

FACULTY OF MECHANICAL ENGINEERING



Specialisation AC4 offers:

- ✓ modern laboratories equipped with: PLCs from Siemens and B&R and industrial robots from FANUC,
- ✓ extensive teaching facilities,
- ✓ access to specialised hardware and software,
- ✓ highly specialised academic staff with theoretical and practical experience,
- ✓ possibility of developing the knowledge on extra-curricular activities.

Graduate profile

Graduates combine knowledge of organizational (planning) and technical (CAx methods, ie. CAD, CAE, CAM, CAPP) pre-production, and modern methods of manufacturing and computer integration, particularly in:

- ✓ design and manufacturing technology,
- ✓ production control and planning,
- ✓ management and cooperation between enterprises,

with knowledge in the areas of:

- ✓ design and operation of automated manufacturing systems,
- ✓ programming of technological equipment (robots, numerically controlled technological machines, PLC controllers, microprocessor – based systems),
- ✓ applications of artificial intelligence.

BALLUFF

sensors worldwide



Integrated Manufacturing Systems AC4 under patronage of BALLUFF company

Select Faculty of Mechanical Engineering



- University with traditions
- Diversified range of studies
- 72 th years of faculty activity
- Grade A in national evaluation of scientific and R&D activities of research institutions
- Accredited College Courses
- European research programs: ERASMUS+, Leonardo da Vinci, Tempus, CEEPUS
- Double degree (Cranfield University, TU Bergakademie Freiberg)
- Cooperation with industry

Subjects of the specialisation

- ✓ Design of technological processes,
- ✓ Control, measurement and diagnostic systems,
- ✓ Microprocessor-based control systems,
- ✓ Robotisation of technological processes and robots programming,
- ✓ PLC programming,
- ✓ Distributed control systems and real-time operating systems,
- ✓ Design and modelling of flexible manufacturing systems,
- ✓ Production planning and control in automated systems,
- ✓ Acquisition and management of production data,
- ✓ Computer integrated manufacturing.

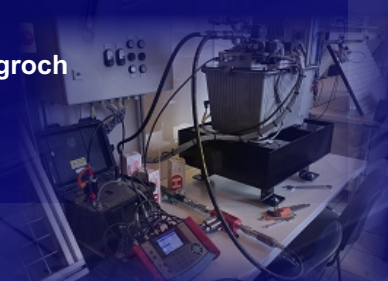
Presentation of specialisation

In response to the labour market growing demand for professionals from a range of organisational and technical preparation of production, the Institute of Engineering Processes Automation and Integrated Manufacturing Systems provides the Integrated Manufacturing Systems specialisation in the Automation and Robotics field of study.

What are the specialties of our graduates? Why study it?

At AC4 I learned primarily the integration of sensors and actuators from BALLUFF with SIEMENS PLCs. Acquired skills in planning and simulation of production processes allowed me to streamline the initial stages of work on new projects. In addition, the fact that all subjects were taught in English helped me in later work, which as with any automaton / robotics relies on frequent trips abroad. Studying in English enables cheat confidence in the discussions undertaken and to learn specialised vocabulary. I believe that resigning from this specialty only because of fear of English is a big mistake.

Msc eng. Robert Wiercigroch
(AIUT employee)



Recruitment

A recruitment process for foreign students starts on November, 1st and ends on December, 15th and is supported by online system.

<https://apply.polsl.pl/>

A recruitment process for Polish students starts on January, 8th and ends on January, 31st and is supported by online system.

<https://sorek.polsl.pl/>



What outside of science?



JOIN US NOW



Modern laboratories → Innovative research

The Institute offers AC4 students access to laboratories:

- ✓ the Laboratory of Discrete and Continuous Processes Control,
- ✓ the Laboratory of MULTIMOTION – Multi-Axis Control Laboratory,
- ✓ the Laboratory of Simulation and Visualisation of Mechatronic Systems,
- ✓ the Laboratory of Mechatronic Systems Control,
- ✓ the Laboratory of MEMS Applications,
- ✓ the Laboratory of Hydraulic and Pneumatic Microdrives.

Professional scientific Staff

At the Institute of Engineering Process Automation and Integrated Manufacturing Systems, 43 scientists are employed, including:

- ✓ 15 independent researchers, including 5 professors,
- ✓ 19 doctors of technical sciences and 9 doctoral students.

The Institute is authorized to conduct doctoral studies in disciplines:

- ✓ construction and operation of machines,
- ✓ material engineering,
- ✓ production engineering and mechanics.

Contact

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Links

<http://mt.polsl.pl/kafelka/wydzialowa-komisja-rekrutacyjna/>

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