



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

German [S1Mech2>JN2]

### Course

Field of study  
Mechatronics

Year/Semester  
2/3

Area of study (specialization)  
–

Profile of study  
general academic

Level of study  
first-cycle

Course offered in  
Polish

Form of study  
full-time

Requirements  
elective

### Number of hours

Lecture  
0

Laboratory classes  
0

Other  
0

Tutorials  
60

Projects/seminars  
0

### Number of credit points

5,00

### Coordinators

mgr Joanna Skrobała  
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### Lecturers

### Prerequisites

The ability to use vocabulary and grammatical structures required on the high school graduation exam with regard to productive and receptive skills

### 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:

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

- systematics of machines
- machine tools
- gears and bearings

- basics of electrical engineering  
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:

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

Social competences:

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.

The student is able 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:

Passing requirements:

- active participation in class
  - successful participation in the required tests
  - preparation and delivery of a presentation on a specialist topic
- Minimum requirement: 50% for each element

### Programme content

-Classification of machines

Machine tools - construction, principle of operation of a CNC machine tool.

Types of gears, characteristics and comparison, application and types of bearings - description and comparison, application

Defining basic concepts in the field of electrical engineering, reading diagrams.

### Course topics

Division and classification of machines

Industrial revolutions 1.0-4.0

National and international standards

Machine elements

Construction, examples and application of mechatronic systems

Defining basic concepts in the field of electrical engineering, reading diagrams

### Teaching methods

work with texts, discussion, team work, translation, films, individual written and oral deliverance, individual meetings with students, homework analysis, Moodle platform exercises...

### Bibliography

Basic:

Steinmetz, M./Dintera H.: Deutsch für Ingenieure, Springer View, Wiesbaden 2014

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

Additional:

Jarosz, A., Jarosz, J.: Deutsch für Profis. Branża mechaniczna

Maenner, D.: Prüfungstraining telc Deutsch B1+ Beruf, Cornelsen Verlag, Berlin 2012

online: DEUMA Deutsch im Maschinenbau, 2004

### Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	65	2,50