



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Internship

### Course

Field of study

Automatic Control and Robotics /studies conducted in English/

Area of study (specialization)

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Level of study

First-cycle studies

Form of study

full-time

Year/Semester

2/4

Profile of study

general academic

Course offered in

english

Requirements

compulsory

### Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars

160

### Number of credit points

4

### Lecturers

Responsible for the course/lecturer:

Krzysztof Wandachowicz, Ph.D, D. Sc., Eng.

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Faculty of Control, Robotics and Electrical

Engineering

Piotrowo 3A Street, 60-965 Poznań

Responsible for the course/lecturer:

### Prerequisites

A student starting this subject should have basic knowledge, skills and social competences resulting from the implementation of the study program for the field of Automatic Control and Robotics in the group of basic and major subjects.

### Course objective

Gaining practical knowledge of issues related to the field of study.

### Course-related learning outcomes

Knowledge



1. Is aware of the current state and the latest development trends in the field of automation and robotics.
2. Has basic knowledge necessary to understand the non-technical determinants of engineering activities and the process of automation and robotization in industry and households; knows the basic principles of occupational health and safety applicable in industry.
3. Has basic knowledge of management, including quality management and running a business.
4. Knows and understands the basic concepts and principles of the protection of industrial property and copyright; can use the resources of patent information.
5. Knows and understands the general principles of creating and developing forms of individual entrepreneurship, using knowledge of automation and robotics.

#### Skills

1. Can read and understand technical design documentation and simple technological diagrams of automation and robotics systems.
2. Can apply the principles of occupational health and safety.
3. Can identify and formulate the specification of simple engineering tasks in the field of automation and robotics.

#### Social competences

1. Is aware of the importance and understands the non-technical aspects and effects of engineering activities, including its impact on the environment and the related responsibility for decisions made, is ready to care for the achievements and traditions of the profession.
2. Is aware of responsibility for their own work and readiness to submit to the rules of teamwork and responsibility for jointly performed tasks; is able to lead a small team, set goals and set priorities leading to the implementation of a task; is ready to perform professional roles responsibly.
3. Is ready to define priorities in order to accomplish the task set by himself or others.
4. Is aware of the need for a professional approach to technical issues, scrupulous familiarization with the documentation and environmental conditions in which devices and their components may operate, is ready to comply with the principles of professional ethics and require others to do so, respect the diversity of views and cultures.
5. Is willing to think and act in an entrepreneurial manner.

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

An internship report certified by the internship tutor. An internship certificate issued by the host entity for the internship. A questionnaire describing the achieved learning outcomes.



## Programme content

Training in occupational health and safety and fire regulations. Acquainting with the applicable work regulations and conditions for the protection of state and official secrets. Acquainting with the structure and functioning of the enterprise (institution). Implementation of an individual internship program. Preparation of a report on the course of internships.

## Teaching methods

Teaching methods should be adapted to the individual internship program.

## Bibliography

Basic

1. Regulamin organizacji praktyk studenckich objętych programem studiów na Wydziale Automatyki, Robotyki i Elektrotechniki.
2. Regulamin studiów stacjonarnych i niestacjonarnych pierwszego i drugiego stopnia uchwalony przez Senat Akademicki Politechniki Poznańskiej.

Additional

1. Obwieszczenie Ministra Gospodarki, Pracy i Polityki Społecznej z dnia 28 sierpnia 2003 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia Ministra Pracy i Polityki Socjalnej w sprawie ogólnych przepisów bezpieczeństwa i higieny pracy. Dz.U. 2003 nr 169 poz. 1650.

## Breakdown of average student's workload

|  | Hours | ECTS |
|--|-------|------|
| Total workload   | 160   | 4,0  |
| Classes requiring direct contact with the teacher  | 100   | 4,0  |
| Student's own work (literature studies, preparation for design classes, preparation of the project, implementation of an individual internship program) <sup>1</sup> | 100   | 4,0  |

<sup>1</sup> delete or add other activities as appropriate