

INSTITUTE OF ENVIRONMENTAL ENGINEERING



45 YEARS OF TEACHING EXPERIENCE

INSTITUTE OF ENVIRONMENTAL ENGINEERING

Environmental Engineering (I, II, III cycle *)



Energy (I cycle)



Smart Urban Systems (I cycle; interdepartmental studies)





ENVIRONMENTAL ENGINEERING

The graduate is prepared to independently perform tasks in the design, construction and operation of engineering facilities including: water treatment stations, sewage treatment plants, water and sewage, heating and gas networks and installations, and waste disposal plants.

He/she has a broad knowledge of environmental technologies and management and the ability to solve design and construction problems in the field of sanitary engineering using modern computer techniques.

Job offers: design offices, municipal management companies including those involved in the production and distribution of water for human consumption, collection and disposal of municipal wastewater, municipal waste treatment, thermal power plants, chemical, biological and environmental analysis laboratories and local government units.





ENERGY

Graduates of engineering studies possess a wide range of knowledge, allowing them to perform tasks in companies of various profiles - from thermal power plants to small and medium-sized enterprises operating in the energy sector in the broadest sense, as well as companies conducting proper energy management. Graduates also work in local authorities, where issues related to the planning and development of energy, including distributed energy, play an increasingly important role.

Job offers: companies involved in the design and implementation of investments and the operation of energy systems. They can also work in consulting companies and energy management organisations.





SMART URBAN SYSTEMS

The graduate is prepared to undertake activities within the framework of strategic management of the city's resources and to coordinate new undertakings aimed at improving the functional and spatial condition of the city. He/she is prepared to supervise the implementation of economic plans in individual sectors of city functioning and to create new strategies, plans and concepts of development.

He/she is familiar with the basics of planning technical infrastructure systems on a city scale, the principles of designing and operating water supply and sewage facilities and equipment, gas engineering, heating, electric power systems, telecommunication, electromobility, communication, drainage of urbanised areas, as well as relations and dependencies between them. He/she is able to take actions towards the implementation of state-of-the-art solutions in urban systems, including information technology (IT), Internet of Things (IoT), processing of large, variable and diverse databases (Big Data), monitoring of engineering and social events, autonomous transport and communication systems, intelligent urban traffic control.





IN OUR RESEARCH WE FOCUS ON

Water and waste water testing

- Drinking water analysis
- Collection and comprehensive testing of municipal and industrial wastewater
- Improvement of water quality for human consumption.
- Technological studies for the improvement of water quality for human consumption.
- Analysis and evaluation of possible options for upgrading water treatment plants.

Assessment of hydraulic conditions in the water supply network

- **Development of a simulation model of the water supply network.**
- Design of monitoring of the operating conditions of the network, pumping stations, reservoirs.
- Laboratory and semi-technical studies on the selection of urban and industrial wastewater treatment technologies.

Waste management

- Research on municipal waste
- Testing of organic fertilisers and plant aids produced from bio-waste
- Monitoring of landfills, in accordance with legislative requirements.AT4 determinations and measurements of specific biogas production from methane fermentation.
- Development of industrial waste management technologies in accordance with the principles of a closed loop economy



IN OUR RESEARCH WE FOCUS ON

Geotechnical services - investigations of soils and grounds

- Recognision of cohesive and non-cohesive soils, content of organic parts, soil compactability, degree of plasticity, filtration coefficient, water flow velocity, identification of minerals and rocks.
- Identification of post-industrial land reclamation needs before changing the form of land use.

Rainwater management

- Rainwater management in the scope of: modelling of rainwater supply to the analysed area; analysis of water absorption of the area; analysis of irrigation needs.
- Reduction of stormwater flooding, by adapting sewerage systems to climate change.
- Assessment of the feasibility and effectiveness of blue-green infrastructure in the area served by the stormwater drainage system.

Air protection

 Improving outdoor air quality by implementing pollution monitoring systems with recommendations for improving air quality status.

Municipal energy - improving energy efficiency by increasing the use of renewable energy sources

- Optimising electricity and heat generation for heating and hot water preparation
- Reduce the consumption of electricity, heat and other utilities by implementing a consumption monitoring system, in particular in buildings managed by the local authority (schools, kindergartens, public buildings, administration buildings, etc.).

ACCOMODATION



Campus B - humanistic sciencies

Campus A - technical sciencies

Fees depend on the number of places in the room.
They are respectively about PLN 400 (90 euro) for a place in a triple room and about PLN 650 (150 euro) for a place in a single room.





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STUDENT'S LIFE – SCIENCE CENTER



STUDENT'S LIFE – PLANETRIUM



STUDENT'S LIFE – NATURE



STUDENT'S LIFE – NATURE



STUDENT'S LIFE – NATURE



STUDENT'S LIFE – BOWLING





STUDENT'S LIFE – AQUA PARK







STUDENT'S LIFE – CENTER OF SPORT AND RECREATION



STUDENT'S LIFE – SPORT



STUDENT'S LIFE – BACHANALIA (STUDENT'S FESTIVAL)



STUDENT'S LIFE – WINOBRANIE (WINE FESTIVAL)



STUDENT'S LIFE – ONE LOVE CLUB



STUDENT'S LIFE – X-DEMON CLUB



STUDENT'S LIFE – U OJCA (STUDENT'S CLUB)







STUDENT'S LIFE – GEBA (STUDENT'S CLUB)



STUDENT'S LIFE – 8 PROCES (PUB)



STUDENT'S LIFE – HAUST (PUB)



STUDENT'S LIFE – SEE MORE



AIRPORT- BUS - TRAIN

STUDENT'S LIFE – SEE MORE









AIRPORT- BUS - TRAIN



SEE YOU IN ZIELONA GORA!