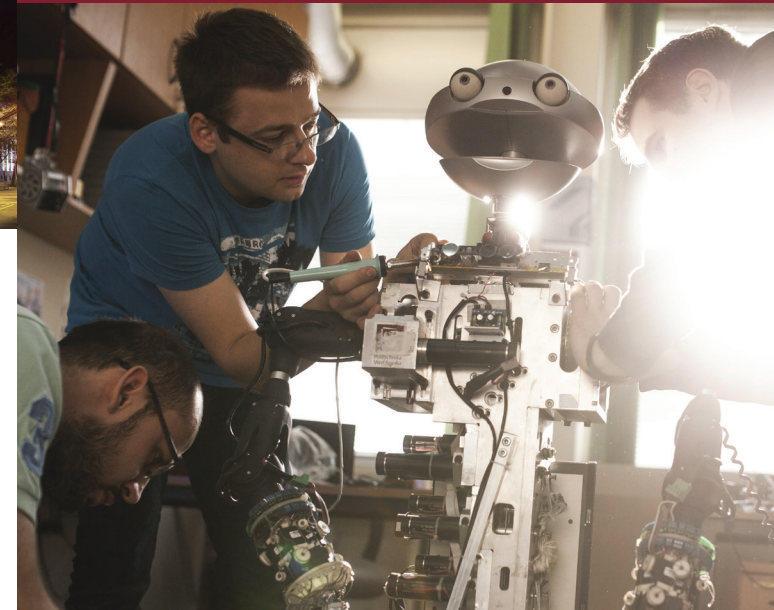Wrocław University of Technology

> „Electronic and Computer Engineering (ECE)- a new field of study at Wroclaw University of Technology where the theoretical background and practical knowledge from the current study programs of Electronics, Computer Science and Automation & Robotics is combined. Such a combination of disciplinesreflects modern trends in electronics where analog meets digital and hardware meets software. This new practical field of study is recommendedamong others for those electronic enthusiasts who want to know „how it works".

Professor Krzysztof Tchoń,
program coordinator and lecturer

ELECTRONIC AND COMPUTER ENGINEERING

STUDIES IN ENGLISH

Program coordinator:
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GENERAL INTRO

This course will give students multidisciplinary knowledge of electronics and computer engineering. It will enable them to obtain theoretical and practical knowledge in designing applied electronic systems based on analogue and digital techniques as well as gaining expertise in microprocessors, programmable logic applications and signal processing. Graduate students will be able continue second level study in the fields of Electrical Engineering, Computer Science, Automation and Robotics or Telecommunication, or other related fields.

JOB PROSPECTS

The graduate will acquire the experience necessary for a professional career in broadly covered industrial automation, and will be prepared for 2nd level studies (master level).

COURSE SCHEDULE

	1st YEAR, SEMESTER 1	
	Subject/Module	ECTS
1	Metrology	4
2	Mathematic - Analysis	7
3	Mathematic - Algebra	7
4	Introduction to Programing	8
5	Foreign languages	2
6	Philosophy, Ethics	2
	TOTAL	30

	1st YEAR, SEMESTER 2	
	Subject/Module	ECTS
1	Mathematic - Analysis 2	5
2	Mathematic for Electronics	4
3	Physics	6
4	Object Oriented Programming	6
5	Electronics	8
6	Sport	1
	TOTAL	30

	2nd YEAR, SEMESTER 3	
	Subject/Module	ECTS
1	Physics for Electronics	6
2	Scientific & Engineering Programming	5
3	Electronic Components and Sensors	8
4	Electronic Technology	5
5	System Theory	3
6	Foreign Languages	3
	Total	30

	2nd YEAR, SEMESTER 4	
	Subject/Module	ECTS
1	Programming Systems & Environments	4
2	Introduction to Microcontrollers	8
3	Electronic Circuits	7
4	Introduction to Automation & Robotics	7
5	Fundamentals of Telecommunication	4
	TOTAL	30

	3rd YEAR, SEMESTER 5	
	Subject/Module	ECTS
1	Computer Networks	4
2	Digital signal Processing	5
3	Optional Courses (3 of the 5: Advanced Topics in Robotics; Microcontrollers; Artificial Intelligence and Computer Vision; Optoelectronics; Wireless systems)	21
	TOTAL	30

	3rd YEAR, SEMESTER 6	
	Subject/Module	ECTS
1	Team Project	5
2	Electroacoustic	4
3	Optional Courses (3 of the 5: Control Systems Engineering; Embedded Systems; Real Time Operating Systems; Lasers, Fibres and Applications; Communication Systems & networks)	21
	TOTAL	30

	4th YEAR, SEMESTER 7	
	Subject/Module	ECTS
1	Diploma Seminar	2
2	Final Project	13
3	Internship	6
4	Author Law	2
5	Business	1
6	Optional Courses (2 of the listed: Practical Electrotechnics; Medical Electronics; Fibre-Optics Technology; Electronics For Renewable Energy Sources; Satellite Communication Networks; Virtualization and Cloud Computing; Machine Learning; Selected Topics In Artificial Intelligence; Hybrid Telecommunication Networks; Ultrasonic Technology; Speech Communication)	6
	TOTAL	30

ENTRY INFORMATION

Required: secondary school certificate, received after the completion of a recognized secondary school (total 12 years of education), being the equivalent of Polish Matriculation certificate. Each application is assessed individually on its merits.

If in doubt, please contact the Admission Officer.

Other information:

Polish students: check on
http://rekrutacja.pwr.edu.pl/field-of-study/inzynieria-elektroniczna-i-komputerow/

International students: check on
www.rekrutacja.pwr.edu.pl/en2/

Tuition fee: Non EU/EFTA students: 3000 EUR per year

EU/EFTA students: no tuition fee

Application fee: Non EU/EFTA students: 200 EUR

EU/EFTA students: 20 EUR