



# National Technical University “Kharkiv Polytechnic Institute”

Educational and scientific institute of power  
engineering, electronics and electromechanics

## 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 (1,5 years, 90 ECTS credits,  
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:

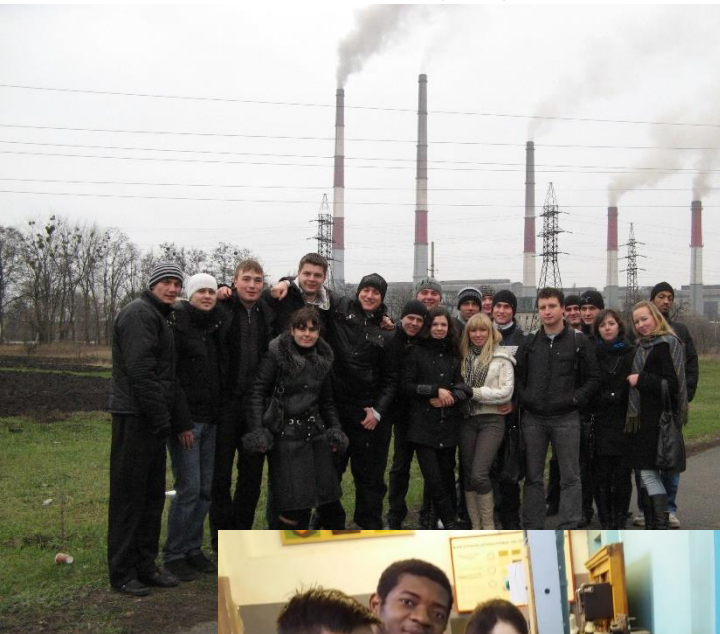
- Electric power plants (electrical departments)
- Electric grid companies
- Power plant equipment repair and maintenance companies
- Power equipment designing organizations
- Power engineering research institutes
- Renewable energy system design and installation companies
- Multinational electrical 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

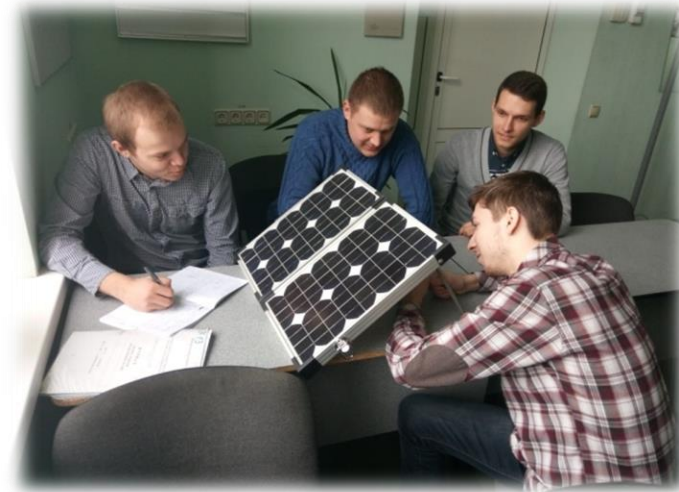


# Specialty of Energy Management and Energy Efficient Technologies

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



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:

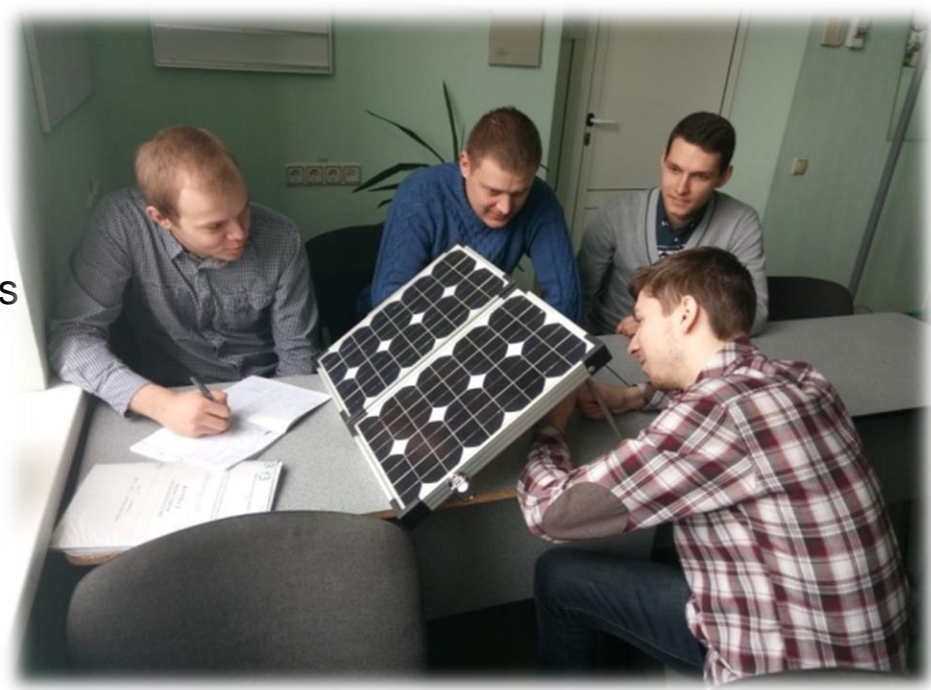
- Energy management departments
- Office of the chief power engineer at industrial enterprises
- Energy supply companies
- Energy service companies
- Renewable energy system design and installation companies
- Research and design organizations in the field of power engineering and energy-efficient technologies





## **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**  
Head of Electric Power Station Chair



**Prof. Konstantin V. Makhotilo**  
Professor



**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



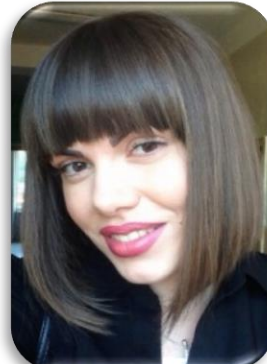
**Mikhail F. Piskuriyov**  
Associate Professor



**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