirefieldspecificvocabularyrelatedtothefollowingissues:describinggraphs,mathematical cal terms and symbols, mathematical operations, mathematical analysis, linear algebra [K\_W 03(P 6S\_W G)];

• is familiar with appropriate linguistic grammatical structures and uses them effectively in written and oral utterances (in English) [K W03(P6S WG)].

#### Skills:

- express basic mathematical operations and to interpret data presented on graphs/diagrams [K U15(P6S UK)];
- formulateatextinEnglishwherehe/sheexplains/describesaselectedfieldspecifictopic[K U15(P6S UK)].

### Social competences:

- retrieve information on his/her own from field specific texts in English [K K01(P6S KK)];
- communicate effectively in a field specific/professional area and on a daily basis [K\_K01(P6S\_KK)].
- and he is ready for further education due to the awareness of the limitations of his own knowledge [K K01(P6S KK)].

# Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

#### Tutorials:

- formative assessment: in-class evaluation (tests);
- · summative assessment: credit.

# **Programme content**

Update: 28.09.2024r.

Tutorials: describing graphs, mathematical terms and symbols, mathematical operations, mathematical analysis, linear algebra, analytic geometry, modern technologies.

## **Course topics**

The tutorial programme covers the following topics: describing graphs mathematical analysis linear algebra analytic geometry modern technologies reading and listening comprehension practice elements of grammar EAP Module

# **Teaching methods**

Tutorials: new vocabulary practice, e.g. pronunciation practice, speaking activities, e.g. students' dialogues, conversations, discussions, written tasks, matching definitions, multimedia activities.

# **Bibliography**

#### Basic:

Krukiewicz-Gacek, A./ Trzaska, A. 2012. English For Mathematics. Kraków: AGH.

### Additional:

- Kucharska-Raczunas, A./Maciejewska, J. 2010. Mathematics For Students Of Technical Studies. Gdańsk: Wydawnictwo Politechniki Gdańskiej;
- Łyczko, A. 2015. English For Mathematics. Kraków: SPNJO.
- Brown, G./Sargent, B. 2021. Cambridge International AS Level Information Technology. London: Hodder Education Group

# Breakdown of average student's workload

	Hours	ECTS
Total workload	67	2,00
Classes requiring direct contact with the teacher	60	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	7	0,00