

SPECIALIZATION

Electrical Systems in Industry and Vehicles



ELECTRICAL SYSTEMS IN INDUSTRY AND VEHICLES



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More informations:

www.iee.put.poznan.pl (Institute of Electrical Engineering and Electronics)

zetis.put.poznan.pl (Department of Theoretical and Applied Electrical Engineering)









Genneral informations:

The scope of the education includes:

- construction, design, testing and diagnosis of electrical and electronic systems in industry, buildings engineering as well as and EVs, HEVs and traction vehicles,
- operation of technical systems, automation and industrial electronics, design of intelligent building installations and electromagnetic compatibility,
- SCADA process visualisation systems and PLCs,
- energy storage and issues related to the design of energy storage and propulsion systems for electric vehicles.



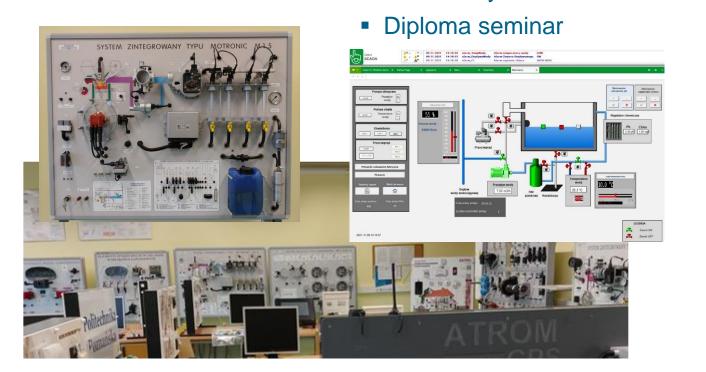




Subjects offered within the specialization:

SEMESTER 1:

Intelligent building



SEMESTER 2:

SCADA Systems

Electric and hybrid vehicles

SEMESTER 3:

- Electrical installations in industry and vehicles
- Property security techniques
- Industrial automation systems
- Vehicle's electronic systems
- Diploma seminar
- Preparation of master's thesis





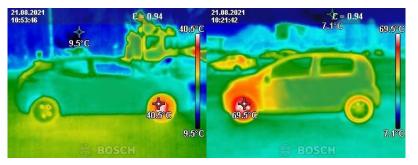
The topics of the diploma theses:

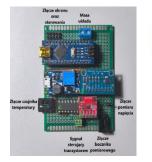
- all works suggested by the employers in the field of electrical engineering,
- design, testing and diagnosis of electrical and electronic equipment used in industry and automotive engineering: e.g. CAN bus, SCADA systems, intelligent building systems and ignition systems, injection systems, ABS, ASR, ESP, GPS, etc.
- simulations of electric, hybrid and traction vehicles

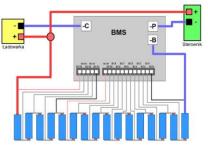
- and their interaction with energy storage (supercapacitors, batteries, fuel cells),
- production and testing of selected electrical and electronic components in industry and vehicles,
- research into electromobility in its broadest sense (particularly electric cars), as well as into renewable energy sources and systems for working with them.

































Possibility of employment after studies:

- in companies manufacturing electrical, electronic equipment for industry and vehicles, in diagnostic stations and in companies manufacturing motor vehicles and traction vehicles.
- in the area of microprocessor control in technology and IT services, including those relating to SCADA systems and intelligent building installations
- in companies and research institutes involved in the design of electrical installations and equipment,
- in their own companies providing electrical, electronic, IT and diagnostic services for e.g. motor vehicles (including electric and hybrid).



Additional information:

- Participation in a certified practical training course on the installation and configuration of ZAMEL building automation devices.
- Opportunity to learn how to use professional automotive diagnostic equipment.
- Activities include excursions to companies related to the subject of education.
- Scientific Club: PUT Solar Dynamics.







Attention!

The choice of specialization takes place at the recruitment stage on the day of the qualifying exam.

The candidate indicates a maximum of three specialtizations, with the first one being the highest preference and the third one being the lowest.

Choosing your preferences does not mean being assigned to a selected specialization.

The final allocation will be made not only on the basis of the preferences indicated by the candidate, but also taking into account the ranking list determined according to the result of the qualifying exam, the specializations opened and the numerosity of the created groups.

Not every specialization has to be opened, it depends on the number of students admitted to the studies. The condition for starting a specialization is that at least 15 students are assigned to it.

Lists of assignments to specializations will be available on the faculty website 3 days before the start of the first semester of studies.