POZNAN UNIVERSITY OF TECHNOLOGY

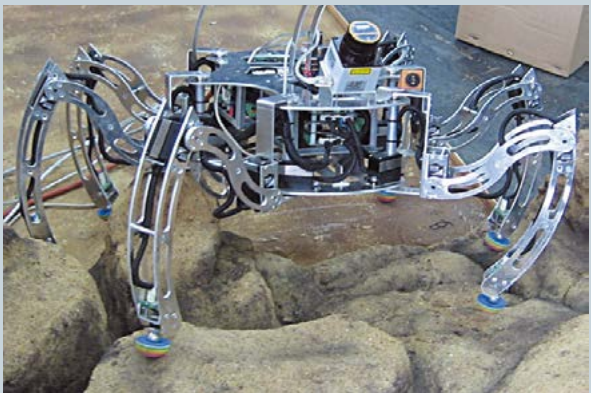
B.Sc. Eng. Programmes

Automatic Control and Robotics

Florian Cordes, member of StarTiger Dropter team

Programme description

Graduate engineering studies provide knowledge of basic issues of automation and robotics: dynamic systems, signal processing, robot kinematics, components and industrial automation equipment, design and programming of microprocessor systems, industrial controllers, sensors and vision systems. Graduates have competencies necessary for projects of medium difficulty in the field of measurement and control. They are able to solve practical problems concerning the application of industrial automation and simple robotic systems. Graduates know basic social, legal, economic and technical determinants of implemented projects.



Course summary:

Semester 1

- Mathematics
- Information Engineering
- The elements of computer science techniques
- Ergonomics, occupational health and work safety, intellectual rights protection
- Elective: Micro and small enterprise management / Project management

Semester 2

- Physics
- Selected topics in mathematics
- Electrical Engineering
- Theoretical mechanics and mechanics of materials
- Signals and dynamic systems

Semester 3

- Electronics
- Real-time systems
- Automatic Control
- Electrical machines and drives in control engineering
- Elective: Methodology of sciences / Ethics / Philosophy

Semester 4

- Robotics
- Metrology
- Microprocessor systems
- Control of electrical drives
- Internships

Semester 5

- Control theory
- System identification
- Devices of automation and actuators
- Electronical and electrical circuits designing
- Elective: Intelligent buildings / Robot programming

Semester 6

- Term design
- Diploma seminar
- Digital controllers and PLC
- Elective: Networks and distributed control systems / Flying robots
- Elective: Control of motion and electric vehicles / Mechanical constructions

Semester 7

- Elective: Analysis of control systems / Tools and software for robotic systems
- Elective: Flexible manufacturing systems / Artificial intelligence
- Diploma seminar
- Diploma work

POZNAN UNIVERSITY OF TECHNOLOGY

B.Sc. Eng. Programmes

Automatic Control and Robotics

University	Poznan University of Technology Poznan, POLAND
Degree to be obtained	Bachelor of Science, Eng.
Programme website	https://www.put.poznan.pl/en
Contact	International Relations Office Piotrowo 5, room 101 61-138 Poznań, Poland
Phone	+48 61 665 3544
Fax	+48 61 665 3956
E-mail	study@put.poznan.pl
Language of instruction	English
ETCS points	210
Duration	3.5 years (7 semesters)
Programme begins	end of September
Programme ends	end of February
Deadline for applications	middle of July
Education requirements	English language – level B2 (Common European Framework), Secondary school certificate which entitles its holder to apply to higher education institutions. Full list of the required documents is available at https://www.put.poznan.pl/en
Mode of instruction	Lectures, classes, laboratory classes, projects, internships