

Politechnika Łódzka

Published on *Politechnika Łódzka - Rekrutacja* (https://rekrutacja.p.lodz.pl)

Organizational unit running the field of study:

Faculty of Electrical, Electronic, Computer and Control Engineering

Cycle of study:

First-cycle

Mode of study:

Full-time (degree programme)

Language of instruction:

Polish

Degree awarded:

Bachelor of Science

Duration of study:

3,5 / 4 years

Description of the field of study:

The program is run by two Faculties: the Faculty of Electrical, Electronic, Computer and Control Engineering and the Faculty of Mechanical Engineering, with the former being the official program leader.

It is an interdisciplinary degree program which allows students to study topics in, among others, electrical engineering, mechanics, automation, electronic engineering, and computer science.

The curriculum includes classes in general science (mathematics, physics) as well as in specialist fields (e.g. mechatronic systems, microsystems, automotive mechanical systems, mechatronic systems for household appliances, light electric vehicles, hybrid connecting elements) during which they learn skills to program and construct mechatronic systems.

Students are trained in self-study and team working, which they have the opportunity to put into practice during collaborative capstone projects, frequently carried out in cooperation with industry. This way, future engineers are trained to work in design centers, high-tech production plants, and as mechatronic systems specialists. Problem-solving skills as regards automation of production processes are also developed. Graduates are capable of logical as well as abstract thinking during pragmatic solving of interdisciplinary problems.

The conceptual framework of the curriculum is oriented towards the education of qualified personnel for knowledge-based economy and understanding of development trends as well as preparing students for industrial practice (especially industry dealing with the design and production of mili-, micro, and nano-scale mechatronic devices and systems), as well as technological processes (including industrial

ecology), regarded as an expression of innovation and development of this branch of the economy.

Graduate profile:

Graduates with a degree in Mechatronics will be able to creatively apply technical knowledge to solve practical tasks on the basis of acquired professional competencies related to:

- working in an interdisciplinary team and integrating the acquired knowledge in the design, manufacture, operation, and programming of mechatronic devices and systems,
- the selection and operation of machines, including electrical machines for drive systems,
- the design, implementation, and setting up of measurement systems,
- the implementation of systems monitoring technological and production processes.

Furthermore, they have specialist skills, in particular, they can:

- plan, organize work and manage time effectively,
- identify, formulate, and solve engineering problems,
- communicate effectively in a foreign language.

Graduates with an inżynier degree in Mechatronics are qualified to be employed in, among others:

mechatronic systems manufacturing industry: electrical machines, household appliances, medical and diagnostic equipment, aviation, machining, textile, automotive, and micro- and nanosystems manufacturing companies,

industries and other establishments operating and servicing mechatronic systems, and machines and equipment in which they are used.

Date of enrolment: 12th of June - 10th of July 2023 Admission requirements:

- Admissions calendar [1]
- Required documents [2]
- Fees [3]

Source

URL:https://rekrutacja.p.lodz.pl/en/mechatronika-first-cycle-faculty-electrical-electronic-computer-and-control-engineering

Links

[1] https://rekrutacja.p.lodz.pl/en/deadlines [2] https://rekrutacja.p.lodz.pl/en/documents [3] https://rekrutacja.p.lodz.pl/en/tuition-fees