

POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Information engineering [S1AiR1E>Inf1]

Course

Field of study Year/Semester

Automatic Control and Robotics 1/1

Area of study (specialization) Profile of study

— general academic

Level of study Course offered in

first-cycle english

Form of study Requirements full-time compulsory

Number of hours

Lecture Laboratory classes Other (e.g. online)

60 30

Tutorials Projects/seminars

0 0

Number of credit points

8,00

Coordinators Lecturers

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Prerequisites

none

Course objective

none

Course-related learning outcomes

Knowledge:

Has advanced structured knowledge of selected algorithms and data structures as well as procedural and object-oriented programming methodologies and techniques [K1_W8 (P6S_WG)].

Has a structured knowledge of computer architectures, computer systems and networks and operating systems including real-time operating systems [K1_W9 (P6S_WG)].

Has a basic knowledge of the handling and use of IT tools for the design, rapid prototyping, simulation and visualisation of automation and robotics systems and for recording the design of mechanical constructions [K1 W10 (P6S WG)].

Skills:

Is able to obtain information from literature, databases and other sources also in a chosen foreign language [K1 U1 (P6S UW)].

Is able to plan, prepare and simulate the operation of simple automation and robotics systems [K1_U10 (P6S_UW)].

Is able to develop a solution to a simple engineering task and implement, test and run it in a selected programming environment on a PC for selected operating systems [K1_U26 (P6S_UW)]. Social competences:

Is aware of the importance and understands the non-technical aspects and consequences of engineering activities, including their impact on the environment and the related responsibility for decisions; is ready to care for the achievements and traditions of the profession [K1 K2 (P6S KR)].

The graduate is aware of the need for a professional approach to technical issues, meticulous familiarization with the documentation and environmental conditions in which the equipment and its components can operate. The graduate is ready to observe the rules of professional ethics and to demand it from others, to respect the diversity of opinions and cultures [K1 K5 (P6S KR)].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

none

Programme content

none

Teaching methods

none

Bibliography

none

Breakdown of average student's workload

	Hours	ECTS
Total workload	180	8,00
Classes requiring direct contact with the teacher	90	4,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	90	4,00