# POZNAN UNIVERSITY OF TECHNOLOGY



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

## **COURSE DESCRIPTION CARD - SYLLABUS**

#### Course name English Coursei [S1IMat1>JANG1]

Course			
Field of study		Year/Semester	
Materials Engineering		1/2	
Area of study (specialization)		Profile of study general academic	c
Level of study first-cycle		Course offered in Polish	
Form of study full-time		Requirements elective	
Number of hours			
Lecture	Laboratory classe	S	Other (e.g. online)
0	0		0
Tutorials 60	Projects/seminars 0	3	
Number of credit points 6,00			
Coordinators		Lecturers	
dr Marta Strukowska marta.strukowska@put.poznan.pl	mgr Jadwiga Wolak jadwiga.wolak@put.poznan.pl		
mgr Jadwiga Wolak jadwiga.wolak@put.poznan.pl			

### Prerequisites

1. Knowledge: The already acquired language competence compatible with level B1 (CEFR) 2. Skills: The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills 3. Social competencies: The ability to work individually and in a group; the ability to use various sources of information and reference works.

### Course objective

Course objectives: 1. Advancing students' language competence towards at least level B2 (CEFR). 2. Development of the ability to use academic and field specific language effectively in both receptive and productive language skills. 3. Improving the ability to understand field specific texts (familiarizing students with basic translation techniques). 4. Improving the ability to function effectively on an international market and on a daily basis.

### Course-related learning outcomes

## Knowledge:

the following issues:

- 1. engineering materials -metals and their alloys, ceramics, polymers, composites
- 2. structure of materials and their properties. selection of materials for specific applications.
- 3. degradation, wear and tear in materials.
- 4. environment protection, methods of recycling materials

and to be able to define and explain associated terms, phenomena and processes.

#### Skills:

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

- 1. give a talk on field specific or popular science topic (in english), and discuss general and field specific
- 2. issues using an appropriate linguistic and grammatical repertoire
- 3.express basic mathematical formulas and to interpret data presented on graphs/diagrams
- 4. formulate a text in english where he/she explains/ a selected field specific topic

Social competences:

1. as a result of the course, the student is able to:

1. communicate effectively in a field specific/professional area, and to give a successful presentation in english.

2. to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment.

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Formative assessment: evaluation of performance during classes (presentations, tests, MT test) Summative assessment: credit

## **Programme content**

Reaching a high degree of academic, business and social communication.

Revising and extending specialist vocabulary related to basic engineering materials –metals, their alloys, ceramics, composites, polymers,

their structure, properties and selection for specific applications,

corrosion, wear and tear in materials, environment protection, methods of recycling materials

Getting acquainted with the ways of describing and interpreting graphs and diagrams.

Learning the vocabulary of algebra and geometry to express fundamental mathematical operations and to describe shapes, figures and solids.

## **Course topics**

- Elements of Mathematics
- Graph description
- Material types (metals, non-metals, elements, compounds, composites)
- Steel (carbon steels, alloy steels)
- Corrosion
- Non-ferrous metals
- Plating with non-ferrous metals
- Polymers
- Thermoplastics and thermosetting plastics
- Mineral and ceramic engineering materials
- Glass
- Concrete
- Wood , engineered wood
- Material properties
- Kevlar, its properties and applications
- Recyclable materials
- EAP-writing emails in the academic context, formal correspondence

EAP -features of academic style

## **Teaching methods**

Exposing: Presentations

Problem: individual and team- work , participation in discussions.

Practical: formulating oral and written statements, preparing presentations, using the opportunities offered by the Internet.

## Bibliography

Basic

1. Ibbotson, M. 2013. Professional English in Use Engineering. Cambridge: Cambridge University Press. 2 Ibbotson, M. 2009. Cambridge English for Engineering. Cambridge: Cambridge University Press. Additional

.Dooley, J. / Evans.V. 2001, Grammarway 4. London: Express Publishing.

2. Glendinning, E. H. / Glendinning, N. 2008. Oxford English for Electrical and Mechanical Engineering. Oxford: Oxford University Press.

3. Grzegożek, M. and Starmach, I. 2004. English for Environmental Engineering. Kraków: Studium Praktycznej Nauki Języków Obcych Politechniki Krakowskiej.

4. Hanf, B. 2001. Angielski w technice. Poznań: Wydawnictwo LektorKlett (Pons).

5. Harding, K. and Taylor, L. 2005. International Express intermediate. Oxford: Oxford University Press.

6. Bonamy, D. 2011. Technical English 4. Pearson Education Limited.

7. Internet sources

## Breakdown of average student's workload

	Hours	ECTS
Total workload	120	4,00
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)	60	0,00