



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

**German Course (technical)**

**Course**

Field of study

**Mathematics in Technology**

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

1/2

**Number of hours**

Lecture

-

Tutorials

-

**Number of credit points**

3

**Lecturers**

Responsible for the course/lecturer:

mgr Maja Rakiewicz

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Centrum Języków i Komunikacji PP

**Prerequisites**

Knowledge: The already acquired language competence compatible with level B1 (CEFR) -[PQF 4]

Skills: The ability to use vocabulary and grammatical structures required on the high school graduation exam regarding productive and receptive skills – [PQF 4]

Profile of study

general academic

Course offered in

**German**

Requirements

elective

Laboratory classes

-

Projects/seminars

60

Other (e.g. online)

-

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Social competence: The ability to work individually and in a group; the ability to use various sources of information and reference works

### Course objective

- 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

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

- basics of Electrical Engineering
- forms of electrical energy
- renewable energy
- electrical machines

[K\_W02 (P6S\_WG)]

and to be able to define and explain associated terms, phenomena and processes. [K\_W03 (P6S\_WG)]

#### 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 German), and discuss general and field specific issues using an appropriate linguistic and grammatical repertoire [K\_U23 (P6S\_UK)]
- 2 express basic mathematical formulas and to interpret data presented on graphs/diagrams [K\_U24 (P6S\_UK)]
- 3 formulate a text in German where he/ she explains/ describes a selected field in specific topics [K\_U23 (P6S\_UK)]
- 4 to read and understand mathematical texts and technical documents, operating manuals for electrical devices and similar documents [K\_U24 (P6S\_UK)]

#### Social competences

- 1 As a result of the course, the student is able to communicate effectively in a field specific/professional area, and to give a successful presentation in German [K\_K01 (P6S\_KK)]



2 The student is able to recognize and understand cultural differences in a professional and private conversation, and in a different cultural environment [K\_K07 (P6S\_KO)]

3 The student is able to independently search for information in specialist literature in German [K\_K05 (P6S\_KK)]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

**Formative assessment:** assessment during language classes: oral performance, written assignments, speech/presentation, tests

**Summative assessment:** final examination

### Programme content

Electrical charge, voltage, current, operation of electrical current, resistance, measuring of electrical current

Forms and carrier of electrical energy

Renewable energy: solar panels, geothermal energy, wind energy, water turbine

Transformer, generator, electrical machines

### Teaching methods

Brainstorming, Mind Maps, Snowball Technique

### Bibliography

Basic

Steinmetz, M./ Dintera, H.: Deutsch für Ingenieure, Ein DaF Lehrwerk für Studierende ingenieurwissenschaftlicher Fächer, Springer Vieweg 2014

Additional

Fearns, A./ Buhlmann, R.: Technisches Deutsch für Ausbildung und Beruf, Lehr- und Arbeitsbuch, Verlag Europa-Lehrmittel, Goethe Institut 2013



### **Breakdown of average student's workload**

	Hours	ECTS
Total workload	90	3
Classes requiring direct contact with the teacher	60	2
Student's own work (preparing a presentation, preparing for tests, homework, preparing and final examination) <sup>1</sup>	30	1

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1 delete or add other activities as appropriate