ELECTRIC GRID MANAGEMENT

The master Program

The master's program is aimed at giving students the skills of scientific research in the field of electric power facilities managing: regime management, personnel management, improving the efficiency of electric power systems and networks. Program staff have a great reserve for the implementation of projects in these areas with the publication of results in peer-reviewed publications

Program Description

The EGM program provides for in-depth knowledge and understanding of processes of managing electric power systems facilities. The program aims at increase the ability of students to develop and manage projects, as well as lead and coordinate project teams. The program has been developed in accordance with the experience of NMSTU in European projects to improve educational and research infrastructure courses.

You will be taught

evaluate the economic efficiency of technological processes, innovative technological risks when introducing new equipment and technologies

operate, test and repair the technological equipment of electric power and electrical industries

determine effective production and technological conditions of electric power operation and electrical engineering facilities

apply methods and tools of automated process control systems of the electric power and electrical industries

Research Activity

NMSTU is a unique place where fundamental and engineering researches meet real industry. That is why the main aim of EGM is to develop creative and research potential of the future researcher in the field of management of electric power facilities. The research activities of master students will provide them cross-disciplinary competencies at the intersection of electric power, management and economics. The program will allow graduate to become in demand on the labor market or to comfortably prepare for further research activities in postgraduate studies.

Program goal

As a result of training graduates of the program will acquire knowledge and skills of qualified specialists in the field of management in electric power engineering. The main aim of the program is to award students a Master degree, which is well recognized around the world.

Duration of study

Two academic years (4 semesters)
Total 120 ECTS

Language of study: English

Basic courses

Methodology and Scientific Research Methods

Innovation Forms of Business

Basics of Academic Communication

Foreign Language in One's Professional Sphere

Presentation of scientific results

Marketing for scientists

Theory of inventive problem solving

Optional courses

Energy economics

Mathematical modeling in electric power engineering

Current issues of electric power engineering

Electricity markets

Power saving technologies in electric power engineering

Techno-economic calculations in electric power engineering

Digital technologies in the electric power industry

Management in electric power engineering

Optimal operation of electric power sources

Grid conditions management

Regulatory framework in the electric power industry

Organization of operation and repair of electric power equipment

Power analysis and management

Stability of power supply systems

Energy audit

Russian as a foreign language (during the first year of study)

Training base

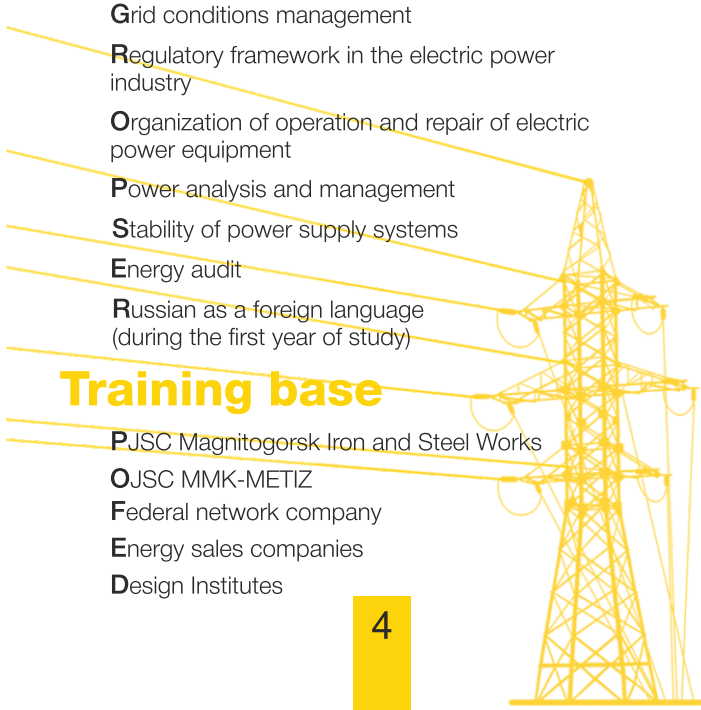
PJSC Magnitogorsk Iron and Steel Works

OJSC MMK-METIZ

Federal network company

Energy sales companies

Design Institutes



Main academic STAFF

ALEKSANDRA V. VARGANOVA

Program Manager

Associate Professor, Candidate of Technical Sciences. Areas of knowledge: optimal control of power plants, reliability assessment of power supply systems, developing CAD for electric power facilities.

GENNADY P. KORNILOV

Dr. Tech. sciences, professor, chairman of the dissertation council. Areas of knowledge: energy saving measures at industrial enterprises, issues of power quality and electromagnetic compatibility.

EVGENIA A. PANOVA

Associate Professor, Candidate of Technical Sciences. Areas of knowledge: evaluating asymmetric conditions of power supply systems, modeling relay protection and developing CAD for electric power facilities.

OLGA V. GAZIZOVA

Associate Professor, Candidate of Technical Sciences. Areas of knowledge: stability of generators of industrial power plants.

ANDREI N. SHEMETOV

Associate Professor, Candidate of Technical Sciences. Areas of knowledge: power analysis and management.

ILDAR R. ABDULVELEEV

Associate Professor, Candidate of Technical Sciences. Areas of knowledge: modeling of electric power facilities in the conditions of industrial enterprises, issues of power quality and electromagnetic compatibility.

Over 10

VISITING PROFESSORS

3 EXTEND

INTERNATIONAL RESEARCH

and educational events with visiting professors from the EU, China, India, the USA and Great Britain

4

ACTIVE BILATERAL ACADEMIC

mobility programs with the universities of Italy, Czech Republic and France

POSSIBILITY

TO UNDERGO A PRACTICAL TRAINING

in Danieli and Schneider Electric Laboratory

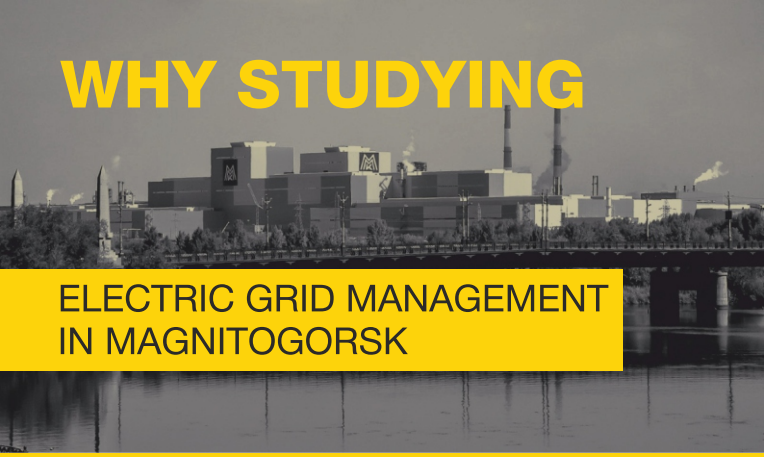
Schneider Electric

DANIELI

Nadezhnaya smena

INTERNATIONAL ENGINEERING CHAMPIONSHIP CASE-IN

The opportunity to participate in the activities of the "Nadezhnaya smena" Fund



WHY STUDYING

ELECTRIC GRID MANAGEMENT IN MAGNITOGORSK

1. MMK - a unique base for research in the field of electric power industry
2. EGM is focused on satisfying the international labor market
3. We train engineers, managers, scientists in accordance with global trends in the field of electric power
4. Our graduates are welcomed by utility companies, design institutes, and industrialenterprise
5. Increased requirements for specialists in the electric power industry offset by high wages
6. EGM the ideological “bridge” between science, industry, economics and management

Entrance Requirements

For both foreign students and graduates of the Russian higher education institutions

FORMAL ENTRANCE REQUIREMENTS

A candidate should have a recognized first degree (Bachelor of Science or Engineering) in Power Engineering and Power Technology, or Materials Engineering, or other closely related disciplines, awarded by an internationally recognized university-level institution.

Candidates must be able to speak fluently and write in English. You must additionally provide documentation that your English skills correspond to those required in the examination regulation.

SPECIAL ENTRANCE REQUIREMENTS

Students should have an interest in continuing their careers in the field of Power Engineering and Power Technology. The program is appropriate for both engineers coming from industry and from university.

Candidates should be able to apply their knowledge of mathematics, science and engineering to identify, formulate and solve engineering problems, as well as to set up and perform experiments in a laboratory setting.

Application procedure and DEADLINES

Until the end of July, you must fill out an application and provide the following documents in the applicant's personal account:

1. Application for admission to the master program.

2. Diploma (or some analogous document) on a program of the level of a bachelor degree or certificate (ordering) about passing now such program.

3. TOEFL certificate (score **50-70**: intermediate or upper intermediate level) or other international certificates (BEC etc.) of similar level.

4. Curriculum Vitae of the applicant. Until July, 10 the procedure of selection of applicants for testing passing is carried

WHEN APPLYING, BE SURE TO CONSIDER THE DURATION OF THE VISA

Federal State Budgetary Educational Institution of Higher Education

NOSOV MAGNITOGORSK STATE TECHNICAL UNIVERSITY

38 Lenin street, Magnitogorsk 455000 Russia

International office:

+7 (3519) 22-04-67

magstu.international@gmail.com

Admissions Office

+7(3519) 33-09-39

Information Policy Administration

+7(3519) 29-84-23

+7 (919) 324 67 19

aleksandra-khlamova@yandex.ru

official group
www.vk.com/nmstu

official account
www.instagram.com/nmstu

official page
www.facebook.com/nmstu

official channel
www.youtube.com/user/magtu74

Electric Grid Management- The first English-language program in Russia

www.magtu.ru

www.egm.ru

www.en.magtu.ru