



Institute of Automation Specialization: Automation

Fields of Education:

All students who graduate from the Institute of Automation, regardless of their specialisation, will have a firm background in planning, computing, IT skills, computer-aided planning and operation related to electrical engineering. For this reason, the curriculum contains extensive training in electronics, automation and applied information technology.

Courses in Automation include a wide choice of further orientation for students with special interests.

These **specialisation modules** are the following:

- Robots and servodrives
- Intelligent electronics systems
- Programmable process control, vehicle electronics
- Building and public utility automation.



In addition to special training in the field of automation, this Institute takes part in the tuition of students in power engineering, managers in engineering, teachers of engineering as well as students in the English-language integrated engineering programme.

Housed at the Faculty's Óbuda location, the Institute is responsible for teaching subjects in Automation, Measurement- and Digital Technique, Electronics and Electric Machines. Institute staff offers lectures and laboratory sessions in the above fields.

Areas of research and development:

- Automation of measuring systems, computer-aided evaluation and documentation
- Development of electronics used in vehicles driven by electric- or internal combustion engines
- Robots and control and programming of CNC controlled machines
- Crane drives, regulation of speed and position, wireless remote control, power-electronics systems
- Development of controlling/regulating electronics and electric machines (brushless-, synchronous-, switched reluctance and servo motors) for automation
- Application of industrial information networks, bus systems
- Research and development of industrial EMC applications.



The home page address of the Institute of Automation is: www.aut.bmf.hu