



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Preparation of the thesis [S2AiR2-RiSA>PPM]

### Course

Field of study

Automatic Control and Robotics

Year/Semester

2/3

Area of study (specialization)

Autonomous Robots and Systems

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

### Number of hours

Lecture

0

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

30

### Number of credit points

20,00

### Coordinators

### Lecturers

### Prerequisites

The student should have basic knowledge of the basics of robotics, measuring systems, manipulating and mobile robots, robot programming and computer science. Should be able to obtain information from the indicated sources. They should also understand the necessity to expand their competences and acquire new skills.

### Course objective

The aim is to prepare a Master's thesis by completing a project in robotics.

### Course-related learning outcomes

Knowledge:

-

Skills:

K2\_U20 is able to develop improvements (enhancements) of the existing design solutions of automatic control and robotics components and systems

K2\_U25 is able to construct an algorithm to solve a complex and non-standard engineering task and a simple research problem, and to implement, test and run it in a selected programming environment for selected operating systems;

Social competences:

K2\_K1 understands the need and knows the possibilities of continuous training? improving professional, personal and social competences, is able to inspire and organize the learning process of other people; K2\_K3 is aware of the 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 team, set goals and define priorities leading to the implementation of the task;

K2\_K6 the graduate is aware of the social role of a graduate of a technical university and understands the need to formulate and convey to the public (in particular through the mass media) information and opinions on the achievements of automation and robotics in the field of research and application work and other aspects of engineering activities; the graduate makes efforts to communicate such information and opinions in a generally understood manner.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Ongoing control of the progress in the preparation of the master's thesis by the supervisor.

### Programme content

The subject of the master's diploma thesis is the realisation of a project, often having the features of scientific research, in the scope connected with the specialisation. The topic is defined by the supervisor in agreement with the diploma student.

### Course topics

none

### Teaching methods

Consultations in the scope of the implemented projects, individual discussions concerning diploma projects, laboratory work under the supervisor's supervision.

### Bibliography

Basic:

1. A. Dudziak, A. Żejmo, Redagowanie prac dyplomowych - wskazówki metodyczne dla studentów. Difin, 2008. 2. J. Maćkiewicz, Jak pisać teksty naukowe?, Uniwersytet Gdański, 2001. 3. P. Oliver, Jak pisać prace uniwersyteckie : poradnik dla studentów, Wyd. Literackie, 1999

Additional:

1. J. Pieter, Ogólna metodologia pracy naukowej, Ossolineum, 1967.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	500	20,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	470	19,00