

National Technical University "Kharkiv Polytechnic Institute"

Electric Power Engineering Department Electric Power Stations

http://sites.kpi.kharkov.ua/es/index.php/WelcomeU

Specialization of Electric Power Engineering, Electrical Engineering, and Electromechanics

Two specialties:

- Electric Power Stations
- Energy Management and Energy Efficient Technologies

Two-step power engineering specialists training:

Bachelor's level (4 years, 240 ECTS credits)
Master's level (2 years, 120 ECTS credits)





Specialty of Electric Power Stations

Bachelor's Degree in **Electric Power Engineering, Electrical Engineering, and Electromechanics**





Master's Degree in **Electric Power Stations**







Areas of knowledge application:

- Electric power plant and substation equipment designing
- Electric power plant and substation equipment operation and control
- Renewable generation plant designing and operation
- Electric power equipment simulation









Our graduates work at:

- Electric power plants (electrical departments)
- Electric grid companies
- Power plant equipment repair and maintenance companies
- Power equipment designing organizations
- Power engineering research institutes
- Renewable energy system design and installation companies
- Multinational electrical equipment companies (e.g. ABB, Schneider Electric, Siemens, Alstom, etc.)



Bachelor's educational program:

- Mathematical Problems of Power Engineering
- Theory of Electrical Engineering
- Electromagnetic and Electromechanical Transients
- Electrical Machines
- Electric Power Plants and Substations

Electric Power Plant Equipment Design

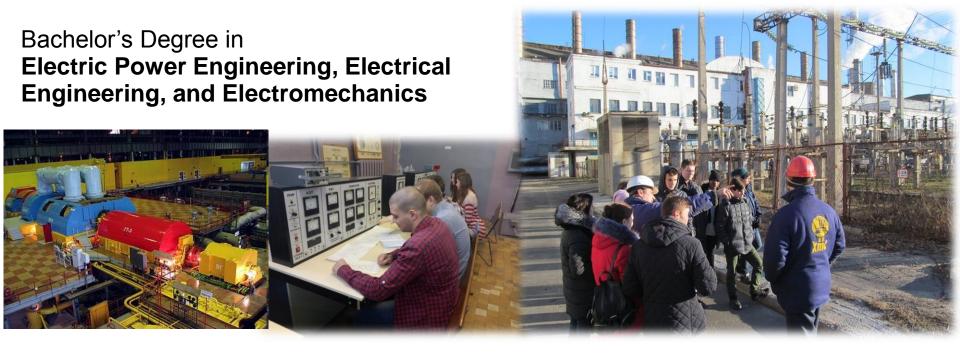
- Electric Power Supply Systems



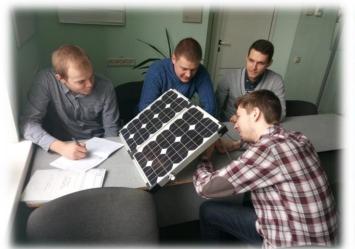
Master's educational program:

- State-of-the-Art Electric Power Plant Equipment
- Electric Power Plant Equipment Simulation
- Renewable Generation Plant Equipment
- Electric Power Plant CAD
- Electric Power System Automation
- Electric Power System Security
- Power System Operation Optimization
- Modern Mathematical Tools

Specialty of Energy Management and Energy Efficient Technologies



Master's Degree in **Energy Management**











Areas of knowledge application:

- Energy audit of various facilities used for economic activities
- Implementation of energy management system at enterprises and organizations according to ISO 50001
- Development and promotion of energy efficiency advancement measures at businesses and homes

- Designing and installation of renewable energy systems









Our graduates work at:

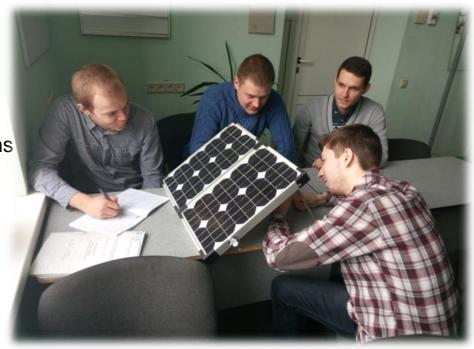
- Energy management departments
- Office of the chief power engineer at industrial enterprises
- Energy supply companies
- Energy service companies
- Renewable energy system design and installation companies
- Research and design organizations in the field of power engineering and energy-efficient technologies



Bachelor's educational program:

- Energy Management and Audit
- Electric Power Plants and Substations
- Thermal Engineering
- Financial Appraisal of Energy Saving Projects
- Economic Appraisal of Energy Saving Problems
- State-of-the-Art Energy-Efficient Technologies
- State-of-the-Art Energy Sources and Cogeneration Plants





Master's educational program:

- Energy Policy and Energy Marketing
- Energy Management and Energy Audit
- Electric Power Quality and Quality Control
- Optimization Problems in Energy Saving
- State-of-the-Art Problems and Mathematical and Computer-Aided Modelling Methods
- Power Technology Combining and Renewable Energy Resources Application
- State-of-the-Art Power Industry Problems, Technologies, and Outlook

The Faculty



Prof. Alexander P. Lazurenko Dean of Power Engineering Department



Prof. Konstantin V. Makhotilo Acting Head of Electric Power Station Chair



Dr. Ilia A. Nemirovskiy Associate Professor



Dr. Ludmila I. Lysenko Associate Professor



Dr. Georgiy I. Melnikov Associate Professor



Dr. Elena A. Danilova Associate Professor



Dr. Galina I. Cherkashina Associate Professor Scientific Secretary of the Chair



Mikhail F. Piskuriov Associate Professor



Dr. Ivan I. Chervonenko Senior Lecturer



Dr. Dmitriy A. Shokarev Associate Professor



Dr. Anna A. Tishchenko Senior Lecturer



Igor N. Bogatyriov Associate Professor



Nikolay M. Krugol Teaching Assistant