COURSE DESCRIPTION CARD - SYLLABUS

Course name
Research laboratory

Course

Field of study
Automatic control and robotics
Area of study (specialization)
Robots and autonomous systems
Level of study
Second-cycle studies
Form of study
full-time

Year/Semester
1 / 2
Profile of study
general academic
Course offered in
Polish
Requirements
compulsory

Year/Semester
1 / 2
Profile of study
general academic
Course offered in
Polish
Requirements
compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

Tutorials

Projects/seminars
45

Number of credit points

2

Lecturers

Responsible for the course/lecturer:
Supervisors of the MSc. thesis or other selected faculty members. email: office_cie@put.poznan.pltel. 061 6652365Institute of Robotics and Machine Intelligenceul. Piotrowo 3A 60-965 Poznań

Responsible for the course/lecturer:

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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 of the research studio is to prepare for the implementation of the master's thesis. During it, the scope of the thesis is defined and a critical review of the literature and existing solutions is made. The aim is also to consolidate practical problem-solving skills in the field of robotics and programming acquired in the course of knowledge studies.

Course-related learning outcomes

Knowledge

K2_W12 has the knowledge necessary to understand the economic, legal and social aspects of engineering activities and the possibility of applying them in practice;K2_W15 has knowledge of running a business, engineering project management and quality management;

Skills

K2_U4 is able to prepare a scientific study in the mother tongue and a short scientific report in English, presenting the results of own researchK2_U5 is able to prepare and present, in Polish and in a foreign language, an oral presentation on the results of his / her work (including research) defined by the project taskK2_U6 has self-education skills to improve and update professional competencesK2_U7 has language skills in the field of automation and robotics, in accordance with the requirements set out for the B2 + level of the European System for the Description of Language Education;; K2_U24 is able to manage the work of the team, is able to lead a team and is able to estimate the time needed to complete the assigned task; is able to develop a work schedule and carry out tasks ensuring meeting deadlines;

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. Preparation of a presentation showing the progress of work and participation in the discussion on it. Work progress and presentation are assessed.

Programme content

Analyzing the subject of the thesis, including a critical review of the literature and comparing it to existing solutions.

Teaching methods

.Case study, presentation, paper, discussion.

Bibliography

Basic

1. A. Dudziak, A. Żejmo, Redagowanie prac dyplomowych – wskazówki metodyczne dla studentów. Difin,20082. 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	60	2
Classes requiring direct contact with the teacher45	45	1
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	15	1

[1] delete or add other activities as appropriate