



Zachodniopomorski
Uniwersytet Technologiczny
w Szczecinie

West Pomeranian University of Technology, Szczecin

Faculty of Electrical Engineering



Wydział
Elektryczny

21st of October, 2015

Faculty of Electrical Engineering

Authorities

Dean, Prof. Stefan Domek



Deputy Deans:

for organization
Dr. Marcin Hołub



for education
Assoc. Prof. Krzysztof Okarma



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www.we.zut.edu.pl

Faculty of Electrical Engineering

One of three oldest faculties of the Engineering School of Szczecin
established on 1st December, 1946

Main characteristics

Authorization to title:

PhD and DSc (habilitation) in *Electrical Engineering*

PhD and DSc (habilitation) in *Control Engineering
and Robotics*

Scientific staff

full professors: **13**

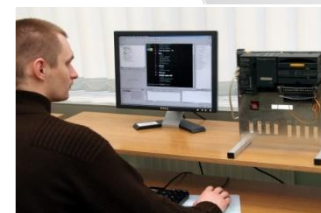
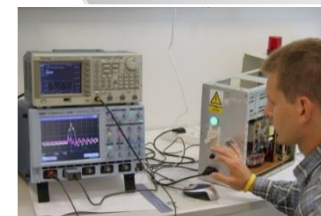
associated professors: **9**

assistant professors (doctor eng.): **51**

assistants: **15**

PhD students: **35**

Number of students: over 1200



Member of

MSDN DreamSpark

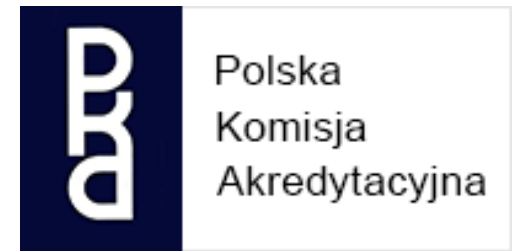


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- **courses approved by PKA (Polish Accreditation Commission): all within the institutional accreditation of the Faculty**
- **ranking of KEJN (Polish Committee for Evaluation of Scientific Units): category A**



Ministry of Science
and Higher Education

Republic of Poland



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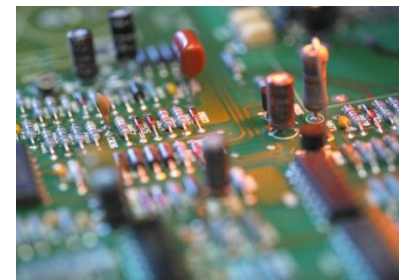
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Fields of studies (study programs):

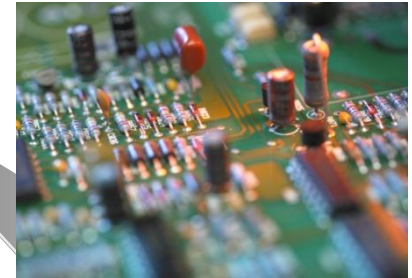
- **Electrical Engineering** (Bachelor, Master and PhD)
- **Automatic Control & Robotics** (Bachelor, Master & PhD)
- **ICT** (Bachelor and Master)
- **Electronics & Telecommunications** (Bachelor)



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Scientific cooperation with foreign institutions:

- Oita University (Japan)
- Technische Universität Ilmenau (Germany)
- Technische Universität Braunschweig (Germany)
- Leibniz Institut für Plasmaforschung und Technologie e.V. Greifswald (Germany)
- National Institute for Astrophysics, Optics and Electronics, Tonanzintla (Mexico)
- University of Pavia, Perugia University (Italy)
- Université du Quebec a Trois-Rivieres, Toronto University (Canada)
- Royal Institute of Technology, Stockholm (Sweden)
- Exeter University (England)
- Patras University (Greece)



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Industrial cooperation

- Internships, certificates, lab equipment ... over 25 mln PLN of investments (9 mln US\$)
- Cooperation agreements, analytical and constructional cooperation
- Courses and workshops
- Common project applications
- *spin-off* and *start-up* (Program Innostart) company creation
- Creation of Industrial Board of Advisors (first in our region)



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Main buildings

ul. Sikorskiego 37

ul. 26 Kwietnia 10



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Faculty of Electrical Engineering

ul. Sikorskiego 37

Königliche Höhere Maschinenbauschule

year 1903



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WYDZIAŁU ELEKTRYCZNEGO
OLOGICZNEGO W SZCZECINIE
00 SZCZECIN UL. 26 KWIEŃNIA 10

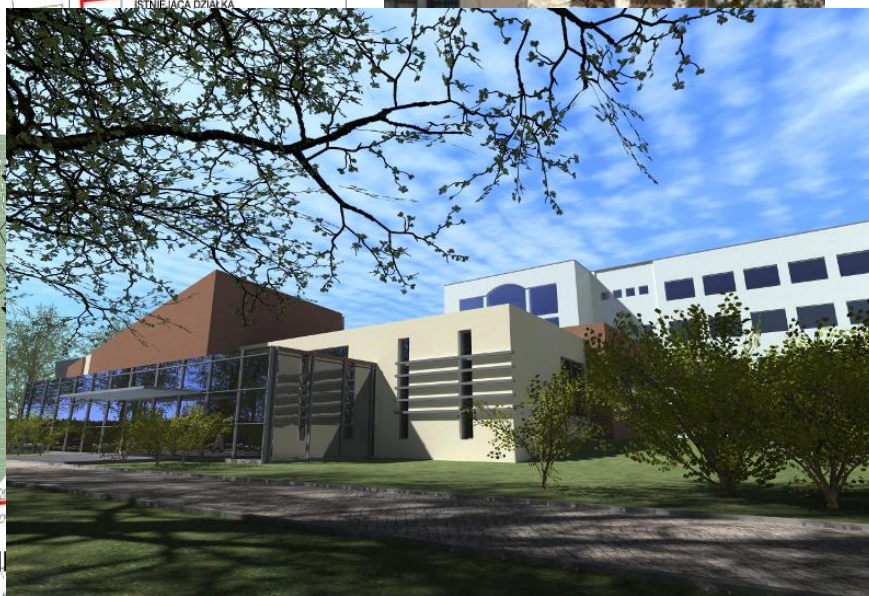
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OZNACZENIA:

ISTNIEJĄCA DZIAŁKA



CJA ZAGOSPODAROWAN



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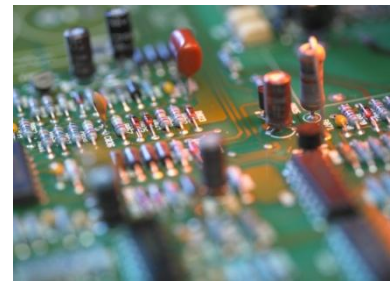


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Research activities

- 6 7FP projects (2,7 mln PLN)
- 5 EU projects (10,6 mln PLN)
- 16 national projects (8,1 mln PLN)



International educational activities

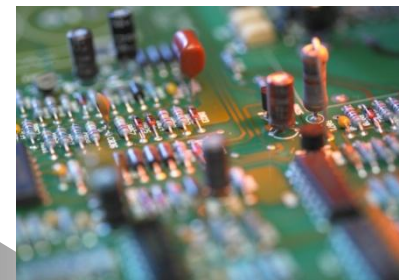
- Tempus Programme (3 projects)
- Erasmus+ Programme (currently:
KA107 credit mobility project,
with Partners from Georgia and Ukraine)



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Educational priorities in cooperation with foreign partner HEIs:

- Electrical energy production and distribution
- Non-destructive testing
- Power electronics
- Renewable energy sources
- Mobile robotics
- Car automation systems
- Nano- and microelectronics
- Embedded systems
- Optoelectronics
- Biomedical Engineering, Biomedical technology
- Signal processing
- Digital multimedia engineering
- IT, Teleinformatics, mobile applications



Certified courses:

- LabView Academy
- Samsung LABO
- Siemens Academy
- B&R certificated
- ASTOR certificates
- Moeller Electric (Eaton) certificates
- Polish SEP (electrical) certificates



ASTOR



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ICT education with a brand



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SAGITTARIUS

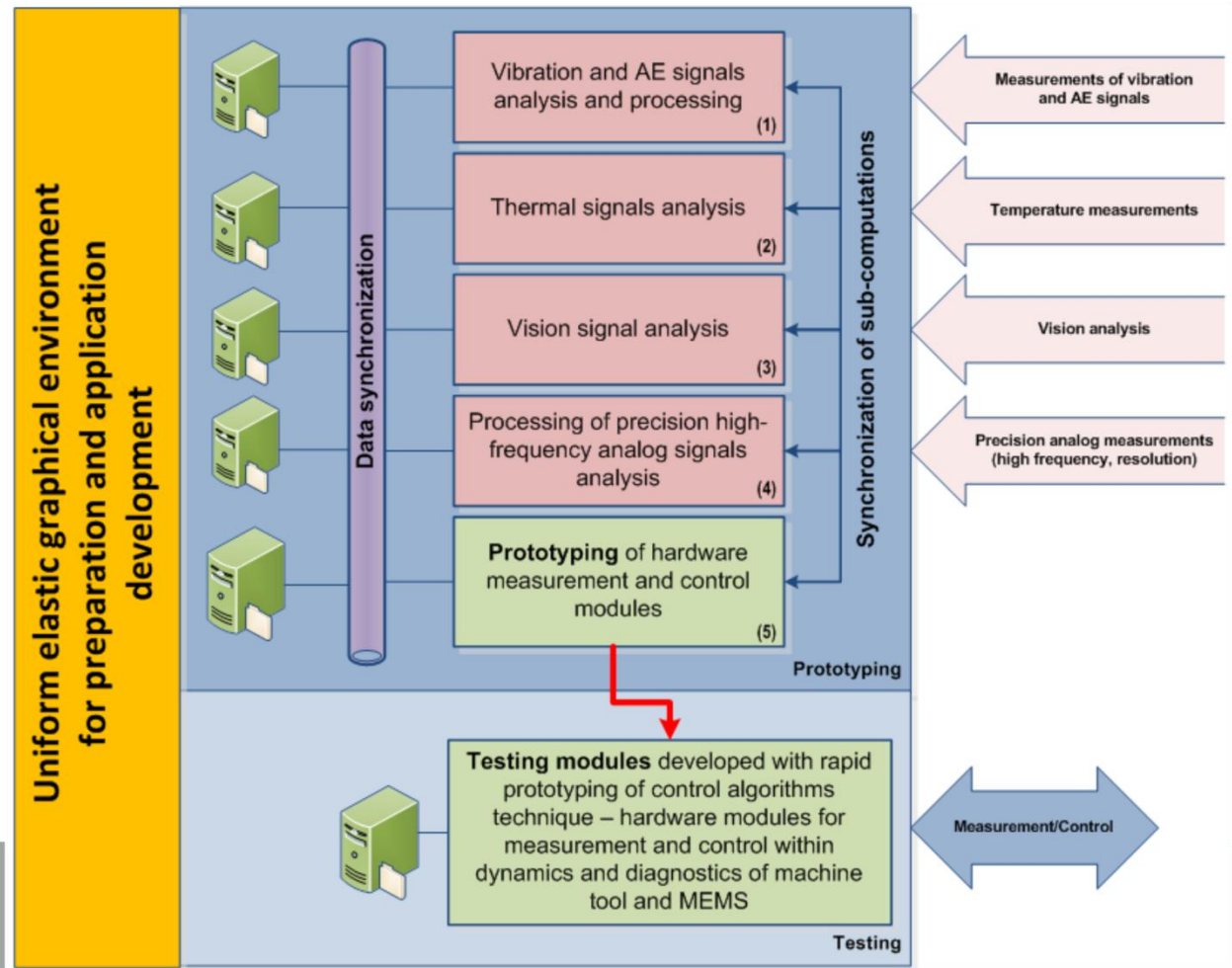
integrated measurements
control and diagnostics

Fund for Polish science and technology
1.1 million Euros



Energy efficiency through effective condition monitoring

- hardware-in-the-loop methodology of modeling and testing complex systems
- possibility of implementation of real-time hardware modules for condition monitoring tasks
- unique solution for measurement and control



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Advanced technical research devices – National Instruments

Allow to conduct precise measurements of:

- Multipoint temperature
- Dynamic transitional analog signals
- Vision Acquisition
- Voltage/Current with high resolution
- Signal processing using FPGA technology

Possible applications:

- Intelligent control systems
- Process monitoring/extended diagnostics
- Surface quality vision inspections
- Advanced materials parameters measurements
- Conducting various simulations
- FPGA based control-measurement systems



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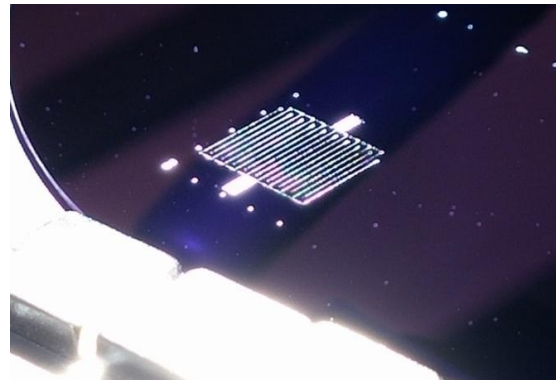
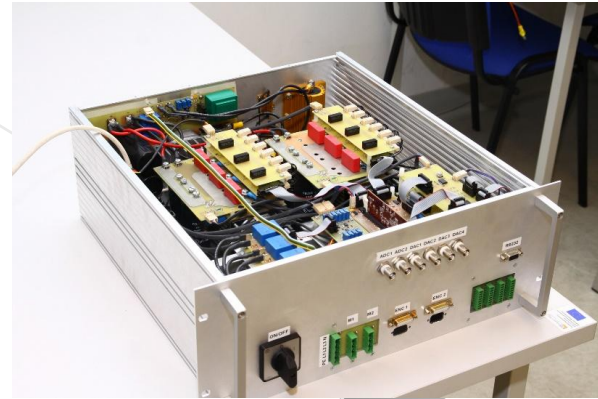
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Industrial control systems, GUIs

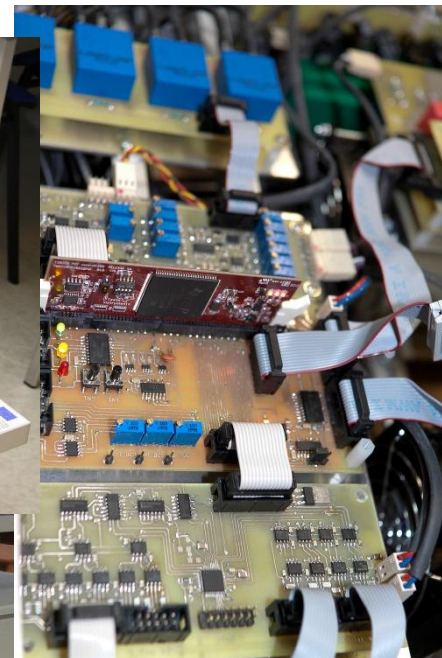
Power electronics

Drive (pump, valve) automation

Biosensing technologies
(graphene-based)



Plasma_{plus}Power



Plasma_{plus}Environment



Plasma_{plus}Industry



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Internationally active



... and with outcome

- **17 student awards in 2014**
- **4 new industrial partners**
- **10 scientific student groups**
- **20 students involved in research activities**
- **4 patent applications by students**
- **student start-up programme with RCiTT**





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