



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

English [N1Mech2>JA2]

### 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  
part-time

Requirements  
elective

### Number of hours

Lecture  
0

Laboratory classes  
0

Other  
0

Tutorials  
40

Projects/seminars  
0

### Number of credit points

5,00

### Coordinators

### Lecturers

### Prerequisites

The already acquired language competence compatible with level B1 (CEFR). The ability to use general and field specific vocabulary, and grammatical structures required on the first level of studies. 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 the level at least B2 (CEFR). 2. Developing the ability to effectively use general and field-specific language in both receptive and productive language skills. 3. Improving the ability to understand field-specific texts (presenting the students with the basic translation techniques). 4. Improving the ability to function effectively on an international market and in daily life.

### 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. Electronics: materials, electronic components and circuits,
2. Control systems,
3. Electric motors,

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

Skills:

As a result of the course, the student has acquired the skills to communicate in English and use Mechatronics-specific language, and is able to:

1. give a presentation in English on a field-specific technical or popular topic, discuss general and technical topics using an appropriate linguistic and grammatical repertoire,
2. express basic mathematical formulae and interpret data presented on a graph/diagram,
3. describe a graph in English.

Social competences:

1. As a result of the course, the student is able to communicate effectively in a field specific/professional environment and typical daily-life situations, and to give a successful presentation in English.
2. 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:

Knowledge acquired during the classes is verified by exam. Pass: 60% of points. The course topics the questions are based on are presented to students earlier. Students are also obliged to prepare a presentation on a technical topic. Summative grade: final examination (written and oral).

### Programme content

1. Issues and vocabulary related to engineering and the basic materials used in electronics: conductors, insulators and semi-conductors.
2. Vocabulary and characteristics of the main electronic components.
3. Characteristics of closed- and open-loop systems and their steering.
4. CAD.

### Course topics

1. Electronics: materials, electronic components and circuits.
2. Control systems.
3. Electric motors.
4. CAD.

### Teaching methods

Practical classes, guided text method.

The teaching methods are based on the improvement of four basic language competences (listening, speaking, reading, writing) as a means of expanding the substantive knowledge in the field of technical topics.

### Bibliography

Basic:

- Dubis, A., Firgane, J. 2006 English through electrical and energy engineering. Kraków: SPNJO Politechniki Krakowskiej
- Glendinning, E., Glendinning, N. 1995, Oxford English for Electrical and mechanical engineering, Oxford; Oxford University Press
- Glendinning, E., McEwan, J. 1996 Oxford English for Electronics, Oxford: Oxford university Press
- Hanf, B. 2000 Angielski w Technice, Stuttgart: LektorKlett
- Internet based materials

Additional:

- Kuboń, A., Maćków, W. 2015. „Mathematics and graphs - vocabulary practice for academic English studies”.

## Breakdown of average student's workload

|   | Hours | ECTS |
|---|-------|------|
| Total workload  | 125   | 5,00 |
| Classes requiring direct contact with the teacher   | 42    | 1,50 |
| Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation) | 83    | 3,50 |