

SYLLABUS

Name: **Final project (MakAu>SI7-FP-19)**

Name in Polish: **Projekt inżynierski**

Name in English: **Final project**

Information on course:

Course offered by department: Faculty of Automatic Control, Electronics and Computer Science

Course for department: Silesian University of Technology

Default type of course examination report:

EGZ

Short description:

There are two main goals to be achieved in this course. The first one is to show engineering skills through design and implementation of a solution to a practical engineering problem in the field of Control, Electronic and Information Engineering. The second goal is to demonstrate ability to properly describe the solution and all its aspects, including the most important global social (technological, economic, cultural etc.) aspects to be taken into account in solving an engineering problem.

Pre-requisites depend on the title and scope of the project. They include basic knowledge and skills needed to complete the project, including those concerning hardware architecture and principles of operation or appropriate programming tools.

Description:

The project should include the following steps:

1. Defining specific goal of the given engineering task and its analysis.
2. Bibliography studies aimed at finding solutions to similar problems, tools and methods needed to complete the project
3. Selection of programming tools and / or hardware.
4. Design and Implementation of software and / or hardware that constitute the main part of the proposed solution.
5. Testing of the proposed solution.
6. Preparation of a report on the implementation of the project, including testing results presentation and discussion.

The engineering final project is of application nature. It can be carried out alone or in groups of several people. At the end of the course the student must present a report and present the results in the form of a multimedia presentation.

Bibliography:

Literature related to the implemented project

Learning outcomes:

After completing the project the student will

- Know state-of-the-art in specialization field (K1A_W13)
- Be able to apply their knowledge in solving an engineering problem and describe the solution in a clear and concise way, meeting the deadline (K1A_U01, K1A_U03, K1A_U28)
- Be able to take into account a wider perspective when proposing their solutions (K1A_U13).

Assessment methods and assessment criteria:

The general assessment methods are defined in the Regulations of Studies and involve a separate review of the project report and grade assignment by the supervisor and the reviewer. The specific form used in the evaluation is defined in the SUT IT system devoted to final thesis and exam processing (APD).

The project progress is documented as defined by the procedure PU12 of the Education Quality Assurance System.

The report project should fulfill requirements available at the web page of the Faculty of Automatic Control, Electronics and Computer Science.

The syllabus is valid from academic year 2024/2025 and its content cannot be changed during the semester.

Course credits in various terms:

<without a specific program>			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	13	2022/2023-Z	