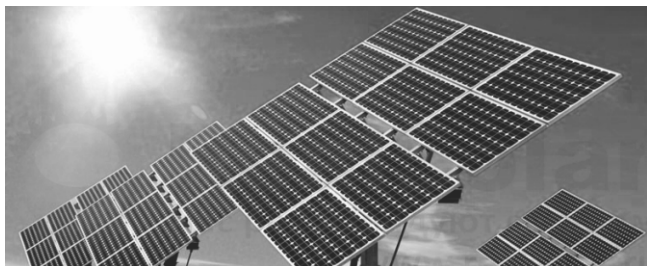




DISTRIBUTED GENERATION SYSTEM MANAGEMENT

The master **Program**

The Master Program Distributed Generation System Management (DGSM) focuses on the management of microgrids with local power sources, including renewable energy sources. Program staff have a great reserve for the implementation of projects in these areas with the publication of results in peer-reviewed journals.



Program Description

The master's program provides an integrated approach to understanding the processes of distributed generation power supply systems operation. This program includes not only the field of electric power industry, but also related issues of management and economics of distributed generation systems.

The DGSM program aims to increase the ability of students to develop and manage projects, as well as lead and coordinate project teams.

You will be taught:



Analyze, predict and evaluate the efficiency of operating modes of power supply systems with distributed generation sources, including renewable ones, using state-of-the-industry hardware and software;



Understand the processes taking place in the electricity markets and, in particular, the microgeneration markets;



Modeling electricity systems with distributed generation and develop measures to improve their performance;



Assess the risks and commercial efficiency of electricity systems with distributed generation.



The main aim of DGSM is to develop creative and research potential of the future researcher in the field of management of distributed generation power supply systems.

The program will allow the 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 microgrids management. 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 INSTRUCTION

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

Stability of Power Supply Systems

Micro Grids Control

Renewable Power Supply Systems

Micro Grid Relay Protection and Automation

Distributed Generation Economics

Power Systems Software

Operating Modes of Conventional Fossil Power Plant

Operating Modes of Renewable Energy Source Power Plant

Industrial Distributed Generation

Domestic Household Distributed Generation

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

Academic Supervisor

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



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.

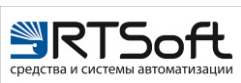


THE OPPORTUNITY TO

participate in the activities of the "Nadezhnaya smena" Fund



exclusive chance to gain experience of work with the newest digital platform of DG



WHY STUDYING



DISTRIBUTED GENERATION SYSTEM MANAGEMENT IN MAGNITOGORSK?



Internships in leading companies of the industry for the development and implementation of control systems for electrical networks with distributed generation

DGSM is focused on satisfying the international labor market

We train engineers, managers, scientists in accordance with world trends in the field of Electric Power

Our graduates are expected in utility companies, design institutes, and industrial enterprises

Increased requirements for specialists in the electric power industry offset by high wages

Exclusive chance to gain experience of work with the newest digital platform for distributed generation system modeling and control

A green circular logo with horizontal wavy lines.

Entrance Requirements

For both foreign students and graduates of 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 August 10, you must fill out an application form and provide the following documents in the applicant's personal account on the university website :

1

Application for admission to the master program.

2

Diploma (or another 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. The procedure of applicants selection for entrance test passing will last until August 22.

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


APPLICATION

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

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official channel

www.youtube.com/user/magtu74

DISTRIBUTED GENERATION SYSTEM MANAGEMENT

Chance to conduct cutting-edge
research in the field of
microgeneration markets



www.magtu.ru



en.magtu.ru/DGSM

