

CATALOGUE OF EDUCATIONAL PROGRAMS

MASTER DEGREE PROGRAMS



2017



01.04.02 Applied Mathematics and Informatics.....	4
04.04.01 Chemistry.....	6
07.04.01 Architectural Engineering.....	8
07.04.01 Urban Development.....	10
07.04.01 Restoration Design	12
08.04.01 Architectural and Construction Materials Science	14
08.04.01 Technical Exploitation Safety of Building Objects	16
08.04.01 Sewage and Wastewater Treatment	18
08.04.01 Water Supply of Cities and Industrial Enterprises.....	20
08.04.01 Urban Areas and Transport Infrastructure Engineering Equipment and Support	22
08.04.01 Construction Complex Mechanization.....	24
08.04.01 Housing and Utility Sector Complex Operation.....	26
08.04.01 Facades and Buildings Interiors Details Construction	28
08.04.01 Reconstruction and Restoration of Buildings and Structures	30
08.04.01 Bases and Foundations Theory and Design.....	32
08.04.01 Highways Theory and Design.....	34
08.04.01 Buildings and Structure Theory and Design.....	36
08.04.01 Reinforced Concrete Structures Theory and Design.....	38
08.04.01 Metal Structures Theory and Design.....	40
08.04.01 Theory of Structures.....	42
08.04.01 Theory of Technology and Organization of Construction Production	44
08.04.01 Heat and Gas Supply of Populated Areas and Enterprises.....	46
08.04.01 Technology of Building Materials, Units and Structures.....	48
08.04.01 Expertise and Management of Investment and Construction of Operational Activities.....	50
08.04.01 Operation of Housing and Municipal Infrastructure.....	52
08.04.01 Energy Efficiency of Heating Systems.....	54
08.04.01 Energy Efficiency of Systems Ensuring Microclimate of Buildings and Structures.....	56

08.04.02 River and Underground Hydraulic Facilities.....	58
09.04.01 Computer Science and Engineering.....	60
09.04.02 Information Systems and Technology.....	62
12.04.01 Instrument Engineering	64
12.04.01 Devices and Methods of Measurement and Control of Process Parameters of Hydrocarbons Pipeline.....	66
13.04.01 Thermal Engineering and Heat Technology.....	68
13.04.02 Optimization of Power Supply Systems and Improving Their Efficiency.....	70
13.04.02 Relay Protection, Automation and Control of Electric Power Systems Modes.....	72
13.04.02 Electrical Engineering.....	74
13.04.02 Electrical Power Engineering.....	76
13.04.02 Modern Technologies in Electrical Engineering and Automated Electric Drive.....	78
13.04.02 Electrothermal Processes and Complexes with Power Supply and Control Systems.....	80
15.04.04 Automation of Technological Processes and Production.....	82
15.04.04 Intelligent Systems of Complex Infrastructure Monitoring	84
15.04.04 Multi-Agent Systems and Technology of Coordinated Control of Robotic Devices.....	86
15.04.04 Intelligent Transport Systems Software and Hardware	88
15.04.05 Design and Technological Support of Machinery Production.....	90
18.04.01 Intensification of Oil Refining and Petrochemistry Processes	92
18.04.02 Industrial Ecology and Rational Use of Natural Resources.....	94
19.04.01 Biotechnology of Functional Food Products and Biologically Active Substances.....	96
20.04.01 Monitoring of Areas with High Anthropogenic Load.....	98
20.04.01 Industrial Ecology and Rational Use of Natural Resources.....	100
21.04.01 Oil Fields Development	102
21.04.01 Construction of Controlled Directional and Horizontal Wells.....	104
21.04.01 Hydrocarbons Pipeline Transport.....	106
21.04.01 Project Management in Oil and Gas Industry.....	108
22.04.01 Self-Propagating High-Temperature Synthesis (SHS) of Powder and Composite Nanomaterials and Nanocoatings Technology.....	110
22.04.02 Foundry Metallurgical Processes and Technologies	112
27.04.04 Control in Engineering Systems.....	114
38.04.01 Economy and Real Estate Appraisal.....	116
38.04.01 Enterprise Economy.....	118
38.04.02 Innovative Entrepreneurship	120
38.04.02 Production Management.....	122
38.04.02 Strategic Management in Fuel and Energy Complexes (FEC)	124
38.04.02 Projects and Programs Management in Municipal Services and Construction	126
38.04.02 Project Management.....	128
38.04.03 Human Resources Management.....	130
38.04.04 State and Municipal Management	132
38.04.04 Urban Management.....	134
54.04.01 Graphic Design	136
54.04.01 Costume Design	138
54.04.01 Environmental Design.....	140

APPLIED MATHEMATICS AND INFORMATICS

FIELD OF STUDY

01.04.02 «APPLIED MATHEMATICS AND INFORMATICS»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR P. RADCHENKO

Head of «Applied Mathematics and Informatics» Department, Professor, Dr. of Physical and Mathematical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The purpose of the program is to give a high-quality essential to the society advanced education in the sphere of applied mathematics and informatics; to train graduates with the best national and international experience in education and on the basis of a harmonious combination of scientific and fundamental training.

The program is aimed at the formation of a broad base of practical knowledge and skills, intellectual capital, modern engineering thinking of the students who are capable of continuous self-improvement; at training employees and managers in various industries, education and science, capable of innovative activities.



ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|--|
| <ul style="list-style-type: none">• Modern Problems of Computational and Linear Algebra• Continuous and Discrete Mathematical Models• Foreign Language• Mathematical Concept of Modern Science• Modern Computer Technology• Mathematical Models in Logistics• Models and Algorithms of Information Protection• Modern Approximate Analytical Methods for Solving Boundary Value Problems• Theory of Optimal Control• Methods and Models of System Analysis• Theory of Formal Languages and Compilation• Nonlinear Modeling of Deformable Materials and Mechanical Systems• Functional and Logic Programming Languages | <ul style="list-style-type: none">• Models and Methods of Financial Mathematics• High-Precision Numerical Methods• Integrated Systems in Symbolic Mathematics• Modern Methods of Parametric Identification Based on Difference Equations• Mathematical Models of Dynamic Systems• Fractional Calculus in Problems of Mathematical Modeling of Dynamic Processes• Problems with Shift for Partial Differential Equations• Stochastic Boundary Value Problems of Rheology and Reliability of Structural Elements• Boundary Problems for Partial Differential Equations with Discontinuous Coefficients• Perturbation Methods in Mathematical Modeling• Methods for Studying Stability of Systems |
|---|--|

MAIN TEACHING STAFF:

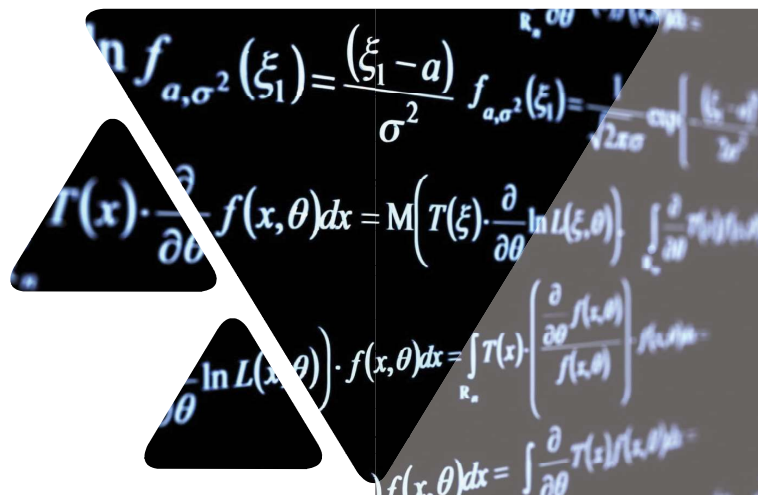
LEADING PROFESSORS IN THE SPHERES OF MATHEMATICS AND INFORMATICS WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

At «Applied Mathematics and Informatics» department there are three classrooms with PCs connected to the Internet and to the local data-processing net.

TRAINING PLACES:

«Applied Mathematics and Informatics» department of Samara State Technical University



Graduate Employability:

JSC «RCC Progress»
LCC «Samara doors factory»
LLC «KogalymNIPIneft»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- MSc students trained in «Applied Mathematics and Informatics» have the opportunity to continue their education in postgraduate school.
- «Applied Mathematics and Informatics» department provides the following PhD programs:
in the field of Mathematics and Mechanics: «Fracture Mechanics», «Differential equations, dynamical systems, and optimal control»;
- in the field of Computer Science and Engineering: «Mathematical modeling, numerical methods and complexes of programs.»
- Research work of MSc students is implemented in the framework of such scientific fields as «Mathematical Modeling», «Computational methods», «Mathematical Methods in Economics» and others.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

MODERN METHODS OF SYNTHESIS AND ANALYSIS OF ORGANIC SUBSTANCES

FIELD OF STUDY

04.04.01 «CHEMISTRY»

FULL NAME OF THE COURSE DIRECTOR

YURIY N. KLIMOCHKIN

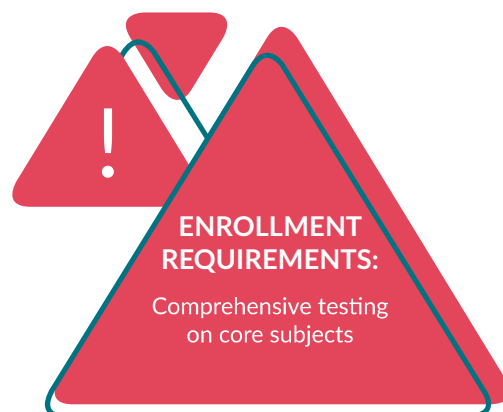
Head of «Organic Chemistry» Department, Professor, Dr. of Chemical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Program is aimed at training of chemists, chemical engineers, biotechnologists, ecologists and other graduates who have mastered in the framework of the previous stage of higher education basic chemical disciplines.

Theme of master's theses of students is associated with a virtual bioscreening, synthesis and structure elucidation of organic compounds, the creation of scientific bases of technological and analytical support for the production of pharmaceutical ingredients, fine chemicals and special products.



LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Philosophical Problems of Chemistry • Computer Technologies in Science and Education • Chromatographic Methods in Chemistry • Quantum Photochemistry • Kinetics and Thermodynamics of Chemical Reactions • Methods for Calculating Molecular Structures • Chemical Basis of Biomolecules Metabolism • Basics of Molecular Biology • Actual Problems of Modern Chemistry • Selected Chapters of Organic Chemistry | <ul style="list-style-type: none"> • Use of Spectroscopy of Nuclear Magnetic Resonance in Organic Chemistry • Physical Organic Chemistry • Chemistry Alicyclic and Cage Compounds • Catalytic Methods in Organic Chemistry • Medicinal Chemistry Fundamentals • Pharmaceutical Chemistry Fundamentals • Spectral Methods of Analysis • Basics of «Green» Chemistry • Chemistry of Organometallic Compounds |
|---|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF CHEMICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Lecture rooms, computer room with access to the scientific and technical information to Russian and foreign resources (collections of full-text journals, databases of Scopus Search, Web of Science, electronic libraries) as well as electronic information-educational environment of SSTU.

Scientific laboratories are equipped with modern analytical equipment that has no analogues in the Samara region:

dual-channel NMR spectrometer 400 MHz, gas chromatograph with a mass spectrometer, liquid and gas chromatography, time-of-flight mass spectrometer with high resolution liquid chromatography, flash chromatography system for preparative separation of compounds, device for elemental analysis, ultraviolet spectrophotometer, spectrofluorometer, infrared Fourier spectrometer, polarizing microscope, differential scanning calorimeter, automatic polarimeter, automatic melting point determination apparatus, and others.

TRAINING PLACES:

The chemical plants, factories and companies of the Russian Federation like JSC «Olainfarm»,

PJSC «SIBUR Holding»,

LLC «PARANAFARM»,

LLC «Samamedprom»,

Institute of Organic Chemistry named after N.D.Zelinsky

Graduate Employability:

Enterprises engaged in the production, storage and distribution of chemical and pharmaceutical products; factory laboratories, expert structures in various fields (environmental, sanitary-epidemiological, food, forensic, technical expertise), certification bodies, representative offices of foreign chemical and pharmaceutical companies in Russia, control and analytical laboratories of the chemical and pharmaceutical areas, research entities of the real sector economy, industrial research institutes, government research centers and institutes of Russian Academy of Sciences.



PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ARCHITECTURAL ENGINEERING

FIELD OF STUDY

07.04.01 «ARCHITECTURE»

FULL NAME OF THE COURSE DIRECTOR

VICTOR P. GENERALOV

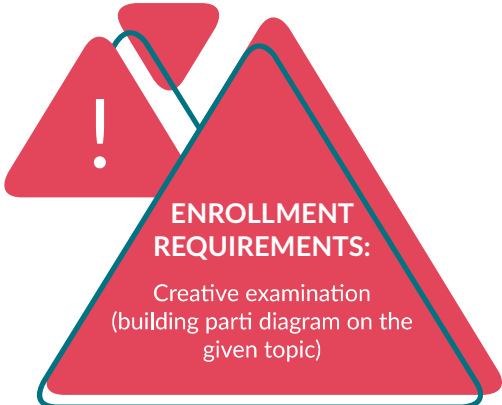
Head of «Architecture of Residential and Public Buildings» Department, Professor, PhD

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is the acquisition and mastering of the skills in the development of methodology of scientific research, analysis of the processes in architecture.



ENROLLMENT REQUIREMENTS:

Creative examination
(building parti diagram on the
given topic)

LIST OF ACADEMIC DISCIPLINES:

- Philosophy and Methodology of Scientific and Project Activities
- Design and Research in Architecture (2nd level)
- Actual Problems of Architecture History and Theory
- Professional Architectural Practice
- Theory and Methodology of Architectural Education
- Business Foreign Language
- Analytical Methods of Structure Research and Modeling in Architectural and Urban Design
- New Typology in Architecture of Residential and Public Buildings
- Social and Environmental Problems of Architecture in the Context of Sustainable Development
- Regulatory Design Aspects in Terms of Reconstruction
- Conceptual Designs and Facilities of Modern Architecture and Urban Planning
- Methodology of Residential Environment Architectural and Planning Organization
- Architectural Engineering-C
- Architectural Engineering-D
- Modern Technologies of Underground and Surface Megapolis Space Complex Development
- Ways to Improve Viability of Buildings considering the Implementation of Resource-saving Technologies
- Design Principles of Highly Urbanized and Multifunctional Buildings and Facilities
- Innovative Approaches in Modern Architectural Design
- Innovative Methods of Scientific and Pre-project Research
- Latest Trends in Architectural and Constructive Design

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

SE «Architectural and Planning Bureau»,

Urban Development Department of Samara and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, SE «Architectural and Planning Bureau», Urban Development Department of Samara and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Work during preparation of master's theses create conditions for cooperation with strategic partners in the field of research and methodical work, modernization of the research activities, expansion of research scope required for the region. It reveals the conditions for training highly qualified personnel for the educational institutions and de-

velopment of scientific research in the field of architecture. Innovative educational technologies based on new interactive teaching methods can be used. It increases integration of architectural objects in the existing architectural environment in master studies.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

URBAN DEVELOPMENT

FIELD OF STUDY

07.04.01 «ARCHITECTURE»

FULL NAME OF THE COURSE DIRECTOR

ELENA A. AHMEDOVA

Head of «Urban Development» Department, Professor, Doctor of Architecture

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is mastering the latest methodology of urban planning at all stages of their future professional activity on the development of instruments in sustainable development areas, urban zoning and areas planning documentation.

Studies of urban development objects held in the dynamics of development of their architectural and planning structure with the justification of urban programming and forecasting the development of urban structures in the Middle Volga region.

ENROLLMENT REQUIREMENTS:

Creative examination
(building parti diagram on the
given topic)

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none">• Philosophy and Methodology of Scientific and Project Activities• Design and Research in Architecture (2nd level)• Actual Problems of Architecture History and Theory• Professional Architectural Practice• Theory and Methodology of Architectural Education• Business Foreign Language• Analytical Methods of Structure Research and Modeling in Architectural and Urban Design• Construction Theory of Pedestrian and Transport City Network• Social and Environmental Problems of Architecture in the Context of Sustainable Development• Regulatory Design Aspects in Terms of Reconstruction• Conceptual Designs and Facilities of Modern Architecture and Urban | <ul style="list-style-type: none">Planning• Redevelopment of Urban Areas• Urban design-C• Urban design-D• Development Formation Modern Tendencies of Large Cities Historic Centers• Information and Communication Town Framework• Design Principles of Residential and Public Buildings with due regard to Ensuring the Environmental Availability Requirements• Innovative Strategies in Contemporary Architecture and Town-planning Complex• Social and Cultural Factors of Architectural Activity• Latest Trends in Architectural and Constructive Design |
|---|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

SE «Architectural and Planning Bureau»,

GC «Volgotransstroy» and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, SE «Architectural and Planning Bureau», GC «Volgotransstroy» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Strengthening formed from the 1990s the regional school of urban planning, and strengthening interregional and international relations with the scientific schools of Russia and foreign research centers for urban planning.
- Expanding areas of research within the framework of research subject preparation and formation in priority areas of science: the rational use of natural resources and transportation systems; cognitive technologies in architecture and urban planning, etc.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

RESTORATION DESIGN

FIELD OF STUDY

07.04.01 «ARCHITECTURE»

FULL NAME OF THE COURSE DIRECTOR

TATYANA V. VAVILONSKAYA

Head of «Restoration and Reconstruction of Architectural Heritage» Department, Associate Professor, PhD

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is developing research skills of architecture history and urban planning history; perform preliminary and comprehensive research on the objects of architectural heritage; development of restoration projects and adaptation of architectural heritage; reconstruction planning.

ENROLLMENT REQUIREMENTS:

Creative examination
(building parti diagram on the
given topic)

LIST OF ACADEMIC DISCIPLINES:

- Philosophy and Methodology of Scientific and Project Activities
- Design and Research in Architecture (2nd level)
- Actual Problems of Architecture History and Theory
- Professional Architectural Practice
- Theory and Methodology of Architectural Education
- Business Foreign Language
- Analytical Methods of Structure Research and Modeling in Architectural and Urban Design
- History and Theory of Monuments Protection and Restoration
- Social and Environmental Problems of Architecture in the Context of Sustainable Development
- Legal and Regulatory Aspects of Design in Terms of Reconstruction
- Urban Development Reconstruction
- Scientific Research Methodology in the Field of Reconstruction and Restoration
- Restoration Design-C
- Restoration Design-D
- Materials and Structures in Modern Restorative and Reconstructive Practice
- Restoration Technique and Technology
- Modern Computer Technology as a Tool for Graphic Reconstruction and Systematic Research in the Field of Heritage Protection
- History of Landscape Architecture and Renovation
- Organizational and Management Activities in the Field of Heritage
- Economic Analysis of Buildings Restoration and Renovation
- Modern Constructions Use in Restoration and Reconstruction

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

State Protection of Cultural Heritage Department of the Samara region and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, State Protection of Cultural Heritage Department of the Samara region and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Training of specialists capable of solving scientific and practical problems in the field of restoration and preservation of cultural heritage and heritage management, capable of expert and educational activities in theory and history of architectural heritage restoration and reconstruction.

- The results of scientific and practical activities can be incorporated into restoration practice, as well as in international and social activities for the conservation of architectural heritage.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ARCHITECTURAL AND CONSTRUCTION MATERIALS SCIENCE

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

NATALYA G. CHUMACHENKO

Head of «Building Materials, Products and Structures Production» Department, Professor, Doctor of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is forming ideas about the functional relationship of material and design, predetermining the choice and optimization of the properties of material based on the durability purpose and operating conditions of structures; study the composition, structure and technological foundations of materials obtaining with desired functional properties with the use of natural and technogenic raw materials, instrumental methods of quality control and certification on stages of production and consumption.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Ecological Problems of Production and Use of Materials in Construction
- Physical and Chemical Methods of Materials Research
- Construction Materials Basics
- Production Durability Problems of Building Materials and Constructions in Building Materials Technology
- Improving Production Technology of Building Materials and Products
- Physical and Chemical Basics of Special Purpose Materials
- Research Methodology of Construction Materials
- Composite Building Materials
- Nanotechnology in construction materials production
- Nonfired construction materials
- Optimization Methods of Construction Materials Production Technological Processes
- Thermodynamics and Chemical Kinetics of Silicates

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING AND ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Zhangir Khan West Kazakhstan Agrarian-Technology University (Kazakhstan, Uralsk)
- The Korkyt Ata Kyzylorda State University (Kazakhstan, Kyzylorda)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures, workshops, group and individual consultations, monitoring and midterm assessment classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Laboratories are equipped with the necessary equipment, designed for carrying up to date construction materials research.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.



TRAINING PLACES:

The leading construction plants, material factories and research institutions of the Russian Federation like LLC «Samara Concrete Product Plant», SRI «Keramzit» and others.

Graduate Employability:

The leading construction plants, material factories and research institutions of the Russian Federation like LLC «Samara Concrete Product Plant», SRI «Keramzit» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Expansion of research topics.
- Improving the educational process.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

TECHNICAL EXPLOITATION SAFETY OF BUILDING OBJECTS

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALEXEY I. HLYSTOV

Professor of «Building Materials, Products and Structures Production» Department, Professor, Doctor of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is to study the methods of damage diagnostics of building structures and changes in the state of building objects in the life cycles during the technical expertise and organization of reliable operation.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Diagnostics of Buildings and Facilities Technical Conditions
- Experiment Planning and Statistical Processing of Experimental Data
- Buildings and Facilities Technical Operation
- Strengthening, Renovation and Reconstruction Works Features
- Monitoring Safety of Building Constructions during Operation
- Building Structures Reinforcement and Restoration
- Experiments Organization and Conducting
- Building Fund Technical Condition Monitoring
- Buildings and Facilities Reconstruction Basics
- Industrial Plants Damage, Reinforcement Methods
- Ways to Repair Damaged Structures of Residential Buildings
- Increasing the Protective Properties of Enclosure Structures

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING AND ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures, workshops, group and individual consultations, monitoring and midterm assessment classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Laboratories are equipped with the necessary equipment, designed for carrying up to date construction materials research.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.



TRAINING PLACES:

The leading reconstruction organizations of Samara Region like Sectoral Scientific Research Laboratory «Reconstruction», State Housing Inspectorate of Samara Region and others.

Graduate Employability:

The leading reconstruction organizations of Samara Region like Sectoral Scientific Research Laboratory «Reconstruction», State Housing Inspectorate of Samara Region and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Advanced understanding of diagnostics of building objects technical condition will streamline work of public utility services, capital construction department, management

companies to reduce losses in the long-term operation of the construction fund.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

SEWAGE AND WASTEWATER TREATMENT

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALEKSANDR K. STRELKOV

Head of «Water Supply and Sanitation» Department, Professor, Doctor of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 6 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is depth study of sewerage systems and wastewater treatment, application of modern technologies, implementation of scientific research, etc.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Experiment Planning
- Technological Control of Water Supply and Sanitation Facilities
- Preparation and Execution of the Master's Thesis
- Water Supply and Sanitation Modelling
- Sewage Sludge Treatment and Disposal
- Special Methods of Water Preparation
- Theoretical Foundations of Biological Wastewater Treatment
- Water Supply and Sanitation CAD Systems
- Ecological Monitoring of Water Objects

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING AND ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- JSC «Aktobe plant of non-metallic pipes» (Kazakhstan)

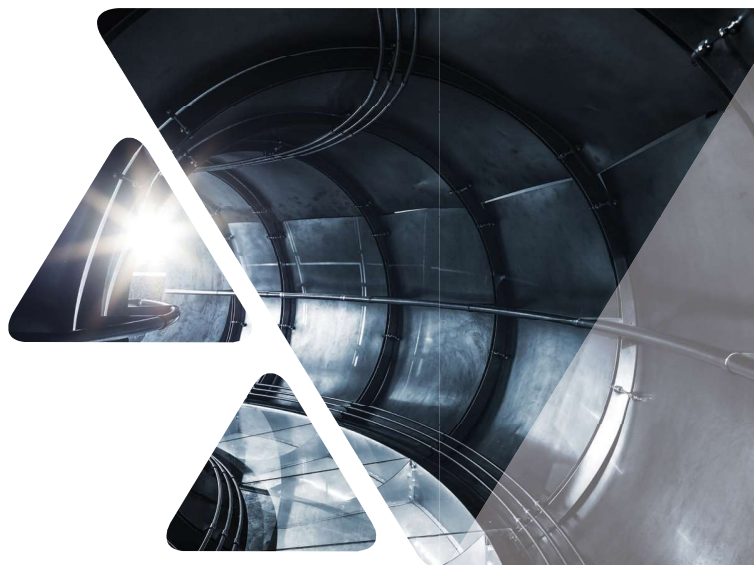
FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Education Laboratories of pumping stations, technological process modeling, applied chemistry, reliability and multiple designing water supply and sanitation systems are equipped with the necessary equipment, designed for carrying up to date research.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.



TRAINING PLACES:

The leading water supply companies, government wastewater treatment organizations of Samara Region like LLC «Samara Utility Systems»,

The Ministry of Forestry,

Environment and Nature Management of the Samara Region and others.

Graduate Employability:

The leading water supply companies, government wastewater treatment organizations of Samara Region like LLC «Samara Utility Systems», The Ministry of Forestry, Environment and Nature Management of the Samara Region and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Systems of collection, disposal and treatment of wastewater, reconstruction of existing sanitation structures and waste-

water treatment of cities and industrial facilities, sewerage of small residential areas

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

WATER SUPPLY OF CITIES AND INDUSTRIAL ENTERPRISES

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALEKSANDR K. STRELKOV

Head of «Water Supply and Sanitation» Department, Professor, Doctor of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 6 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Objective: To prepare Masters capable to design urban and industrial water supply systems using modern and advanced technology, able to carry out research work in the area under consideration of the program, overseeing the construction of urban and industrial water supply systems.

The program aim is depth study of urban and industrial water supply systems, application of modern technologies, implementation of scientific research, etc.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Experiment Planning
- Technological Control of Water Supply and Sanitation Facilities
- Preparation and Execution of the Master's Thesis
- Water Supply and Sanitation Modelling
- Sewage Sludge Treatment and Disposal
- Inhibitory Circulating Systems Water Treatment for Industrial Enterprises
- Special Methods of Water Preparation
- Theoretical Foundations of Biological Wastewater Treatment
- Water Supply and Sanitation CAD Systems
- Ecological Monitoring of Water Objects

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ENGINEERING SYSTEMS AND ENVIRONMENTAL CONSTRUCTION WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- JSC «Aktobe plant of non-metallic pipes» (Kazakhstan)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Education Laboratories of pumping stations, technological process modeling, applied chemistry, reliability and multiple designing water supply and sanitation systems are equipped with the necessary equipment, designed for carrying up to date research.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.



TRAINING PLACES:

The leading water supply companies, government wastewater treatment organizations of Samara Region like LLC «Samara Utility Systems», JSC «Kuibyshev Refinery» and others.

Graduate Employability:

The leading water supply companies, government wastewater treatment organizations of Samara Region like LLC «Samara Utility Systems», JSC «Kuibyshev Refinery» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Water treatment, reconstruction of the existing water supply and water treatment facilities in cities and industrial enterprises, water supply of small residential areas

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

URBAN AREAS AND TRANSPORT INFRASTRUCTURE ENGINEERING EQUIPMENT AND SUPPORT

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ANNA V. ZHOGOLEVA

Associate Professor of «Urban Development» Department, PhD

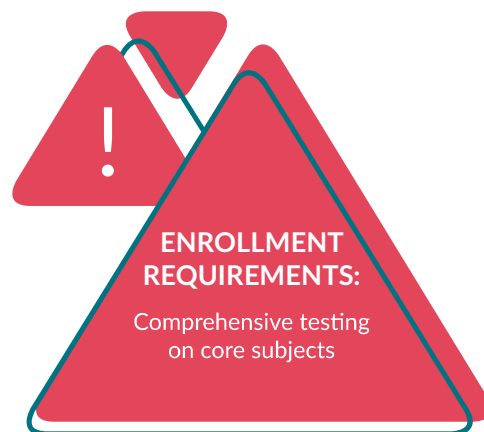
Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Objective: To develop students' personal qualities; formation of common cultural, general and professional competences; developing skills to implement them in innovative, prospecting, design and calculation, research and educational activities.

The social significance of the program is a conceptual justification and simulation of modern training conditions of highly qualified specialists capable of effective implementation activities in the field of research using basic theoretical and practical knowledge and innovative technologies and in the formation of a comfortable human living environment.

The program aim is training professionals in the field of urban planning, urban management, urban economy, whose skills in the field of engineering and urban planning insurance and equipment of areas, buildings, transport facilities will ensure «the sustainable development of urban areas».



LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Mathematical Modeling • Special Sections of Advanced Mathematics • Scientific Research Methodology • Information Technology in Construction • Business Foreign Language • Methods for Solving Scientific and Technical Problems in Construction • Basics of Pedagogy and Andragogy • History of Urban Planning, Transport and Construction Machinery • Theory and Practice of Modern Urban Planning | <ul style="list-style-type: none"> • Underground Urban Studies • Parametric Design Tools • Regional and Urban Landscape Environmental Topology • Communicative Spaces System in Modern City • Modern Approaches to Urban Areas Improvement • Post-Industrial City Frame Infrastructure • Landscape Design Areas Principles • Design Principles of Cities Coastal Areas • Organization of Accessible Urban Environment • Designing Urban Transport Facilities • Methods for Evaluation of Urban Land |
|---|--|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

JSC «Giprovostokneft» and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, JSC «Giprovostokneft» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Creation of experimental projects, instructional materials, integrated curricula of final qualifying undergraduate works, which are based on an integrated engineering and urban planning approach to solving the development problems of urban areas.
- Involvement in implementation of the program the most experienced practitioners engaged in urban development.
- The use of innovative educational technologies based on new interactive teaching methods.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

CONSTRUCTION COMPLEX MECHANIZATION

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

STANISLAV Y. GALITSKOV

Head of «Mechanization, Automation and Construction Power Supply» Department, Professor, Doctor of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The purpose of the program is development of professional competencies including knowledge and skills to implement research, design, operation and maintenance of means of mechanization and automation of construction, construction machinery and equipment.

Main themes of scientific research carried out by undergraduates:

- Mechanization and automation of concrete and ceramic materials and products production;
- Development of new proposals for the technological equipment improvement of building industry, synthesis algorithms and automatic control systems;
- Automation of building and road machines.

The program aim is training personnel for the following areas of activity:

- Engineering maintenance and equipment construction projects;
- Development of machines, equipment and technology needed for construction and production of building materials, products and structures;
- Research in the field of construction and educational activities.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling
- Scientific Research Methodology
- Methods for Scientific and Technical Problems Solving in Construction
- Basics of Pedagogy and Andragogy
- Actuators Digital Control
- Application Programming in Construction Automation Tasks
- Educational Practice
- Technological Practice
- Information Technologies in Construction
- Automation Systems Digital Simulation
- Construction Complex Mechanization
- Construction Industry Modern Machines and Equipment
- Mathematical Description of Technological Processes and Industrial

Plants as a Control Object

- Modern Aspects of Digital Control Systems Building in Construction
- Automation of Technological Processes in Building Materials, Products and Structures Manufacture
- Software Control Systems
- Engineering Experiment Methods and Techniques
- Construction Machinery and Technological Equipment Reliability
- Philosophical Problems of Science and Technology
- Special Sections of Advanced Mathematics
- Business Foreign Language
- Research Work in Semester
- Research Practice
- Pre-graduation Practice

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING AND ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

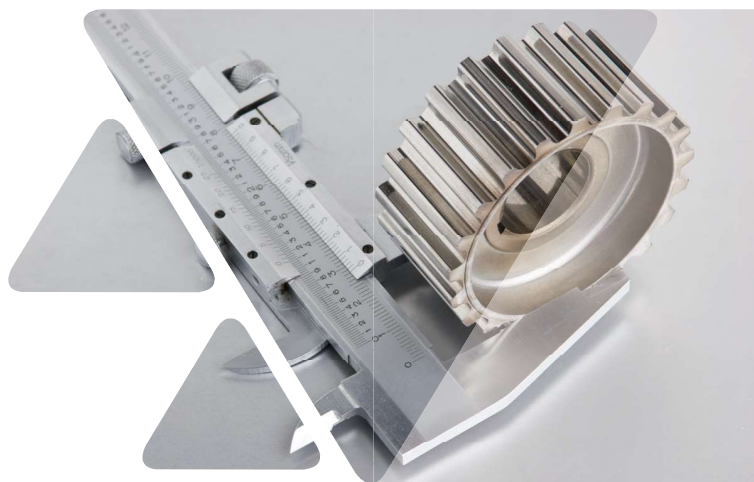
FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms are equipped with projectors. Laboratory of Mechanical Engineering, Electrical Engineering, technological processes automation are equipped with all necessary staff, laboratory stands.

Computer class for practical training equipped with computers connected to the Internet.

TRAINING PLACES:

The leading construction plants, material factories and research institutions of the Samara Region like CJSC «Samara Ceramic Materials Plant», CJSC «Strommashina» and others.



Graduate Employability:

The leading construction plants, material factories and research institutions of the Samara Region like CJSC «Samara Ceramic Materials Plant», CJSC «Strommashina» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Expansion of research topics. Improving the educational process.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

HOUSING AND UTILITY SECTOR COMPLEX OPERATION

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

EVGENY E. ERMOLAEV

Head of «Urban and Construction Management» Department, Professor, Doctor of Economics

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 6 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aim is development of personal qualities of Masters, formation of common cultural, general and professional competences.

The program aims to prepare professionals with in-depth knowledge of theoretical and practical aspects of organization management as a complex socio-economic system and training of professionals with a vision who are able to make strategic and tactical decisions in different areas of the organization functioning.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Business Foreign Language • Basics of Pedagogy and Andragogy • Mathematical Modeling • Special Sections of Advanced Mathematics • Innovative Projects Management in Housing and Utility Sector • Information Technologies in Construction • Scientific Research Methodology • Methods for Scientific and Technical Problems Solving in Construction • Innovation Theory and Methodology • Fundamentals of Housing and Utility Sector Management and Regulation • Organization and Control of Water and Wastewater Systems Technical | <ul style="list-style-type: none"> Operation • Organization and Control of Power Supply Systems Technical Operation • Organization and Control of Heat and Gas Supply Systems Technical Operation • Modern Water and Wastewater Systems Engineering Solutions • Modern Heat Systems Engineering Solutions • Organization and Control of Energy and Resource Saving in Housing and Utility Sector • Innovative Technologies in Housing and Utility Sector Reconstruction and Technical Operation • Economic Evaluation of New Technical and Technological Solutions in Housing and Utility Sector • Modern Methods of Real Estate Organization and Management |
|---|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ECONOMICS AND MANAGEMENT IN CONSTRUCTION AND URBAN DEVELOPMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops, group and individual consultations classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading economic and housing organizations and companies of the Russian Federation like LLC «United Construction Company»,

LLC «GlavRosStroy» and others.



Graduate Employability:

The leading economic and housing organizations and companies of the Russian Federation like LLC «United Construction Company», LLC «GlavRosStroy» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Rational combination of market and state regulation in the sphere of construction and Housing and Utility Sector.
- Extensive use of strategic planning and management in the activities of Housing and Utility Sector organizations.
- Improvement of management structures due to the greater decentralization of responsibilities.
- Maximize use of innovation, economic and mathematical methods in Housing and Utility Sector.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

FACADES AND BUILDINGS INTERIORS DETAILS CONSTRUCTION

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

VITALY A. SAMOGOROV

Head of «Architecture» Department, Professor, PhD

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The social significance of the program is conceptual justification and simulation of modern training conditions of highly qualified specialists, capable of effective use basic theoretical and practical knowledge and innovative technologies to implement activities in research field and in forming the comfortable environment of human life.

The program aim is training highly qualified specialists in the field of construction units and parts of buildings capable of creativity in solving different tasks.



ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none">• Philosophical Problems of Science and Technology• Mathematical Modeling• Special Sections of Advanced Mathematics• Scientific Research Methodology• Information Technology in Construction• Business Foreign Language• Methods for Solving Scientific and Technical Problems in Construction• Basics of Pedagogy and Andragogy• Architectural Ergonomics• Architectural Details Construction | <ul style="list-style-type: none">• Architectural Details in Urban Environment• Detail in Architecture• Architectural Detail in Interior• Building Engineering Equipment Innovations• Architectural Design Innovations• Evolution of Detail in Architecture• Architectural Details Computer Modeling• Compositional Principles of Architectural Details Design• Functional Principles of Architectural Details Design• Professional Architectural Practice• Material Role in Architecture |
|---|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

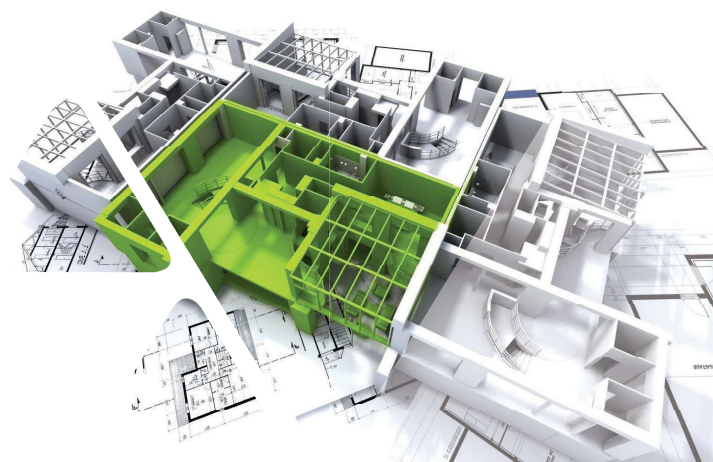
The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

Construction company «Grad»,

GC «Volgotransstroy» and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, Construction company «Grad», GC «Volgotransstroy» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Orientation training of Masters on the use of more advanced modern designs of facade systems and interior solutions with the assistance of a the most experienced domestic and foreign architects and designers. Application of innovative educational technologies based on new teaching interac-

tive methods, the priority of independent work of Masters. The implementation of a variety of scientific and industrial research and practice and training in the development and implementation of the Masters own projects.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

RECONSTRUCTION AND RESTORATION OF BUILDINGS AND STRUCTURES

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

DENIS V. LITVINOV

Associate Professor of «Restoration and Reconstruction of Architectural Heritage» Department, Associate Professor, PhD

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Purpose: formation of general and professional competences; developing skills to implement them in the project, research, communication, organizational and management, critical, expert, educational activities.

The program aim is training of masters in the field of reconstruction of buildings and structures of historical and common construction as well as the restoration of historical buildings, monuments with their reprofiling or adaptation to modern needs. During the training students receive in-depth knowledge of the technology and organization of work on historic buildings in urban development constrained conditions, strengthen and repair damaged structures of the buildings as well as physical and technical basics of design.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Restoration Methodology and Technology
- Monuments Restoration
- Modern Computer Technology as Tool for Graphic Reconstruction
- and Systematic Research in the Field of Heritage Protection
- Materials and Structures in Modern Restorative and Reconstructive Practice
- Legal and Regulatory Aspects of Design in Terms of Reconstruction
- Methods of Buildings and Structures Engineering Survey
- Modern Methods and Technologies to Enhance Structures
- Calculation Methods of Structures under Reconstruction
- Reconstruction Economics
- Landscape Reconstruction
- Engineering Infrastructure Overhaul
- Monuments Protection
- Urban Development Reconstruction

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara,

State Protection of Cultural Heritage Department of the Samara region and others.



Graduate Employability:

The leading architectural departments and companies of Samara Region like Department of Civil Engineering and Architecture of Samara, State Protection of Cultural Heritage Department of the Samara region and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Preparation of qualified professionals in order to preserve valuable architectural heritage of cities and monuments historical environment, preservation and development of historic city architectural appearance, recreating the historical fragments of lost monuments and their elements urban environment.
- Involvement to implementation of the program the most

experienced architects-restorers.

- The development of academic mobility of Masters and teachers, creation of conditions for formation of international education model. Enhancing practical-applied orientation of training. Consideration of environmental factors in renovation and energy-saving projects in their operation.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

BASES AND FOUNDATIONS THEORY AND DESIGN

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

YURI E. SENITSKII

Head of «Structural Mechanics and Strength of Materials» Department, Professor, Doctor of Technical Sciences, member of the New York Academy of Sciences, Honored Scientist of Russia.

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program goal is to prepare future Masters possessing theoretical and practical skills in matters of calculation, design and construction of bases and foundations.

The program aims to acquire in-depth knowledge on calculation and design:

- effective design of zero cycle and underground structures; modern methods of calculating the «base-foundation» system;
- use of different foundations types in specific ground conditions taking into account the features of constructed facilities;
- geological environment occurring processes, place and role of engineering surveys in construction industry;
- building production scientific support stages.

And the program aims to develop knowledge about new scientific decisions determining the process of science, engineering and technology construction in the field of geotechnics and foundation engineering at the present stage.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Mathematical Modeling • Special Sections of Advanced Mathematics • Scientific Research Methodology • Information Technology in Construction • Business Foreign Language • Methods for Solving Scientific and Technical Problems in Construction • Basics of Pedagogy and Andragogy • Experiment Planning | <ul style="list-style-type: none"> • Modern Scientific Problems of Geotechnical and Foundation Engineering • Psychological Aspects of Scientific Work • Modern Calculation Methods of «Foundation-Base» Systems • Effective Design of Pit Type Foundation • Effective Design of Pile Foundations • Modern Problems in Construction Science, Engineering and Technology • Effective Methods of Construction Engineering Surveys • Underground Structures Design and Construction |
|---|---|

MAIN TEACHING STAFF:

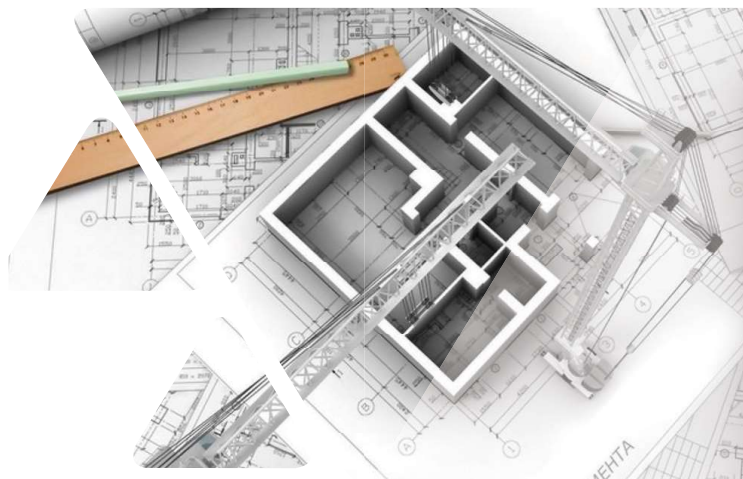
LEADING PROFESSORS OF INDUSTRIAL AND CIVIL CONSTRUCTION FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with multimedia stuff.

Laboratories of geology, soil mechanics, bases and foundations are equipped with the necessary equipment make it possible to carry out a wide range of research.

Computer classes have Internet access. All computers are equipped with the latest software.



TRAINING PLACES:

The leading construction companies and geological organizations of the Russian Federation like Industrial and construction company «TRANSGRUZ»,

Scientific-Production Center «Geotechnics» and others.

Graduate Employability:

The leading construction companies and geological organizations of the Russian Federation like Industrial and construction company «TRANSGRUZ», Scientific-Production Center «Geotechnics» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Developing partnerships with leading universities in Russia to improve Masters' preparation system.
- Establishing links with national professional organizations to enhance scientific and technical training.
- Development of technical and laboratory facilities for expansion of subjects and improve the quality of scientific research.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

HIGHWAYS THEORY AND DESIGN

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

BORIS G. IVANOV

Head of «Highways and Geodetic Support» Department,
Associate Professor, Doctor of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 5 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Objective: To develop students' personal qualities and competencies in accordance with the educational standards.

The program aim is meeting the needs of society and potential employers for highly qualified specialists; expansion, consolidation and systematization of theoretical knowledge and skills, its practical application for solving a specific scientific, technical, socio-economic or organizational and management problems; development of conducting independent research skills; acquisition processing experience, analysis and systematization of theoretical and engineering calculations and experimental studies results in the evaluation of its practical relevance and possible application.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Economic-Mathematical Methods of Transport Constructions Designing
- Experiment Planning and Statistical Processing of Experimental Data
- Traffic Law Fundamentals
- Highways and Artificial Structures Prospective Design
- New Methods for Calculating Constructions of Highways and Artificial Structures
- Progressive Methods of Highways and Artificial Structures Technology and Organization
- Monitoring of Highways and Transport Facilities
- Modern Problems of Energy Saving in Highways Operation and Reconstruction
- Statistical Methods for Road Products Quality Control
- Assessment and Forecast of Transport Facilities Technical State
- Automated Artificial Structures Design Systems
- Modern Problems of Highways and Transport Facilities Maintenance in the Region Environment

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING AND ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- LLP «Plastic AvtoTrans» (Kazakhstan)
- LLP «Ural Trade Industrial Company» (Kazakhstan)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with multimedia stuff.

Laboratories are equipped with the necessary equipment make it possible to carry out a wide range of research.

Computer classes have Internet access. All computers are equipped with the latest software.

The library is equipped with computers connected to the Internet and to electronic-library system.



TRAINING PLACES:

The logistic companies and transport organizations of the Russian Federation like LLC «Transservice», LLC «Logistics Plus» and others.

Graduate Employability:

The logistic companies and transport organizations of the Russian Federation like LLC «Transservice», LLC «Logistics Plus» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Implementation of various forms of participation in graduate interdisciplinary research projects, in the creative intellectual and scientific activities; consolidation of talented Masters

in science to further effective reproduction of scientific and pedagogical staff; enhancing the effectiveness of program.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

BUILDINGS AND STRUCTURE THEORY AND DESIGN

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALLA M. PONOMARENKO

Associate Professor of «Architecture of Residential and Public Buildings» Department, Associate Professor, PhD

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aim is forming competences that enable students to professionally carry out research, development and implementation of information systems and technologies.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Psychological Aspects of Scientific Work
- Architectural Design Features of Residential, Public and Industrial Buildings
- Buildings Modern Typological Features
- Effective Long-Span Buildings and Structures
- Architectural Physics Fundamentals in Construction
- Architecture of Energy Efficient Buildings
- Methods of Residential Environment Architectural and Planning Organization
- Modern Principles of Buildings Bearing and Enclosing Structures Design
- Modern Problems in Construction Science, Engineering and Technology
- Features of High-Rise Buildings Architectural Design
- Architectural Ecology
- Principles of Residential and Public Buildings Design Considering Requirements of Ensuring Environment Accessibility
- Modern Building Materials

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ARCHITECTURE FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading architectural departments and construction companies of Samara Region like Department of Civil Engineering and Architecture of Samara, Construction company «Grad» and others.



Graduate Employability:

The leading architectural departments and construction companies of Samara Region like Department of Civil Engineering and Architecture of Samara, Construction company «Grad» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Training of specialists capable of solving scientific and practical problems in the field of buildings and structures integrated design. Implementation of multi-disciplinary research and

collaboration with the technical and architectural professions including foreign experiences.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

REINFORCED CONCRETE STRUCTURES THEORY AND DESIGN

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

VALERY P. POPOV

Professor of «Building Constructions» Department, Professor, Doctor of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program goal is to prepare students for professional work on solving scientific and engineering problems, organization of scientific research process and implementation of scientific work using basis of received knowledge.

The program aim is formation of theoretical and practical knowledge in the fundamentals of buildings and structures calculation and design under dynamic loading, planning field and computational experiments and results processing; development skills for parametric descriptions of building structures, products and processes in construction with separation of variables parameters; development skills of mathematical formalization of engineering optimization problems design decisions; enhancement of knowledge on modern problems of building science, engineering and technology; formation of theoretical knowledge in the field of structural lightweight concrete drag theory and design of buildings reinforced concrete structures.

The program will expand and enhance the idea of country building complex state at present and its development prospects.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Experiment Planning
- Optimization Scientific Problems in Construction Design
- Psychological Aspects of Scientific Work
- Basis for Calculation of Structures under Dynamic Loading
- Efficient Lightweight Constructions
- Effective Spatial Constructions
- Modern Problems in Construction Science, Engineering and Technology
- Effective High-Rise Buildings Constructions
- Effective Underground Building Constructions

MAIN TEACHING STAFF:

LEADING PROFESSORS OF INDUSTRIAL AND CIVIL CONSTRUCTION FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and practical classes classrooms are equipped with multimedia facilities.

Computer classes are equipped with computers connected to the Internet and equipped with specialized programs Lira CAD, SOFISTIK, Tekla Structures. Department training laboratory is equipped with special equipment to test samples of reinforced concrete constructions and related measurements. Workroom for the manufacture and testing of specimens of reinforced concrete constructions staffed with special equipment. The press room with equipment has 5 presses with a maximum operating mode 50-500 tons, 2 tensile testing machines. Accurate measurements hall for special tests.

TRAINING PLACES:

The leading construction companies and concrete plants of Samara Region like Concrete products plant №2 LLC «Reinforced»,

Design company LLC «Basis» and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Michelli University of Applied Sciences (Finland, Michelli)

**Graduate Employability:**

The leading construction companies and concrete plants of Samara Region like Concrete products plant №2 LLC «Reinforced», Design company LLC «Basis» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Universalization of the continuous education process Undergraduate-Master-Postgraduate study in «Construction» related areas.
- Further development of inter-university and international partnerships.
- Promotion of Masters training among the management of medium and large businesses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

METAL STRUCTURES THEORY AND DESIGN

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

MARAT D. MOSESOV

Professor of «Metal and Wood Constructions» Department, Associate Professor, PhD

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program goal is acquisition of knowledge in the field of specialized disciplines that allow for steel structures calculation and design.

The program aim is to obtain skills for carrying out strength and deformation calculation of metal structures, principles of optimal design, study of traditional and innovative methods in the field of construction design using advanced software package designed for solving design and research tasks.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Experiment Planning
- Scientific Problems of Construction Economics
- Psychological Aspects of Scientific Work
- Basis for Calculation of Structures under Dynamic Loading
- Efficient Lightweight Constructions
- Effective Spatial Constructions
- Modern Problems in Construction Science, Engineering and Technology
- Analytical and Numerical Methods for Mathematical Physics Solutions
- Effective Long-Span Structures
- Modern Technology in Construction
- Effective High-Rise Buildings Constructions
- Environmental Management Fundamentals

MAIN TEACHING STAFF:

LEADING PROFESSORS OF INDUSTRIAL AND CIVIL CONSTRUCTION FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures, workshops, group and individual consultations, monitoring and midterm assessment classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Metallic and wooden structures tests laboratory is equipped with laboratory units, laboratory benches.

Computer classes are equipped with computers connected to the Internet and equipped with specialized programs AutoCAD, Lira, ScadOffice, Stark ES.



TRAINING PLACES:

The leading construction companies and plants of the Russian Federation like JSC «Elektroshchit», JSC «Progress» and others.

Graduate Employability:

The leading construction companies and plants of the Russian Federation like JSC «Elektroshchit», JSC «Progress» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Involvement in learning on Master level graduates from other fields of undergraduate training. Increase in publication activity through staff and graduate students joint publications.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

THEORY OF STRUCTURES

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

YURI E.SENITSKII

Head of «The Strength of Materials and Structural Mechanics» Department, Professor, Doctor of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Objective: to develop students' personal qualities, common cultural, general and professional skills as well as their ability to implement the skills in innovative, surveying, design and calculation, research and educational activities.

The program is aimed at teaching students how to calculate complex building structures under static and dynamic loads, to conduct a technical examination of building projects, to collect and analyse base line data for the design of buildings and structures.

ENROLLMENT REQUIREMENTS:

Written examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Higher Mathematics
- Scientific Research Methodology
- Information technology in construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Building Industry
- Basics of Pedagogy and Andragogy
- Theory of Plates and Shells
- Scientific Problems of Construction Economics
- Psychological Aspects of Scientific Work
- Solution of Boundary Value Problems of the Dynamics and Stability of Structures
- Nonlinear Problems of Structural Mechanics
- Interaction of Elastic Structural Conjugated Fields Components of Hydroelasticity, Thermoelasticity and Electroelasticity
- Method of Decomposition on its own Vector-Valued Functions in Structural Mechanics Problems
- Incremental Construction Mechanic
- Calculation of Building Structures on Elastic Foundation

MAIN TEACHING STAFF:

LEADING PROFESSORS OF «THE STRENGTH OF MATERIALS AND STRUCTURAL MECHANICS» DEPARTMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

Laboratories are fit with the up-to-date equipment to carry out research.

There is a computer class for practical training.

The library is equipped with computers connected to the Internet and an e-library system.



TRAINING PLACES:

The leading plants and factories of the Russian Federation like «Samara Plaster Plant»

JSC «ReinforcedConcrete»

Graduate Employability:

The leading plants and factories of the Russian Federation like Samara Concrete Products Plant
JSC «Design and Construction Company»
TehStroiProekt»
Research Institute«Keramzit»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Calculation of building structures taking in to account the elastic, thermo-elastic and electroelastic stress fields

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

THEORY OF TECHNOLOGY AND ORGANIZATION OF CONSTRUCTION PRODUCTION

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

VALERY P. POPOV

Head of «Technology and Organization of Construction Production» Department, Professor, Dr. of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program objective is to improve the professional training of specialists in the sphere of process technology in the construction and production management.

The program is aimed at in-depth study of technological and organizational disciplines to train highly qualified specialists in the field of technology and organization of construction production.



ENROLLMENT REQUIREMENTS:

Written examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- Psychological Aspects of Scientific Work
- Information technology in Construction
- Experiment Planning
- Application of Modern Technological Equipment
- Efficient Technologies in Foundation Engineering
- Efficient Technologies in Erection of Base Plates
- Efficient Technologies in Painting and Decorating
- Efficient Technologies in Facades Arrangement
- Current Problems in Construction Science, Engineering and Technology
- Special Sections of Higher Mathematics

- Business Foreign Language
- Mathematical Modeling
- Scientific Research Methodology
- Methods for Solving Scientific and Technical Problems in Building Industry
- Scientific Problems of Construction Economics
- Basics of Pedagogy and Andragogy
- Philosophical Problems of Science and Technology
- Research Practice
- Research and Production Practice
- Research Work

MAIN TEACHING STAFF:

LEADING PROFESSORS OF «TECHNOLOGY AND ORGANIZATION OF CONSTRUCTION PRODUCTION» DEPARTMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

There is a computer class for practical training.

The library is equipped with computers connected to the Internet and an e-library system.

TRAINING PLACES:

The leading plants, building companies and factories of the Russian Federation like Scientific Production Center «Construction»,

GC «AlviStroy»,

Samara Specialized Trust of Vehicle Construction,

Ltd. «PM» Recon «



Graduate Employability:

The leading plants, building companies and factories of the Russian Federation like Ltd. «Volga NIPITEK» and Ltd. «StroiBusiness»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Increase the publication activity through joint publications of staff and graduate students.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

HEAT AND GAS SUPPLY OF POPULATED AREAS AND ENTERPRISES

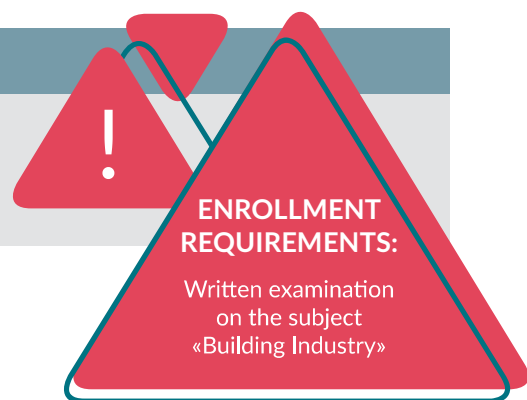
FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

STANISLAV Y. GALITSKOV

Head of «Mechanization, Automation and Electricity Supply of Building Industry»
Department, Professor, Dr. of Technical Sciences



Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The purpose of the program is to develop professional competencies of the students, including knowledge, skills and abilities to perform research, design, operation and maintenance of heating systems and gas supply of populated areas, residential areas and buildings.

The main themes of scientific research carried out by MS students:

- Optimization of the cottage heating systems in terms of unsteadiness of residence;
- Impact of the characteristics of protecting designs materials on energy heating systems;

- Synthesis of software control systems of the office building heating.

The program is aimed at training personnel for the following areas of activity:

- Engineering maintenance and equipment construction projects;
- Design and operation of heat and gas supply systems, residential and industrial facilities;
- Research in the field of construction and educational activities.

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Mathematical Modeling • Scientific Research Methodology • Methods for Solving Scientific and Technical Problems in Building Industry • Basics of Pedagogy and Andragogy • Information technology in Construction • Automatic Control Theory • Automation of Heat Systems • Scheduling of Engineering Systems of Buildings and Structures • Computational Model of Heat and Gas Supply Systems • Philosophical Problems of Science and Technology • Research Practice • Research and production practice | <ul style="list-style-type: none"> • Research work • Mathematical Models of Heat and Energy Consumption of Buildings and Structures • Improvement of Burners for Combustion of Fossil Fuels • Technological Practice • Experimental Methods in Life-Support Systems of Buildings and Structures • Process Improvement and Optimization of Heat and Gas Supply Systems • Reliability and Safety of Heat Systems • Optimization of Thermal Generation Plants • Use of Waste Energy in Heating Systems • Special Sections of Higher Mathematics • Business Foreign Language |
|--|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS IN THE SPHERE OF BUILDING INDUSTRY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms are equipped with projectors. Laboratories of mechanical engineering, electrical engineering, process automation installations are equipped with the appropriate stands. Computer classes are connected to the Internet.

TRAINING PLACES:

PJSC «Cottage»
«Samara Plaster Plant»
National Research Moscow State Construction University



Graduate Employability:

The leading plants, building companies and factories of the Russian Federation like LLC «PrivolzhskNIPIneft»
GK «ANION», LLC «SamREK-operation».

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- To expand research to pics and improve the educational process.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building
Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

TECHNOLOGY OF BUILDING MATERIALS, UNITS AND STRUCTURES

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

IGOR V. GORYUSHINSKY

Professor of «Building Materials and Constructions» Department, Doctor of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Objective: to develop general cultural and professional competences of students by studying fundamental and applied sciences in the field of materials science, building materials and units, by improving the production technologies of materials and providing quality education and training.

The program is aimed at developing practical skills in organization of scientific research and production activities, analyzing a technological process, organizing work of the group of performers, governing the operating procedures.



ENROLLMENT REQUIREMENTS:

Written examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Higher Mathematics
- Scientific Research Methodology
- Information technology in construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Building Industry
- Basics of Pedagogy and Andragogy
- Environmental problems of Construction Engineering Sector
- Mechanization and Automation of Construction Engineering Sector
- Construction Materials Science
- Modern Aspects of the Technology of Construction Materials and Structures Production
- Production Technique of Enclosure Structures
- Quality and Durability of Enclosure Structures
- Main Directions of Technical Progress in the Field of Building Materials
- Main Ways to Improve Building Designs
- New Types of Binding Agents and Concretes
- Improving the Thermal Insulation Properties of Materials
- Building Materials from Local Raw Materials and Industrial Waste

MAIN TEACHING STAFF:

LEADING PROFESSORS OF BUILDING MATERIALS AND CONSTRUCTIONS DEPARTMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

Laboratories are fit with the up-to-date equipment to carry out research.

There is a computer class for practical training.

The library is equipped with computers connected to the Internet and an e-library system.

TRAINING PLACES:

The leading plants and factories of the Russian Federation like DSK Tree

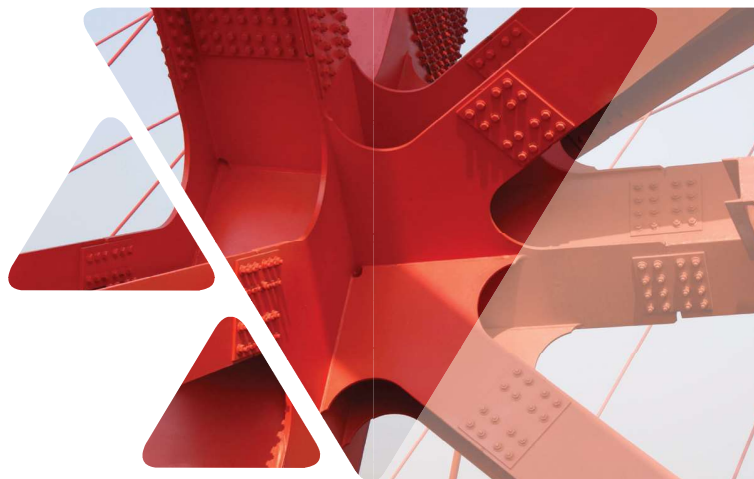
Samara Frame

Samara Ceramic Materials

Samara Stroifarfor

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Zhangir-Khan West Kazakhstan Agrarian-Technical University (Kazakhstan, Uralsk)
- Kyzylorda State University (Kazakhstan, Kyzylorda)



Graduate Employability:

The leading plants and factories of the Russian Federation like Samara Concrete Products Plant JSC «Reinforced Concrete» JSC «Design and Construction Company Research Institute «Keramzit»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- To increase the effectiveness of MSc program the following steps are to be implemented: introduction of various forms of interdisciplinary research projects, participation of stu-

dents in creative intellectual and scientific activities, involvement of talented young people in scientific work.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

EXPERTISE AND MANAGEMENT OF INVESTMENT AND CONSTRUCTION OF OPERATIONAL ACTIVITIES

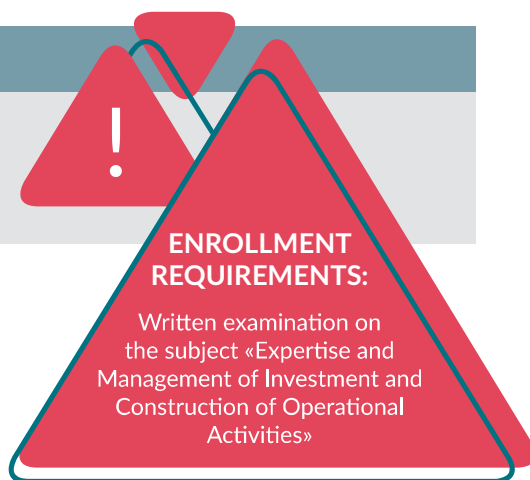
FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

OLGA V. DIDKOVSKAYA

Head of «Value Engineering and Technical Expertise of Buildings and Structures» Department, Professor, Dr. of Economics



ENROLLMENT REQUIREMENTS:

Written examination on the subject «Expertise and Management of Investment and Construction of Operational Activities»

Length of Schooling:
2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 7 MONTHS
OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Objective: to train the specialists for the following areas of activity:

- Engineering, construction (reconstruction, overhaul) of capital construction;
- Examination, operation and monitoring of buildings and structures (complexes);
- Assessment of real estate (land, buildings, structures, premises, unfinished constructions) and property complexes;
- Engineering maintenance and equipment construction projects;

- Research and educational activities.

The program is aimed at the following types of professional activities to which students are prepared:

- Innovation, design and survey;
- Industrial and technological activity;
- Research and teaching;
- Project Management;
- Professional expertise.

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Mathematical Modeling • Special Sections of Higher Mathematics • Scientific Research Methodology • Information technology in Construction • Business Foreign Language • Methods for Solving Scientific and Technical Problems in Building Industry • Expert Methods in Investment and Construction and Operational Activities • Evaluation of Property and Business | <ul style="list-style-type: none"> • Examination of the Quality and Efficiency of Design Solutions • Contractual Relationship Management • System of Technical Operation Management • Cost Engineering in Building Industry • Areas of Construction and Technical Expert Studies and Cost Expert Studies • Modern Methods of Management and Operation of Real Estate Construction • Construction Audit • Inspection of Technical Condition of Buildings and Structures |
|--|--|

MAIN TEACHING STAFF:

LEADING PROFESSORS IN THE SPHERES OF ECONOMICS AND BUILDING INDUSTRY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

There is a computer class for practical training where the computers are equipped with specialized programs «Estimate», «AutoCad», «Rocks», «AltInvest».

The library is equipped with computers connected to the Internet and an e-library system.

TRAINING PLACES:

«Center for pricing in construction»

LLC «Evaluation Office»

LLC «ProBiznesOtsenka»

Non-profit organization «Regional operator Samara region» Major Repair Fund



Graduate Employability:

The Ministry of Construction of the Samara region,
Ministry of Sports of the Samara Region
LLC «Territorial rating agency»
State Unitary Enterprise «Stroikontrol»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- To expand research topics and improve the educational process.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

OPERATION OF HOUSING AND MUNICIPAL INFRASTRUCTURE

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

EVGENIY E. ERMOLAEV

Head of «Urban Management and Construction» Department, Professor, Dr. of Economics

Length of Schooling:
2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 6 MONTHS
OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims at the development of personal qualities common cultural, general and professional competences of MSc students.

The program objective is to prepare professionals with in-depth knowledge of the theoretical and practical aspects of the management of an organization as a complex socio-economic system and to train the professionals able to make strategic and tactical decisions in different areas of the organization functioning.

ENROLLMENT REQUIREMENTS:

Write examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Business Foreign Language • Mathematical Modeling • Special Sections of Higher Mathematics • Basics of Pedagogy and Andragogy • Management of Innovative Projects in Housing and Utilities Complex • Information Technology in Construction • Scientific Research Methodology • Methods for Solving Scientific and Technical Problems in Building Industry • Theory and Methodology of Innovation • Fundamentals of Management and Regulation of the Housing and Public Utilities | <ul style="list-style-type: none"> • Organizing and Managing the Technical Operation of Water and Wastewater Systems • Organizing and Managing the Technical Operation of Power Supply Systems • Organizing and Managing the Technical Operation of Heat and Gas Supply Systems • New Engineering Solutions for Water and Wastewater Systems • New Engineering Solutions for Heat Systems • Organization and Management of Energy and Resource Saving in Housing and Public Utilities • Innovative Technologies in Reconstruction and Technical Operation of Housing and Communal Complex • Economic Evaluation of New Technical and Technological Solutions in the Housing Complex • Modern Methods of Organization and Management of Real Estate |
|--|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF «URBAN MANAGEMENT AND CONSTRUCTION» DEPARTMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

There is a computer class for practical training.

The library is equipped with computers connected to the Internet and an e-library system.

TRAINING PLACES:

LLC «GlavRosStroy»

LLC «Stroyleks»

Homeowners Association «Volzhsky prospect»

LLC «Gazprom gas distribution Samara»



Graduate Employability:

LLC «Srednevolzhskaya gas company»

LLC «United Construction Company»

LLC «UK» Property

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- The rational combination of market and state regulation in the sphere of construction and the Housing and Public Utilities.
- Extensive use of strategic planning and management in the activities of Housing and Public Utilities organizations.

Improving management structures due to the great decentralization of responsibilities.

- Maximum use of innovation, economic and mathematical methods in the Housing and Public Utilities.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ENERGY EFFICIENCY OF HEATING SYSTEMS

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALEKSEY G. SALOV

Professor of «Heat and Ventilation» Department, Associate Professor, Dr. of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program goal is to acquire knowledge in the field of special disciplines that enable to analyze the functioning of the energy and transport companies in order to assess their efficiency.

The program is aimed at getting the skills to analyze the energy efficiency of equipment-management of enterprises and thermal networks, at developing ways to improve management structures activity of heat supply systems.

ENROLLMENT REQUIREMENTS:

Written examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Mathematical Modeling • Special Sections of Higher Mathematics • Scientific Research Methodology • Information technology in Construction • Business Foreign Language • Methods for Solving Scientific and Technical Problems in Building Industry • Basics of Pedagogy and Andragogy • Simulation of Industrial Heating Systems • Process Improvement and Optimization of Heat Supply Systems Parameters • Methods and Tools for Monitoring and Measuring of Thermal | <ul style="list-style-type: none"> Parameters • Ensuring Efficient and Reliable Operation of Heating Systems • Methods and Controls of Heating Systems Management • Design of Heating Systems and Accounting Systems of Power Supply Parameters • Design of Intelligent Control Systems of Heat Supply of Buildings and Complexes • Improving the Management Structure of a Generated Enterprise • Combined-Cycle Units in Heating Systems • Multi-Criteria Optimization of Operating Modes of Generating Companies • Improving Burners of Heat Generating Units • Modelling of Processes of Generation and Transport of Heat Energy |
|--|--|

MAIN TEACHING STAFF:

LEADING PROFESSORS IN THE SPHERE OF BUILDING INDUSTRY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops are equipped with a stationary audience multimedia equipment and computers connected to the Internet.

Laboratories are equipped with facilities for carrying out practical work on heating, ventilation, air conditioning and refrigeration, heat supply and microclimate parameters definition.

Computer classes are connected to the Internet and equipped with such specialized programs as Adobe Design Premium, AutoCAD, ArchiCAD, Microsoft Office, Garant.



TRAINING PLACES:

«Heat and Ventilation» Department of the Institute of Architecture and Construction of Samara State Technical University

Graduate Employability:

LLC «SPETSPROMSTROY»
LLC «Samara SKO»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- To develop the scientific school of the system analysis.
- To increase a publication activity through joint publications of staff and graduate students.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ENERGY EFFICIENCY OF SYSTEMS ENSURING MICROCLIMATE OF BUILDINGS AND STRUCTURES

FIELD OF STUDY

08.04.01 «CONSTRUCTION»

FULL NAME OF THE COURSE DIRECTOR

ALEKSEY G. SALOV

Professor of «Heat and Ventilation» Department, Associate Professor, Dr. of Technical Sciences

Length of Schooling:
2 YEARS AND 5 MONTHS
OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program goal is to acquire knowledge in the field of special disciplines that enable to carry out simulations of various thermal and hydraulic processes, assessing the effectiveness of climate systems.

The program is aimed at getting the skills to analyze the effectiveness of various software systems of microclimate, to study traditional and innovative technologies to ensure microclimate.

ENROLLMENT REQUIREMENTS:

Written examination
on the subject
«Building Industry»

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Higher Mathematics
- Scientific Research Methodology
- Information technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Building Industry
- Basics of Pedagogy and Andragogy
- Energy-Saving Systems to Ensure the Microclimate of Buildings and Structures
- Applied Mechanics of Liquid and Gas for Energy-Efficient Resource Systems
- Fundamentals of the Theory of Calculation of the Boundary Layer
- Analytical and Numerical Methods for Solving Problems of Fluid Dynamics and Heat and Mass Transfer
- Theory and Technique of Heating Experiment
- Methods and Tools of Management in Systems Ensuring Microclimate of Buildings and Structures
- Fundamentals of Modeling of Turbulent Transport and Turbulence Measurements
- Designing Energy-Efficient and Resource-Saving Air-Conditioning and Cooling Systems
- Designing Energy-Efficient and Resource-Saving Ventilation Systems
- Fundamentals of the Theory of Similarity
- Optimization of Heat and Mass Transfer Processes in Systems Ensuring Microclimate of Buildings and Structures
- Management of Intensity of the Heat Transfer and Friction Resistance in Systems Ensuring for Microclimate of Buildings and Structures
- Modelling of heat and Mass Transfer and Fluid Dynamics Processes

MAIN TEACHING STAFF:

LEADING PROFESSORS IN THE SPHERE OF BUILDING INDUSTRY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Classrooms for lectures and workshops are equipped with a stationary audience multimedia equipment and laptops connected to the Internet.

Laboratories are equipped with facilities for carrying out practical work on heating, ventilation, air conditioning and refrigeration, heat supply and microclimate parameters definition.

Computer classes are connected to the Internet and equipped with such specialized programs as Adobe Design Premium, AutoCAD, ArchiCAD, Microsoft Office, Garant.



TRAINING PLACES:

Design and construction company «Consol»

LLC «Gazprom Transgaz Samara»

«Heat and Ventilation» Department of the Institute of Architecture and Construction of Samara State Technical University

Graduate Employability:

Design and construction company «Consol»
LLC «Gazprom Transgaz Samara»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- To develop the scientific school of numerical study of a microclimate ensuring systems.
- To increase a publication activity through joint publications of staff and graduate students.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

RIVER AND UNDERGROUND HYDRAULIC FACILITIES

FIELD OF STUDY

08.04.02 «TECHNOSPHERE SAFETY»

FULL NAME OF THE COURSE DIRECTOR

MIKHAIL I. BALZANNIKOV

Director of ACEI SSTU, Vice-Rector of Architectural and Construction Education, Professor, Doctor of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 5 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Goal of the program is formation of an appropriate level of Master preparation to solve professional problems.

The program aim is forming general cultural and professional competences on design, construction and operation of river and underground hydraulic facilities according to Masters' curriculum.

Area of professional activity of graduates includes design, construction, operation, monitoring, and reconstruction of river and underground hydraulic facilities and transport infrastructure; engineering surveys for the construction of river and underground hydraulic facilities; carrying out scientific research.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Philosophical Problems of Science and Technology
- Mathematical Modeling
- Special Sections of Advanced Mathematics
- Scientific Research Methodology
- Information Technology in Construction
- Business Foreign Language
- Methods for Solving Scientific and Technical Problems in Construction
- Basics of Pedagogy and Andragogy
- Experiment Planning
- Scientific Problems of Construction Economics
- Hydrosphere Ecology
- Use of Renewable Energy Sources
- Hydraulic Facilities Safety
- Environmental Hydraulic Facilities
- Modern Problems in Construction Science, Engineering and Technology
- City Hydropower Facilities
- Underground Hydraulic Facilities

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ENGINEERING SYSTEMS AND ENVIRONMENTAL CONSTRUCTION WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with multimedia stuff.

Hydraulic Engineering Laboratory, Laboratory for Civil Defense and Life Safety equipped with the necessary equipment make it possible to carry out a wide range of research.

Computer classes have Internet access. All computers are equipped with the latest software (MS Office, AutoCad, Mathcad).

TRAINING PLACES:

The leading hydraulic organizations and enterprises of the Samara Region like LLC «Samara Municipal Systems», OJSC «RusHydro» - «Zhigulevsk hydroelectric power station» and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- The John Paul II Catholic University of Lublin (Poland, Stalowa Wola)
- Tashkent State Technical University (Uzbekistan, Tashkent)
- Michelli University of Applied Sciences (Finland, Michelli)



Graduate Employability:

The leading hydraulic organizations and enterprises of the Samara Region like LLC «Samara Municipal Systems», OJSC «RusHydro» - «Zhigulevsk hydroelectric power station» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Collection and systematization of information and initial data for hydraulic engineering objects designing; calculation and design of parts and assemblies using standard tools; preparation of design and working technical documentation, design of complete development work of hydraulic engineering facilities.
- Organization of metrological support of technological processes,

use of quality control standard methods of construction hydraulic engineering projects.

- Study and analysis of scientific and technical information, national and international experience; participation in experiments on the set procedures, making descriptions of taken research and systematization of results.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

COMPUTER SCIENCE AND ENGINEERING

FIELD OF STUDY

09.04.01 «COMPUTER SCIENCE AND ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

SERGEY P. ORLOV

Head of «Computer Engineering» Department, Professor, Dr. of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program objective is to develop knowledge and skills in the following professional fields: theoretical and experimental study of problems and the solution of problems in the development of hardware and software of computer networks and systems, automated data processing and control systems.

The program is aimed at training for professional and research activities.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Computer systems
- Programming Technology
- Methodology of Scientific Research
- Technology of Multi-Service Networks
- Theoretical Computer Science
- Theory of Design (Systems Analysis and Engineering Requirements)
- Computer-Aided Design of Parallel Programs
- Intelligent Systems and Knowledge Bases
- Foreign Language
- Analysis Systems of Space Sensing Data
- Image Recognition Systems
- Mathematical Models of Computer Systems
- Design Systems in FPGA, FPAA and FPGA
- Data Processing System-on-Chip
- Reliability of Distributed Computing Systems
- Computer Multimedia Technology

MAIN TEACHING STAFF:

LEADING PROFESSORS OF INFORMATICS
WITH PHD DEGREES OR DOCTOR OF
SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Three computer labs with PCs;
Computing cluster of Samara State Technical University;
Lecture halls with multimedia support

TRAINING PLACES:

CJSC «Open Source»,
CJSC «Infotrans»,
JSC «Giprovostokneft»

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

• West Kazakhstan Engineering-Technological Institute



Graduate Employability:

CJSC «Open Source»
CJSC «Infotrans»
JSC «RCC» Progress

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Preparation for supercomputer technologies.
- Software design and hardware of mobile devices and applications.
- Invitation of leading Russian and foreign scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building
Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INFORMATION SYSTEMS AND TECHNOLOGY

FIELD OF STUDY

09.04.02 «INFORMATION SYSTEMS AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

SEMEN A. PIYAVSKII

Head of «Information Develop Educational Systems and Technologies» Department, Professor, Doctor of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Objective: To prepare graduates for an academic Master's program focused on research and innovation activity in a wide range of areas, including, first of all, science, technology, education, administration, management.

The program aim is forming competences that enable students to professionally carry out research, development and implementation of information systems and technologies.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|--|
| <ul style="list-style-type: none">• Logic and Methodology of Science• Optimal Control Theory• Neural Networks Theory• Research and Modeling Methods of Information Processes and Technologies• Quality Evaluation and Information Systems Projects Control• Information Systems Design• Methodological Foundations of Information Technologies• Logic of Educational Systems Development in Information Society• Logic of Social Processes and Movements in Information | <ul style="list-style-type: none">Society• Scientific Work Methodology• Information Systems in Banking• Administrative Information Systems• Perspective Information Technologies• Logic of Technical Systems Development in Information Society• Logic of Economic Processes in Information Society• Intelligent Systems• Statistical Processing Information Technologies• Business Processes Designing |
|---|--|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF INFORMATION SYSTEMS AND TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.

Computer class for practical training equipped with computers connected to the Internet.

The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

The leading IT companies of the Russian Federation like LLC «Vebzavod»,

Consortium «Integra-S» and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- State University of New York at Binghamton (USA)
- University of Manchester (England)
- Central Lancashire University (England)
- Polytechnic University, Rzeszów (Poland)



Graduate Employability:

The leading IT companies of the Russian Federation like LLC «Vebzavod», Consortium «Integra-S» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Organization of academic exchange with leading universities in Russia and abroad.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INSTRUMENT ENGINEERING

FIELD OF STUDY

12.04.01 «INSTRUMENT ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR S. MELENTIEV

Head of «Information and Instrumentation Technology» Department, Professor, Dr. of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Focusing on research and innovation in a wide range of areas, including science, technology, education, and administration.

The program aims to develop professional competencies in the production and use of equipment and systems for receiving, recording and processing information about the environment, technical and biological objects.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- History and Methodology of Instrument Engineering Information Technology in Instrument Engineering Mathematical Modeling in Instrument Systems
- Modern Problems of Science and Instrument Engineering
- Foreign Language
- Measurement and Information Systems
- Intelligent Measuring Tools
- Experiment and Test Automation
- CAD Basics of Measuring Instruments
- Metrological Assurance of Measuring Instruments
- Modern Microcircuitry
- Latest Technology in Instrument Engineering
- Modern Electric Drives in Instrument Engineering
- Modern Electric Cars
- Fundamentals of Reliability Theory
- Optimization of Instrument Designs
- Information Devices of Robotic Systems
- Measuring Robotic Systems

MAIN TEACHING STAFF:

LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

MSc students perform laboratory work cycles on the following disciplines:

- Automation of Experiments and Tests;
- Intelligent Measuring Tools;
- Information-Measuring Systems;
- Information Technology in Instrument Engineering.

Laboratory work on the discipline «Automation of Experiments and Tests» and «Information-Measuring Systems» is carried out in a specialized laboratory which is equipped with a model of automated information and measuring and control systems for the measurement of ocean water parameter, power, acoustic studies, process control systems in manufacturing, etc.

All the laboratories are equipped with modern computer equipment, including both conventional and specialized computers, as well as measuring equipment made by leading domestic and foreign companies. All PCs are connected to the Internet and to the local data-processing net.

The department operates a training center Mitsubishi Electric.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Mitsubishi Electric

TRAINING PLACES:

- LLC «Research and Production Center» PALS «
- Institute for Control of Complex Systems of the Russian Academy of Sciences;
- Ltd. «Metrology and Automation»;
- LLC «Alliance Group»



Graduate Employability:

JSC «RCC» Progress»
Ltd. «Metrology and Automation»
LLC «Research and Production Center» PALS

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading universities in the country, including the Federal State Budget Institution of Science «Institute of Structural Macrokinetics and Problems of Materials of the

Russian Academy of Sciences».

- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

DEVICES AND METHODS OF MEASUREMENT AND CONTROL OF PROCESS PARAMETERS OF HYDROCARBONS PIPELINE

FIELD OF STUDY

12.04.01 «INSTRUMENT ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR S. MELENTIEV

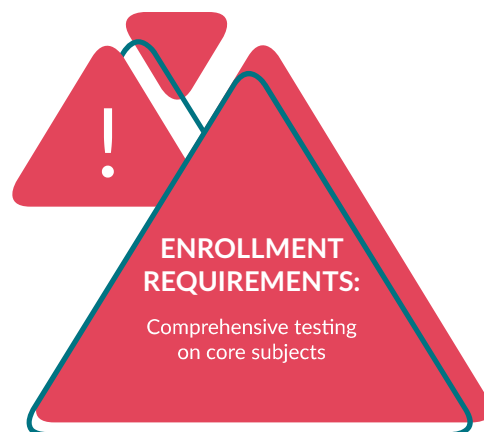
Head of «Information and Instrumentation Technology» Department, Professor, Dr. of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

To train highly qualified specialists in the field of oil and gas business who are capable of creating new techniques and methods of diagnostics equipment, of programming microcontrollers, designing instrumentation for the measurement of physical quantities (pressure, temperature, flow rate, chemical composition, etc.) of hydrocarbon parameters, of implementing process control at all stages of production, of taking effective decisions on resource maintenance of the equipment, of problematic issues decision making for the detection and identification of defects in the structure and chemical composition of materials of construction that may lead to a reduction in quality parameters of specified hydrocarbon pipeline facilities.

The program aims to develop professional competences in the field of nondestructive testing and diagnostics of hydrocarbons pipeline equipment.



LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling in Instrument Systems
- Methods for Measuring the Basic Technological Parameters of Oil and Gas Fields
- Information Technology in Instrument Engineering
- Technology of Non-Destructive Testing of Oil and Gas Fields
- Physical Methods to Control Oil and Gas Fields
- CAD Basics of Measuring Instruments
- Automation of Technological Processes of Oil and Gas Fields
- Intelligent Sensors
- Technological Reliability of Pipelines
- Processes Pipeline Transport
- Application Software
- Computer Collection and Processing of the Measuring Information in the Oil and Gas Industry
- Industrial Safety of Pipeline Systems
- Assessment and Analysis of Risks
- Fundamentals of Reliability Theory
- Optimization of Instrument Designs
- Detection and Filtering Signals in Non-Destructive Testing
- Methods of Technical Diagnostics
- Modern Microcircuitry
- Modern Electric Drives
- Measurement and Control of Technological Processes of Oil and Gas Fields
- Measurement and Control of Physical Quantities

MAIN TEACHING STAFF:

LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

Lecture halls are equipped with multimedia equipment. The department operates a training center Mitsubishi Electric, 10 laboratories, a computer centre of the Automation and Information Technology Faculty, a classroom for diploma projects and research activities.

TRAINING PLACES:

- JSC «RCC» Progress
- LLC «SamaraNIPIneft»
- LLC «Gazprom Transgaz Samara»
- JSC «Research and Production Center PALS»
- «Transneft-Privolga».

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Mitsubishi Electric

**Graduate Employability:**

JSC «RCC» Progress
Ltd. «Metrology and Automation»
LLC «Research and Production Center» PALS as well as the leading oil and gas plants and factories of the Russian Federation.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Control of the pipeline system of hydrocarbon products; search systems for the hydrocarbons fields in the world's oceans; system of non-destructive testing products (speakers);

automated signal processing systems of analyzers of composition and properties of substances.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

THERMAL ENGINEERING AND HEAT TECHNOLOGY

FIELD OF STUDY

13.04.01 «THERMAL ENGINEERING AND HEAT TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

MIKHAIL Y. LIVSHITS

Head of «Management and Systems Analysis of Thermal Power and Socio-Technical Systems» Department, Professor, Dr. of Technical Sciences

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program is aimed at training students for professional scientific and research activities in the field of power engineering and heat engineering.

The fields of the graduates' professional activities are:

thermal and nuclear power plants, energy supply system enterprises, objects of small power; units, systems and complexes of high-and low-temperature heat technologies; steam and hot water boilers for different purposes; reactors and steam generators of nuclear power plants; steam and gas turbines, gas-fired engines (engines of internal and external combustion); power units and combined-cycle gas tur-

bine plants; installations for the production of compressed and liquefied gases; compressor, refrigeration units; installation of air conditioning systems; heat pumps; chemical reactors, fuel cells, electrochemical power plant; units of hydrogen energy; auxiliary heat equipment; heat and mass transfer devices for different purposes; thermal and electrical network; air conditioning units of coolants; technological liquids, gases and vapors, melts, solids and granular bodies as coolants and working bodies of power and thermal technological systems; fuel and oil; specifications and technical documentation and standardization systems; diagnostic systems and automated process control in power and thermal engineering.

LIST OF ACADEMIC DISCIPLINES:

- Modern Problems of Power Engineering, Heat Engineering and Heat Technologies
- Identification and Adaptation of the Control of Technological Processes of Thermal Diffusion of Thermal Physics
- Mathematical Modeling of Energy Processes and Systems
- Renewable Energy Resources
- Hydrodynamics and Heat Transfer in Liquids
- Equations of Mathematical Physics in Thermal Conductivity and Elasticity
- Production of Heat and Electricity at Thermal Power Stations
- Combined-Cycle and Gas Turbine Power Plants
- Basics of Effective Investment in Energy
- Computational Methods and Computer Technologies in Management of Thermal Engineering Systems
- Advanced Technologies and Innovations in Thermal Engineering
- Environmental Issues of Heat Energy Production and Use
- Problems of Energy and Resources in Thermal Engineering and Heat Technology
- Modern Methods of Calculation and Design of Thermal Power Plants
- Heat Balance Calculation of Thermal Power Plants
- Modern Technologies of Water and Fuel Treatment at Thermal Power Stations
- Water-Chemical Regimes of Power Plants
- Special Issues of Burning Gas
- Technical Methods of Burning Gas
- Structural Modeling and Management of Heating Systems with Distributed Parameters
- Dynamic Optimization of Thermal Power Facilities and Systems

MAIN TEACHING STAFF:

LEADING PROFESSORS OF HEAT POWER ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- The department operates the following laboratories:
- Technical means of automation and process control systems, Technical measurement and metrology, Boilers and Gas Flaring Technique, Heat engines and blowers, Hydraulics, Heat and Mass Transfer, Thermodynamics, Steam turbines and gas turbines.
- There is a specialized computer class.

TRAINING PLACES:

- The leading heat power and oil and gas plants and factories of the Russian Federation like JSC «Kuibyshev Refinery»
- JSC «Novokuibyshevsk Refinery»,
- Volzhskaya Territorial Generation Company» (Samara) and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hannover (Germany)
- University of Padua (Italy)



Graduate Employability:

The leading heat power and oil and gas plants and factories of the Russian Federation like Mosenergo, PJSC «Gazprom», Rosneft, PJSC «LUKOIL», JSC «Transneft» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading universities in the country, including National Research «Bauman Moscow State Technical University».
- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.
- Internship of MSc students at the University of Hannover (Germany) are to be organized.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

OPTIMIZATION OF POWER SUPPLY SYSTEMS AND IMPROVING THEIR EFFICIENCY

FIELD OF STUDY

13.04.02 «ELECTRICAL ENGINEERING AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR I. POLISHCHUK

Head of «Electric Power Supply of Industrial Enterprises» Department, Professor, Dr. of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The fields of the graduates' professional activities are:

electrical substation; power systems and networks; urban, industrial and agriculture power systems; design and diagnostics, protection against lightning and surge means of ensuring electromagnetic compatibility of equipment, high-voltage electrical technology; projects in the power industry.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Humanitarian Aspects of Professional Activity
- Scientific Discourse
- Planning and Processing of Experimental Research Data in Electrical Engineering and Technology
- Modern Technologies in Electrical Engineering and Technology
- Energy and Resource Saving in Electrical Engineering and Technology
- Modern Problems of Electrical Engineering and Technology Sciences
- Algorithms of Automated Calculation of Electric Power Supply Systems
- Special Issues of Electric Power Supply
- Innovation Workshop (Design Workshop)
- Bases of Commercialization of Technological Achievements
- Trends in Electrical Equipment Development in Energy Sector
- Maintenance and Repairing of Electrical Systems
- Installation and Maintenance of Electrical Installations
- Optimizing Structure and Parameters of Electric Power Supply Systems
- Advanced Technologies in Electric Power Industry
- Electric Power Quality in Electric Power Systems
- Energy Audit
- Microprocessor-Based Protection in Electric Power Systems
- Relay Protection and Automation of Electric Power Systems
- Diagnosis of Electric Power Supply Systems
- Installation and Adjustment of Electric Power Supply Systems
- Energy Savings in Electric Power Supply Systems
- Information Systems in Electric Power Industry
- Dispatching Control in Electric Power Supply Systems
- Modes of Operation Analysis of Electric Power Supply Systems
- Modes of Operation Optimization of Electric Power Supply Systems
- Optimization of Structure of Electric Power Supply Systems

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- The Department operates the following laboratories:
- «Samara State Technical University - Elektroshchit», «Samara State Technical University - Schneider Electric»,
- «Power» and «Educational engineering» equipped with the specialized stands and modular units.
- There is a computer class for practical training with the high-speed Internet connection.

TRAINING PLACES:

- LLC «Gazprom Transgaz Samara»
- JSC «Samaraneftehim project»
- JSC «Samaraneftegaz»
- Branch of JSC «RusHydro»
- Zhigulevsk hydroelectric power station
- TransneftPrivolga
- Samara Thermal Power Plant and others

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hannover (Germany)
- University of Padua (Italy)
- Ltd. «Inductoheat» (USA)



Graduate Employability:

The leading electrical power plants and industrial enterprises of the Russian Federation like Elektroshchit, Samara electrical design, JSC «Project-electro», AvtoVAZ, Samaraenergo, LLC «Gazprom Transgaz Samara», JSC «RCC» Progress», «Samaraneftegaz», JSC «TransneftPrivolga» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading Russian universities.
- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

RELAY PROTECTION, AUTOMATION AND CONTROL OF ELECTRIC POWER SYSTEMS MODES

FIELD OF STUDY

13.04.02 «ELECTRICAL ENGINEERING AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

ALEKSANDER S. VEDERNIKOV

Dean of Electrical Engineering Faculty, Associate Professor, PhD

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program objective is to develop the community of future professionals who are able to ensure the reliability of electrical enterprises and their sustainable development through continuous innovation.

Seminars, trainings, research work and practical workshops are held with the participation of representatives of electrical companies that allows the students to obtain unique theoretical and practical knowledge and skills.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|---|
| <ul style="list-style-type: none"> • Planning and Processing of Experimental Research Data in Electrical Engineering and Technology • Modern Technologies in Electrical Engineering and Technology • Energy and Resource Saving in Electrical Engineering and Technology • Modern Problems of Electrical Engineering and Technology Sciences • Electromagnetic Compatibility in Electric Power Systems • Stability of Electric Power Systems • Innovation Workshop (Design Workshop) • Bases of Commercialization of Technological Achievements • Main Electrical Equipment of Electrical Systems and Networks • Digital Launchers and Measuring Elements of Relay Protection • Control of Frequency, Active Power Flows and Voltage in Electric Power Systems • Disturbance Control of Electric Power Systems • Technology Workshop on Analysis and Planning of Electric Modes of | <ul style="list-style-type: none"> Electric Power Systems • Methods and Tools of Electric Power Quality Management • Automatic Emergency Response Mode Control in Electric Power Systems • Reliability of Relay protection and Automation Devices • Optimization of Modes of Electric Power Systems Elements of Active-Adaptive Electrical Grid • Dispatching Control in Electric Power Supply Systems • Sources and Schemes of Control Current of Electric Power Stations and Substations • Calculation of Asymmetrical Short-Circuits in Electric Power Systems • Elimination of Accidents in Electric Power Systems Preventing Violations of the Normal Operation of Electric Power Systems • Devices of Remote Indication and Telemetry • Planning of Electric Power Modes of Electric Power Systems • Microprocessor-Based Relay Protection and Automation |
|---|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- The Department operates the following laboratories:
- Relay protection and automation
- Electrical stations and substations
- Power Systems Automation
- The laboratory of microprocessor relay protection,
- Transients in power systems and others.

TRAINING PLACES:

- The leading electrical power plants and industrial enterprises of the Russian Federation like JSC «System Operator of Unified Energy System»,
- PJSC «Federal Grid Company of Unified Energy System»,
- PJSC «Interregional Distribution Grid Company of Volga»,
- PJSC «T Plus», PJSC «Federal Hydro Company - RusHydro»,
- CJSC «Group» Elektroschit «companies - TM Samara».

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Russian National Committee of International Council on Large Electric Systems
- Schneider Electric



Graduate Employability:

The leading electrical power plants and industrial enterprises of the Russian Federation like JSC «System Operator of Unified Energy System», PJSC «Federal Grid Company of Unified Energy System», PJSC «Interregional Distribution Grid Company of Volga», PJSC «T Plus», PJSC «Federal Hydro Company - RusHydro», CJSC «Group» Elektroschit «companies - TM Samara».

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Due to the reform of electric power industry and the transition to market relations, the value of planning and operational management of power systems has increased significantly. The electricity sector companies are facing technical and economic challenges to answer which highly skilled professionals are required. The MSc's graduates are specialists in the field of relay protection and emergency control and of dispatching control in the electric power industry who are able to provide enterprises work without downtime and economic loss.
- When training the students of the program 13.04.02 «Electrical Engineering and Technology» it is planned to introduce a model of practice-oriented engineering training, including project modules. The launch of modular educational programs for team performance of the educational projects of increasing complexity in the ideology of the Global Initiative for modernization of engineering education CDIO (think – design – implement – exploit) will produce professionals with a unique engineering thinking who are ready to work as a team.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ELECTRICAL ENGINEERING

FIELD OF STUDY

13.04.02 «ELECTRICAL ENGINEERING AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

LEV S. ZIMIN

Dr. of Technical Sciences, Professor of «Power Supply of Industrial Enterprises» Department

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to prepare graduates with the following fields of professional activity: electrical machines, power converter, electromechanical complexes and systems, including their management and regulation; electrical and electronic devices, systems of electromechanical and electronic devices, automatic devices and flows of energy management systems; electric drive and automation of machinery and process systems in various sectors of the economy; electrotechnological installations and processes, installations and electrical heating devices.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- English for Specific Purposes
- Humanitarian Aspects of Professional Activity
- Scientific Discourse
- Planning and Processing of Experimental Research Data in Electrical Engineering and Technology
- Modern Technologies in Electrical Engineering and Technology
- Energy and Resource Saving in Electrical Engineering and Technology
- Modern Problems of Electrical Engineering and Technology Sciences
- Programmable Logic Controllers and Network Technology
- Methods of Making Engineering Solutions in Design and Management
- Innovation Workshop (Design Workshop)
- Bases of Commercialization of Technological Achievements
- Expert Systems in Creation and Operation of Electrical and Electromechanical Transducers
- Methods of Electrotechnological Systems Analysis and Methods of Electrical Systems and Electrotechnological Installations Calculation
- Electrothermal Processes and Installations
- Optimization of Modes of Electrical and Electromagnetic Transducers
- Technological Diagnostics of Electrotechnical Systems Electrotechnical and Electrotechnological Automatio Complexes
- Algorithmic and Optimization of Electrotechnological Processes and Complexes
- Microcontroller Control Systems
- Multiconnected Systems of Automation Control
- Electric Drive in Energy Efficient Technologies
- Automatic Electric Drive
- Methods of Management Object Identification Additional Chapters of Mathematics
- New Management Technologies of Electromechanical Transducers Based on Power Electronics
- Modern Intelligent Information Systems and Electrical Automobile Systems
- Optimal Control of Electrothermal Installations and Systems
- Electrotechnological CAD Systems

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

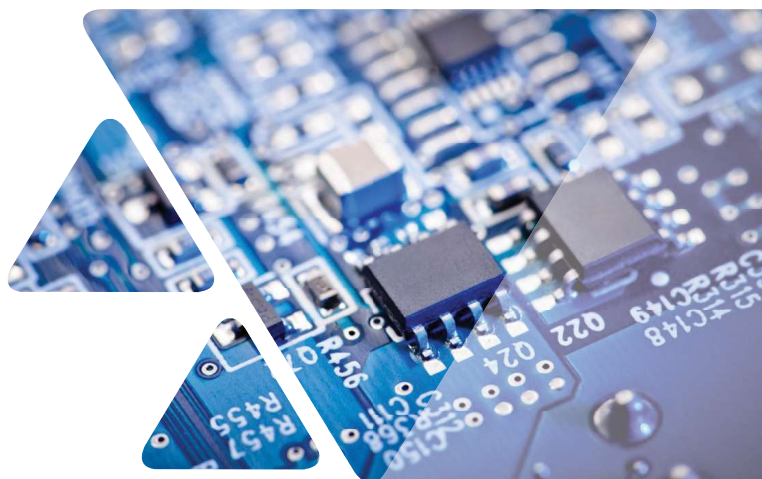
- Lecturing is done using slide presentations, e-learning lectures. Laboratories are equipped with installations «Experimental determination of dynamic characteristics of a resistance furnace», «Determination of the induction heater batch transfer function from the experimental transfer function», «Study of automatic control systems of induction heater».
- There are also laboratories «Electrical machines», «Microprocessor-based relay protection and automation devices», «High Voltage Equipment».

TRAINING PLACES:

- The leading electrical power plants and industrial enterprises of the Russian Federation:
- Elektroshchit
- Samara electrical design
- JSC «Project-electro»
- AvtoVAZ, Samaraenergo
- LLC «Gazprom Transgaz Samara»
- JSC «RCC» Progress «
- Samaraneftgaz
- JSC «TransneftPrivolga»

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hannover (Germany)
- University of Padua (Italy)
- Ltd. «Inductoheat» (USA)



Graduate Employability:

The leading electrical power plants and industrial enterprises of the Russian Federation:
Elektroshchit, Samara electrical design,
JSC «Project-electro»
«AvtoVAZ», «Samaraenergo»
LLC «Gazprom Transgaz Samara»
JSC «RCC» Progress
Samaraneftgaz
JSC «TransneftPrivolga»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading Russian universities.
- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ELECTRICAL POWER ENGINEERING

FIELD OF STUDY

13.04.02 «ELECTRICAL ENGINEERING AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR I. POLISHCHUK

Head of «Electric Power Supply of Industrial Enterprises» Department, Professor, Dr. of Technical Sciences

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The fields of the graduates' professional activities are:

electrical substation; power systems and networks; urban, industrial and agriculture power systems; design and diagnostics, protection against lightning and surges means of ensuring electromagnetic compatibility of equipment, high-voltage electrical technology; projects in the power industry, high electro technology, relay protection and automation of power systems.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|--|
| <ul style="list-style-type: none">• Professional Foreign Language• Humanitarian Aspects of Professional Activity• Scientific Discourse• Planning and Processing of Experimental Research Data in Electrical Engineering and Technology• Modern Technologies in Electrical Engineering and Technology• Energy and Resource Saving in Electrical Engineering and Technology• Modern Problems of Electrical Engineering and Technology Sciences• Electric Power Modes of Power Plants and Systems• Automated Control Systems in the Electric Power Industry• Innovation Workshop (design workshop)• Bases of Commercialization of Technological Achievements• Electromagnetic Compatibility in Electric Power Industry and Electrical Engineering• Trends in the Development of Electrical Equipment in the Energy Sector• Calculations of Steady and Transient Modes of Electric Power Supply | <ul style="list-style-type: none">• Systems• Models and Methods in Calculation of Power Supply Systems• Automatic Control of Power Supply Systems• Advanced Technologies in the Power Industry• Stability of Electric Power Systems• Microprocessor-based Relay Protection and Automation• Automated Control Systems and Dispatching in the Electric Power Industry and Electrical Engineering• Diagnostics of Technical Condition of Electrical Equipment• Risk Assessment in Electricity Industry• Modes of Operation of Electric Power Stations and Substations Equipment• Information Systems in Power Industry• Frequency and Voltage Regulation in Electric Power Systems• Smart Grid Technologies• Optimization of Modes of Power Supply Systems• Optimization of Structure of Power Supply Systems |
|--|--|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

The Department operates the following laboratories:

- «Samara State Technical University - Elektroshchit», «Samara
- State Technical University - Schneider Electric»,
- «Electricity», «Electrical machines»,
- «Microprocessor-based relay protection and automation devices», «High Voltage Equipment».

TRAINING PLACES:

- LLC «GazpromTransgaz Samara»
- JSC «Samaraneftehimproject»
- JSC «Samaraneftegaz»
- Branch of JSC «RusHydro»
- Zhigulevskhydroelectric power station
- TransneftPrivolga
- Samara Thermal Power Plant and others

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hannover (Germany)
- University of Padua (Italy)
- Ltd. «Inductoheat» (USA)

**Graduate Employability:**

The leading electrical power plants and industrial enterprises of the Russian Federation like Elektroshchit, Samara electrical design, JSC «Project-electro», AvtoVAZ, Samaraenergo, LLC «Gazprom Transgaz Samara», JSC «RCC» Progress, Samaraneftegaz and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading Russian universities. It is planned to

invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

MODERN TECHNOLOGIES IN ELECTRICAL ENGINEERING AND AUTOMATED ELECTRIC DRIVE

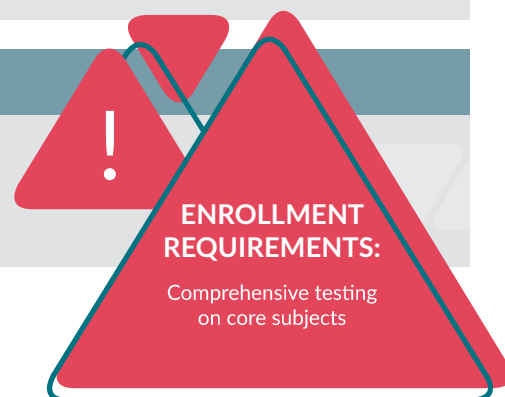
FIELD OF STUDY

13.04.02 «ELECTRICAL ENGINEERING AND TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

YURY A. MAKARICHEV

Head of «Electromechanics and Automobile Electric Equipment»
Department, Associate Professor, Dr. of Technical Sciences



Length of Schooling:
2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program is aimed at training professionals of research and design activity in the field of electrical engineering and automated electric.

The program objective is to prepare graduates who are able to:

- carry out research independently;
- assess risk and determine the security measures of new technologies;
- search for sources of patent information, determine the purity of the patent technology of objects, prepare the primary materials for patenting inventions and register programs at electronic databases;
- carry out the examination of the proposed design solutions and new

technological solutions;

- formulate the terms of reference, develop and use automation tools for the design and technological preparation of production;
- apply the methods of analysis of options and search for compromise solutions;
- apply the methods of creating and analyzing models to predict the properties and behavior of objects;
- manage the project development facilities;
- carry out feasibility study projects.

LIST OF ACADEMIC DISCIPLINES:

- Methods of Technical Decisions in Design and Management Tasks
- Information Technology in Electrical Engineering and Electric Drive
- Technical Foreign Language
- Automation of Experimental Research Data Processing
- Economics and Organization of Innovative Production of Electrical Equipment
- Quality Management Systems in Industry and Education
- Automatic Electric Drive in Energy-Saving Technologies
- Optimization of Operation Modes of Electrical and Electromagnetic Transducers
- Identification Methods of Objects of Management
- Expert Systems in the Creation and Operation of Electrical and Electromechanical Transducers
- Programmable Logic Controllers and Network Technology
- Modern Problems of Electrical and Electromechanical Transducers
- Calculation Models and Methods of Electromechanical Systems
- Optimal Design in Electrical Engineering and Electric Drive
- Electrical and Technological Automated Systems
- Mathematical Modeling of Electromechanical Systems Elements
- Special Chapters of Mathematics
- Electric Drive for Energy Efficient Technologies
- Automatic Electric Drive
- Microcontroller Control Systems
- Multivariable Systems of Automatic Control
- New Technologies of Control of Electromechanical Transducers Based on Power Semiconductor Technology
- Modern Information and Management Systems
- in Motor Vehicles
- Computer Technology Research of Electrical and Electromechanical Transducers
- Electromechanical Converters of Standard Production Machinery and Technological Complexes

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- The department operates three laboratories:
- Electrical machines, Electrical and electronic devices
- and Special electric machines of automatic devices.
- There is a specialized computer class.

TRAINING PLACES:

- Gazprom,
- Rosneft»,
- PJSC «LUKOIL»,
- JSC «Elektroshchit-Schneider-Electric»,
- JSC «Russian transformer»,
- JSC «Transneft»,
- JSC «RCC Progress»,
- JSC «Aviacor - Aviation Plant» and other leading Russian enterprises.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Russian National Committee of International Council on Large Electric Systems
- Schneider Electric



Graduate Employability:

«Gazprom»
«Rosneft»
PJSC «LUKOIL»
JSC «Elektroshchit-Schneider-Electric»
JSC «Russian transformer»
JSC «Transneft»
JSC «RCC Progress»
JSC «Aviacor - Aviation Plant»
and other leading Russian enterprises.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver

lectures and to organize internships of MSc students at the leading universities of Russia.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ELECTROTHERMAL PROCESSES AND COMPLEXES WITH POWERSUPPLY AND CONTROL SYSTEMS

FIELD OF STUDY

13.04.02 «POWER AND ELECTRICAL ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

LEV S. ZIMIN

Dr. of Technical Sciences, Professor of «Power Supply of Industrial Enterprises» Department

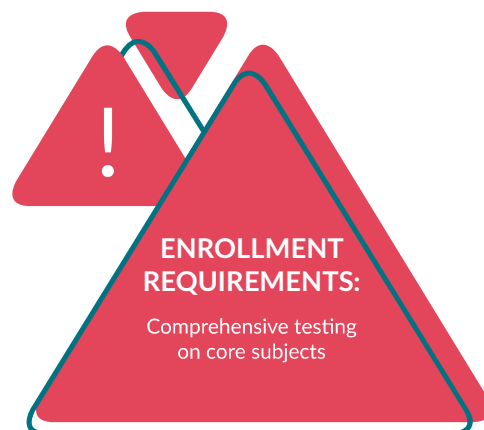
Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to produce graduates of professional activity with the following objectives:

- electric drive and automation of technological complexes and mechanisms in various sectors of the economy;
- electrotechnological complexes and processes, electrical heating devices and complexes;
- regulatory and technical documentation and standardization systems;
- methods and power quality control devices, electrical products industry, electro-technological complexes and systems.

The program aims to train human resources for professional research, design and engineering works, associated with a set of technical tools, techniques and methods of human activity for conversion, application of electric energy, development and manufacturing of elements, devices and systems that implement these processes.



LIST OF ACADEMIC DISCIPLINES:

- Automated Systems of Experimental Research Data Design and Processing,
- Economics and Organization of Innovative Electrical Equipment Production,
- Modern Design and Construction Techniques in Power and Electrical Engineering,
- Special Professional Units Research and Modeling,
- Basics of Systems with Distributed Parameters Theory,
- Mathematical Models of Electro-Technological Processes,
- Automated Electrotechnological Complexes and Systems,
- Algorithmic and Optimization of Electro-Technological Processes and Complexes,
- Processes and Complexes of Induction Heating,
- Electrical Heating and Melting Furnaces,
- Energy Saving In Electro-Technological Complexes,
- Structural Modeling of Objects With Distributed Parameters,
- Methods of Electro-Technological Systems Analysis,
- Optimal Control of Electrothermal Processes,
- Microprocessor Devices in Electrothermal Control Systems Complexes,
- Power Supply of Electrothermal Units,
- Electrothermal Processes and Complexes Control Systems,
- Technological Diagnosis of Electrotechnological Systems,
- Methods of The Experiment Planning and Processing,
- Switchgear and Electric Networks of High Frequency Systems,
- High-Voltage Equipment of Operational and Technical Communication Center,
- Evaluation of Mathematical Models of Electrothermal Processes Accuracy and Reliability,
- Methodology and Technology of Scientific Experiment

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ELECTRICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Four laboratories equipped with workbenches; two ICT-rooms equipped with specialized software like Multisim-10 and Concept (Unity-PRO), classrooms equipped with presentation equipment (projector, screen, whiteboard).

TRAINING PLACES:

- JSC «Samara Distribution Networks»;
- OJSC «Gazprom»,
- Oil Company «Rosneft»,
- JSC «Transneft»,
- JSC «Progress»,
- JSC «Avtovaz»,
- OJSC «Samara Research and Technical Center Kuznetsov»

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hanover, Germany
- University of Padua, Italy



Graduate Employability:

JSC «Samara Distribution Networks»; OJSC «Gazprom», Oil Company «Rosneft», JSC «Transneft», JSC «Progress», JSC «Avtovaz», OJSC «Samara Research and Technical Center Kuznetsov», CJSC «Elektroschit»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Moscow Power Engineering Institute and Bauman Moscow State Technical University is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION

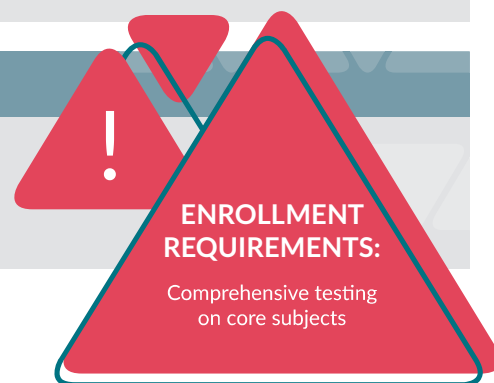
FIELD OF STUDY

15.04.04 «AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION»

FULL NAME OF THE COURSE DIRECTOR

NIKOLAY G. GUBANOV

Head of «Automation and Control of Technological Processes»
Department, Associate Professor, PhD



Length of Schooling:
2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program is aimed at training the students for professional scientific and research activities in the field of automation of technological processes and production.

The programme objective is to train the specialists whose fields of professional activities are:

- Preparation of specifications for the modernization and automation of existing production and technological processes;
- Development of new automated technologies, tools and systems, including life-cycle management production and its quality;
- Conducting patent research in order to ensure the purity of the patent and patentability of new design solutions;
- Design architectural software systems of automated and automatic control systems, diagnostics and testing of common and special purpose for different sectors of the national economy;
- Development of preliminary, technical and working projects,

management of the product lifecycle and its quality with the use of modern design automation, domestic and foreign experience, development of competitive products;

- Carrying out technical calculations for projects, feasibility and functional cost effectiveness analysis;
- Assessment of the innovative potential of the project; development of methodological and regulatory documents based on the current standards;
- Assessment of the risks of commercialization of innovative projects;
- Industrial and technological activities: modernization and automation of existing and design of new automated production and technological processes using automated technological preparation of production systems;
- Development and practical implementation of funds and control automation systems.

LIST OF ACADEMIC DISCIPLINES:

- Computer Technology in the Field of Automation and Control
- Modern Problems of Automation and Control
- Software of Design Calculation of Automation Reliability
- Technical and Information Support of Control Systems
- Identification of Dynamic Objects
- Application Programming
- Modeling of Object and Control Systems
- Methods and Algorithms for Processing Signals and Images
- Computer Methods of Designing Control Systems
- Stability and Safety of Reactor Units in Oil and Gas Refining Processes

- Software Tools of Technological Processes Modeling
- Designing a Single Information Space of Virtual enterprises
- Patenting
- Russian as a Foreign Language (advanced)
- Modern Microprocessors in Control Systems
- Modern Tools for Development of Application Software of Microprocessor Systems
- Modern Trends in the Development of Oil and Gas Refining
- Distributed Computer Information Management Systems
- Special Control Systems in Oil and Gas Processing

MAIN TEACHING STAFF:

LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Linköpings University (Sweden)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- The department operates three laboratories:
- Laboratory of technical means of automation and process control systems, Laboratory of information-measuring systems and Laboratory of technical measurement and metrology.
- There is a specialized computer class.

TRAINING PLACES:

- JSC «Samaraneftekhimproekt»,
- JSC «RCC» Progress «,
- JSC «Giprovostokneft»,
- JSC «Transneft - Privolga»,
- «Service-Center-Automatic», Novokuybyshevsk,
- OJSC «Saratov Refinery»,
- JSC « Novokuybyshevsk Oil Refinery» and others.



Graduate Employability:

JSC «Samaraneftekhimproekt», JSC «RCC» Progress», JSC «Giprovostokneft», JSC «Transneft - Privolga», «Service-Center-Automatic», Novokuybyshevsk, OJSC «Saratov Refinery», JSC « Novokuybyshevsk Oil Refinery» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with leading universities in the country, including Gubkin Russian State University of Oil and Gas and ITMO

University.

- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INTELLIGENT SYSTEMS OF COMPLEX INFRASTRUCTURE MONITORING

FIELD OF STUDY

15.04.04 «AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION»

FULL NAME OF THE COURSE DIRECTOR

SERGEY V. SUSAREV

Associate Professor of «Automation and Control of Technological Processes» Department, PhD

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program objective is to train highly qualified specialists of the development of intelligent monitoring systems who are able to create and implement projects for complex infrastructure.

The program is aimed at obtaining information from a variety of sensors in order to determine the technical condition of equipment, detect deviations and faults in its work, to ensure monitoring of the situation and early warning of the need for maintenance and decision-making to provide safe and reliable operation of complex infrastructure.

The Master program «Intelligent Systems of Complex Infrastructure Monitoring» is designed for those who are planning to work with the monitoring systems of technological processes to ensure the functioning of the equipment at the potentially dangerous and technically complex objects such as oil and gas refineries, hydro and thermal power stations, railway stations, airports, stadiums and multifunctional offices and entertainment complexes.



LIST OF ACADEMIC DISCIPLINES:

- Software Tools of Design Calculation of Reliability of Complex Infrastructure
- Ensuring Safety of Complex Infrastructure
- Methods and Algorithms for Processing Signals of Complex Infrastructure
- Technical and Information Support of Control Systems of Complex Infrastructure
- Use of Programmable Logic Controllers in Intelligent Monitoring Systems
- Distributed Management Systems of Complex Infrastructure

MAIN TEACHING STAFF:

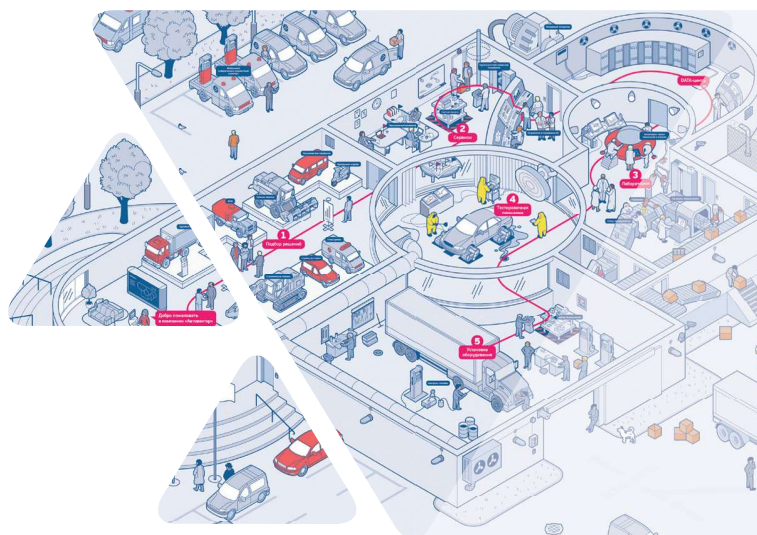
LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- All the laboratories are equipped with modern computer equipment, including both conventional and specialized computers, as well as measuring equipment made by the leading domestic and foreign companies. The lecture halls have multimedia equipment.
- There are three specialized laboratories where the students conduct practical work in the field of automation hardware, the hardware and software parts of the automation and management of complex infrastructure projects.

TRAINING PLACES:

- PJSC «NC» Rosneft «
- PJSC «Transneft»
- JSC «Zarubezhneft»
- PJSC «Samaraneftekhimproekt»



Graduate Employability:

PJSC «NC» Rosneft»
PJSC «Transneft»
JSC «Zarubezhneft»
PJSC «Samaraneftekhimproekt»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with Russian leading universities.
- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

MULTI-AGENT SYSTEMS AND TECHNOLOGY OF COORDINATED CONTROL OF ROBOTIC DEVICES

FIELD OF STUDY

15.04.04 «AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION»

FULL NAME OF THE COURSE DIRECTOR

PAVEL O. SKOBELEV

Head of «Electronic Systems and Information Security» Department, Professor, Dr. of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to develop professional competences in the field of innovative intelligent IT-systems, the development of analytical and managerial skills.

Seminars, trainings, research work and practical workshops are held with the participation of representatives of IT-companies that allows the students to obtain unique theoretical and practical knowledge and skills.

The program is designed for those who are planning to run high-tech business or build their careers in Russia or abroad using intelligent IT.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Design of Multi-Agent Control Systems of Robotic Devices
- Intelligent Information Systems
- Modern Trends in Development of Remotely Piloted Robotic Devices
- Robotics and Control Systems
- Distributed Computer Information Management Systems
- Supervisory Control and Data Acquisition System

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- All the laboratories are equipped with modern computer equipment, including both conventional and specialized computers, as well as measuring equipment made by the leading domestic and foreign companies. The lecture halls have multimedia equipment.
- The department operates remotely piloted aerial vehicles 3DR IRIS +, DJI Phantom 3 Advanced and telecommunications equipment.

TRAINING PLACES:

- Research and Production Company «Sensible Solutions»
- PJSC «Rosneft»
- PJSC «Transneft»
- Research and Production Company «Network-Centric Platform «
- Research and Production Company «Aeropatrol «
- Enterprises of agroindustrial complex

MAIN TEACHING STAFF:

LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES



PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development it is expected to create a system of mutual exchange of special courses with Russian leading universities.
- It is planned to invite the leading foreign and Russian scientists from universities and partner organizations to deliver lectures.

Graduate Employability:

Research and Production Company
«Sensible Solutions»
PJSC «Rosneft»
PJSC «Transneft»

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INTELLIGENT TRANSPORT SYSTEMS SOFTWARE AND HARDWARE

FIELD OF STUDY

15.04.04 «AUTOMATION OF TECHNOLOGICAL PROCESSES AND PRODUCTION»

FULL NAME OF THE COURSE DIRECTOR

NIKOLAY G. GUBANOV

Head of «Process Technologies Control and Automation» Department, Assistant Professor, PhD

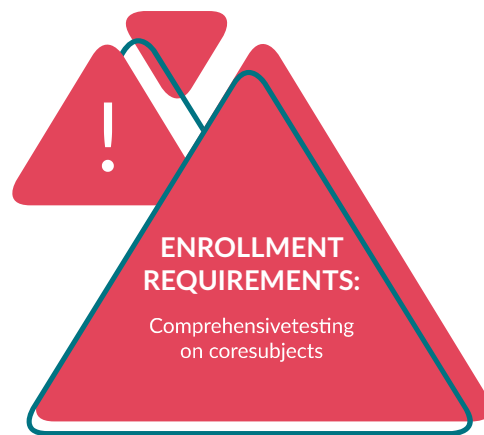
 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The aim of the program is to train highly qualified specialists in the field of intelligent transport systems development, who will be able to create and implement large-scale transport systems, develop the architecture and topology of intelligent transport systems, develop software and hardware platforms integrated intelligent monitoring systems and transport security facilities.

This program is designed for those who are planning to work with the integrated systems of automated monitoring and management of transport infrastructure, which include hardware monitoring and traffic control center for collecting and processing information on traffic flows, communication channels, intelligent control systems. The program aims to develop professional competencies in the field of intelligent transportation systems design and operation.

Nowadays experts who have these competencies are highly demanded in the line ministries of regional government, municipal enterprises, traffic police departments, design, construction companies, large-scale logistics enterprises.



LIST OF ACADEMIC DISCIPLINES:

- Modern Trends in the Development of Intelligent Transport Systems;
- Methods for Large-Scale Infrastructure Management Systems;
- Software Simulation of Traffic Flows; Methods of Transport System
- Optimization;
- Distributed Intelligent Transport Systems;
- Hardware and Software for the Information Storage and Protection.

MAIN TEACHING STAFF:

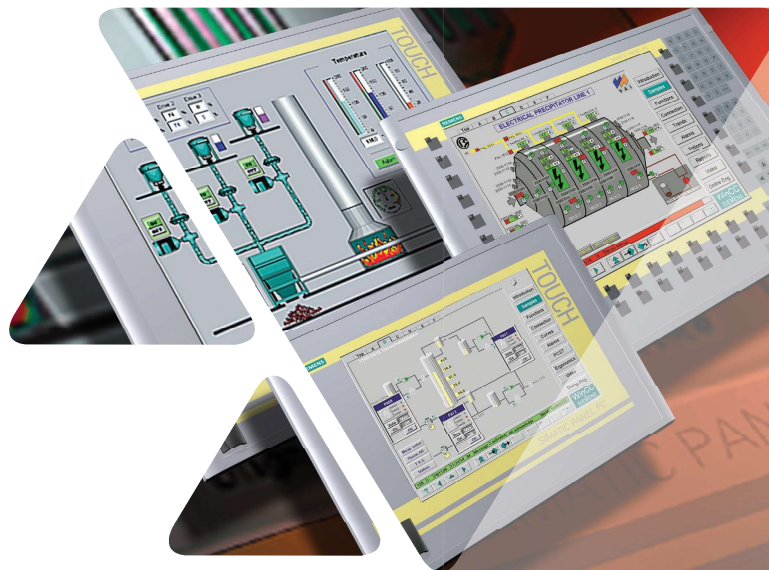
LEADING PROFESSORS OF AUTOMATION AND INFORMATION TECHNOLOGY FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Computer training center « Traffic Organization and Safety» equipped with software tools modeling traffic flows, traffic regulation means, formation of public transport routes and schedules, analysis of traffic situations, micro and macro models of transport situation in megapolises.

TRAINING PLACES:

- JCS «A+S Consult», Saint-Petersburg, Russia



Graduate Employability:

Samara region Transport Department, Samara region Ministry of Transport, Samara region State Traffic Safety Inspectorate departments, transport and logistics companies.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

DESIGN AND TECHNOLOGICAL SUPPORT OF MACHINERY PRODUCTION

FIELD OF STUDY

15.04.05 «DESIGN AND TECHNOLOGICAL SUPPORT OF MACHINERY PRODUCTION»

FULL NAME OF THE COURSE DIRECTOR

NIKOLAY V. NOSOV

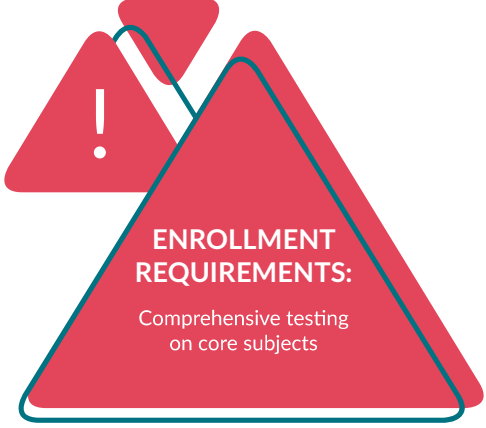
Head of «Mechanical Engineering Technology» Department, Professor, Dr. of Technical Sciences

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to give high-quality education in the field of design and technological support of machinery production which is supposed to be essential in the modern society.

The program is aimed to train individuals for professional and research activities in the field of mechanical engineering.



ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling in Mechanical Engineering,
- Computer Technologies in Science and Industry,
- Intellectual Property Protection,
- Mathematical Methods of Processing Experimental Data,
- Methods for Mechanical Tests And Calculations in Engineering Analysis,
- Metrological Support in Modern Mechanical Engineering,
- Modern Methods and Product Controls,
- Simulation of Machining Processes,
- Modelling of Pre-Machining Technological Processes,
- Software Engineering Tasks,
- Programming Languages in Technologies,
- Methodology of Scientific Research in Engineering,
- Nanotechnology in Mechanical Engineering,
- Reliability and Diagnostics of Technological Systems,
- Modern Problems of Machine-Building Production Tool Support,
- Calculation, Modeling and Design of Equipment with Computer Control,
- Technological Quality Assurance,
- Scientific Fundamentals of Engineering Technology,
- Processing Technology and Programming Of CNC Machines,
- Technological Preparation of Production on the Basis of CAD-CAM Systems,
- Methodology of Process Equipment and Tooling,
- Theory of Tool Design for CNC Machine Tools,
- Repair Technology and Service of Machine Tools with CNC,
- Process Monitoring of Technological Equipment,
- Stamps and Molds Design,
- Modelling of Casting and Metal Forming Processes.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF MECHANICAL ENGINEERING, METALLURGY AND TRANSPORT FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Educational center of computer design with three laboratories, equipment includes bench milling machines with CNC, computers, electronic measuring device «MICRO-SCRIBE», plotters, scanners, projectors etc.;
- Educational center «Delcam» with modern Russian and international software like Kompas, POWER SOLUTION, SOLID WORK, UG, FEATUER CAM, PRO/E, VIN/M, SPRUT etc.;
- Educational center «SSTU – Dentistry» which includes the following laboratories: orthopedic, computer lab, dental prosthetic design technology, thermal, multi-axis machining;
- «SSTU- EMAG» and «SSTU- Mashinostroitel» which includes three laboratories: technology of processing on CNC machines, electronic measuring devices and the development of control programs for CNC machine tools.
- On the Chair there are some new laboratories: repair and restoration of machines details and units, construction vehicles and engines; friction and wear in machines and also a computer programming class of technology production on CNC machines.
- 5 Educational center «Art of metal craft»;
- 6 Educational center «Computer biomechanics».

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- The National Engineering School of Saint-Étienne, France,
- Wrexham Glyndwr University, Great Britain,
- EMAG AG, Germany,
- Groupe Renault, France,
- MORI SEIKI CO., LTD, Japan,
- Delcam, UK,
- Autodesk, Inc., USA,
- Tornos Group, Switzerland.

TRAINING PLACES:

- Specialized departments «Innovation technologies», «Technology of mechanical engineering Advers», «Computer technologies in industry», «Computer technologies in mechanical engineering»; educational centers «Delcam», «SSTU- EMAG», «SSTU- Mashinostroitel», «Art of metal craft», «Computer biomechanics», «SSTU – Dentistry».

Graduate Employability:

The leading machine tool plants, machinery plants, metallurgical factories of the Russian Federation like JSC «Volgaburmash», JSC «Avtovaz», JSC «Kamaz» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INTENSIFICATION OF OIL REFINING AND PETROCHEMISTRY PROCESSES

FIELD OF STUDY

18.04.01 «CHEMICAL ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

ANDREY A. PIMERZIN

Head of «Chemical Engineering of Oil and Gas Processing» Department, Professor, Dr. of Chemical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to prepare masters with the following professional activity areas:

- Techniques, methods and means of obtaining substances and materials by means of physical, chemical and physico-chemical processes, production for various purposes;
- Creation, implementation and operation of basic inorganic chemicals, building materials, basic products and fine chemicals, plastics, refined petroleum products, gas and solid fuel, medicines production.

The graduates may continue research or teaching work.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Theoretical Studies and Experimental Methods in chemistry,
- Kinetics and Catalysis in Oil Refining and Petrochemistry,
- Environmental Problems in Oil Refining and Petrochemical Industry,
- Processes Involving Mass Transfer in Condensed Phase Systems,
- Modern Methods of Modeling and Intensification of Oil Refining and Petrochemistry Technological Processes,
- Efficient Use of Natural Resources and Energy in Oil Refining and Petrochemicals,
- Basics of Technical Translation,
- Technological Design in Oil Refining and Petrochemistry Production,
- Basics of Oil Refining and Petrochemistry Production Theoretical Analysis,
- Oil Refining and Petrochemistry Industry Equipment,
- Equipment of Oil Refining and Petrochemistry Special Products,
- Chemistry and Technology of Obtaining Special Products in Oil Refining and Petrochemistry,
- Chemistry and Technology of Oil Additives and Fuel Production,
- Chemotology of Oil Refining and Petrochemistry Products,
- Structure and Properties of Oil Refining and Petrochemistry Special Products,
- Patenting.

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- There are classrooms with multimedia equipment. Laboratories are equipped with devices to determine physical and chemical properties of oil, petroleum fractions and trade petroleum products; installations simulating basic secondary refining processes; laboratory installations for study of petrochemical synthesis basic processes.
- Research laboratories are equipped with modern equipment such as:
- ultraviolet spectral photometer Shimadzu UV mini 1240,
- energy dispersive X-ray fluorescence spectrometer EDX-800HS,
- gas chromatograph «Crystall-2000M»
- porosimeter Autosorb 1
- mass spectrometer with high resolution liquid chromatograph, fitted with a source of atmospheric ionization direct analysis in real time DART AccurateMass TOF LC/MS
- Simultaneous Thermal Analyzer
- STA 449 F3 Jupiter
- installation for study of diesel fuel hydrotreating processes
- liquid chromatograph LC 20 «Prominence»
- gas chromatograph with atomic emission detector 7890
- automated device for study of catalytic activity and specific surface methods TPD, TPO, TPV, and pulse chemisorption TPDRO 1100
- elemental analyzer multi EA 5000 N (CLD) S (UVFD) BU
- analytical balance
- laboratory installations for the main secondary processes of oil refining simulation
- laboratory equipment necessary for determination of the main indicators of petroleum products (viscosity, flash point, fractional composition, and others) quality

MAIN TEACHING STAFF:

LEADING PROFESSORS OF CHEMICAL ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES



TRAINING PLACES:

- Leading Russian oil refineries and oil companies

Graduate Employability:

Leading Russian oil refineries and technical universities such as «Kuibishev Oil Refinery», «SSTU» etc.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INDUSTRIAL ECOLOGY AND RATIONAL USE OF NATURAL RESOURCES

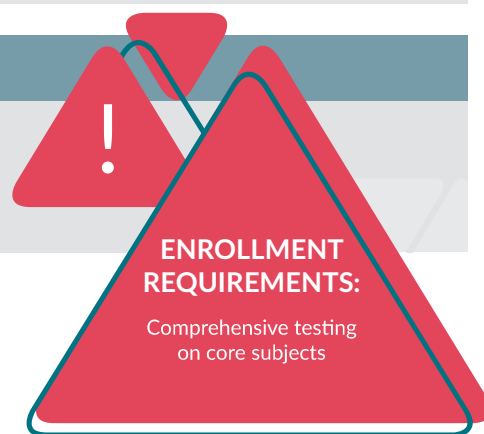
FIELD OF STUDY

18.04.02 «ENERGY AND RESOURCE SAVING PROCESSES IN CHEMICAL
ENGINEERING, PETROCHEMISTRY AND BIOTECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

DMITRY E. BYKOV

SSTU Rector, Professor, Doctor of Technical Sciences



Length of Schooling:
**2 YEARS OF FULL-TIME STUDY
OR PART-TIME STUDY**

PROGRAM DESCRIPTION:

The program aims to form the special competencies, providing the graduates with the opportunity to solve professional tasks in research and development, creation and implementation of energy and resource-saving, environmentally friendly technologies in the production of basic inorganic chemicals, products of basic and fine chemicals, plastics, oil refining products, gas and solid fuel, microbial synthesis, pharmaceuticals and food products, the development of treatment methods with industrial and household waste and secondary raw materials.

Graduates qualify with excellent theoretical and practical education, a high adaptive capacity, which is the basis of successful engineering, research, management, and organizational work in almost all sectors of the economy, education and science.

Graduates acquire knowledge and skill allowing them to meet the challenges

of technological processes and systems from the field of environmental safety, energy and resources, to generalize the results of applied research to substantiate and implement activities related to environmental engineering, to develop measures to comprehensive utilization of raw materials to replace scarce materials, methods of waste disposal, sections of «Environmental Protection» in justification of investments and projects, educational-methodical documentation.

The program was developed within the framework of the international project TEMPUS «Advanced M.Sc. Program in Ecology for Volga-Caspian Basin» in close contact with the universities of Stuttgart, Warsaw, Barcelona and Parma.

The program aims to train highly qualified specialists for professional research and educational activities in the field of industrial ecology and environmental management.

LIST OF ACADEMIC DISCIPLINES:

- Chemical, Petrochemical and Biological Industries Economy and Management,
- Complementary Chapters of Mathematics,
- Theory of System Analysis and Decision-Making,
- Optimization and Organization Methods of Energy and Resource Saving and Chemical Technological Systems,
- Industrial Ecological Safety Management,
- Surface Phenomena and Disperse Systems,
- Basics of Thermodynamics and Resource Saving,
- Resource Saving and Environmental Protection in Oil Production, Refining, Petrochemistry and Energy Sectors,
- Resource Saving and Environmental Protection in Metallurgy, Mechanical Engineering and Construction Industry,
- Design and Operation of Gas Emission Treatment Equipment,
- Design and Operation of Sewage Treatment Equipment,
- Design and Operation of the Processing Equipment and Industrial and Municipal Solid Waste,
- Industrial Environmental Monitoring,
- Environmental Quality Assessment and Management,
- Treatment and Disposal of Sewage Sludge,
- Recultivation of Pits with Waste,
- Basics of Planning and Mathematical Processing of Experimental Data,
- Basics of Multivariate Data Analysis,
- Using Professional Software,
- Methods and Means of Environmental Information Processing,
- Logistics Waste Management,
- Basics of Recycling

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Laboratory complex «Chemical Technology and Industrial Ecology»; Scientific Laboratory «Chemical Technology and Industrial Ecology»; Laboratory «Solid Waste»; two specialized IT-classes, a special classroom with multimedia equipment

TRAINING PLACES:

- Leading Russian oil refineries and technical universities such as «Kuibishev Oil Refinery», «Samara Oil and Gas», «SSTU» etc.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Stuttgart, Germany,
- Polytechnic University of Catalonia, Barcelona, Spain,
- University of Warsaw, Poland,
- University of Parma, Italy

MAIN TEACHING STAFF:

LEADING PROFESSORS OF PETROLEUM ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES



Graduate Employability:

Leading Russian oil refineries and technical universities such as «Kuibishev Oil Refinery», «Samara Oil and Gas», «SSTU» etc.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

BIOTECHNOLOGY OF FUNCTIONAL FOOD PRODUCTS AND BIOLOGICALLY ACTIVE SUBSTANCES

FIELD OF STUDY

19.04.01 «BIOTECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR V. BAKHAREV

Doctor of Technical Sciences, Food Production Technologies Faculty Dean



Length of Schooling:
2 YEARS OF FULL-TIME STUDY
OR PART-TIME STUDY

PROGRAM DESCRIPTION:

The aim of the program is to train highly qualified specialists in the field of food products and biologically active substances biotechnology, environmental biotechnology. Graduates will be able to create new and improve existing biotechnological processes for the processing of food raw materials, as well as microorganisms and enzymes use in various fields of national economy.



ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Humanitarian Aspects of Professional Activity,
- Scientific Discourse,
- Modern Problems of Biotechnology,
- Mathematical Modeling of Biotechnological Processes,
- Methodology of Research in Biotechnology,
- Modern Problems of Ecology, Energy and Resources Saving in Biotechnology,
- Bioethics and Biosafety,
- Biochemistry and Physiology of Microorganisms,
- Basics of New Producing trains Design of Biologically Active Substances,
- Scientific Basefor Biotechnology Development of Functional Food Products,
- Biotechnology of Biologically Active Substances,
- Biotechnological Processes of Food Processing,
- Innovation Workshop,
- Engineering Enterprise,
- Quality Management of Biotechnology Products,
- Innovative Biotechnology Processing of Vegetable Raw Materials,
- Innovative Biotechnology of Fermentation and Bakery Industries,
- Modern Problems of Food Technology,
- Scientific Base of Food Technology Efficiency Increase,
- Biotechnology of Human Normal Flora Products and Probiotic Products,
- Biotechnology Prebiotics and Probiotic Products,
- Practice Work for Primary Professional Skills Obtaining

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FOOD PRODUCTION TECHNOLOGIES FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Laboratory of food raw materials processing technology;
- Laboratory of fermentation processes technology, including a mini-brewery and a wine-making laboratory;
- Laboratory of milk processing biotechnology

TRAINING PLACES:

- SSTU laboratories



Graduate Employability:

The leading Russian milk production enterprises and breweries like «UNIMILK - Danon» and «Baltika - Samara» etc.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Biotechnology is one of the key directions of innovative technological development in a number of industries. Over the past few years there is a rapid growth due to greater opportunities for the solution of global problems, in particular, the preparation of functional food products, probiotics, prebiotics and synbiotics, dietary protein and enzyme preparations, synthesis of food ingredients.
- Nowadays in the Russian Federation there is a need to

create a powerful modern bioindustry, capable of ensuring the country's needs for basic products of biotechnology. To achieve this goal students of the Faculty of Food Production Technologies get in-depth fundamental and professional training in the field of molecular biology and genetics of microorganisms, biochemistry and biotechnology food products and biologically active substances, environmental biotechnology.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

MONITORING OF AREAS WITH HIGH ANTHROPOGENIC LOAD

FIELD OF STUDY

20.04.01 «TECHNOSPHERE SAFETY»

FULL NAME OF THE COURSE DIRECTOR

ANDREY V. VASILEV

Head of «Chemical Technology and Industrial Ecology» Department, Professor, Doctor of Technical Sciences, Samara Region Honored Ecologist

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to train highly qualified specialists in the field of environmental protection, capable of operating in conditions of increasing anthropogenic load in urban areas, to monitor environmental pollution, to conduct a comprehensive assessment of the levels of human impact and develop appropriate mitigation measures.

The program is designed for graduates of environmental and technical programs of higher educational organizations, engineering employees of different enterprises, heads of departments at various levels, as well as for those who want to get a new qualification in the field of environmental protection and expand the range of professional knowledge.

The creation of this program is determined by the growing needs of effective solution urgent environmental problems of the Volga region, Russia and other countries. This program prepares professionals capable of carrying out qualified assessment and prediction of the impact of the industrial enterprises, transport, energy and other objects on the environment and human health.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Environmental Economics and Environmental Protection,
- Complementary Chapters of Mathematics,
- Theory of System Analysis and Decision-Making,
- Basics of Recycling,
- Surface Phenomena and Disperse Systems,
- Biological Monitoring,
- Physical and Chemical Pollution Monitoring,
- Environmental Control and Certification
- Security Expertise,
- Methods and Tools for Environmental Monitoring,
- Systems Engineering Safety and Environmental Risk,
- Basics of Scientific Research,
- Industrial Environmental Monitoring,
- Assessment and Management of Environmental Quality, Stable Functioning of Ecological and Economic Systems, Methods of Minimizing Enterprise Impact on Environment,
- Basics of Planning and Mathematical Processing of Experimental Results,
- Basics Multivariable of Data Analysis,
- Using professional Software,
- Information Technologies for Technosphere Safety

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Laboratory «Monitoring of environmental physical factors»; laboratory «Analysis of environmental chemical factors»; laboratory complex «Chemical engineering and industrial ecology»; two specialized computer classes

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Naples Federico II, Italy,
- Riga Technical University, Latvia

TRAINING PLACES:

- Leading enterprises and scientific centers of fuel and energy, machine-building and aerospace fields.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF PETROLEUM ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES



Graduate Employability:

Leading enterprises and scientific centers of fuel and energy machine-building and aerospace fields like JSC «Avtovaz»
OJSC «Gazprom»
oil company «Rosneft»
JSC «Lukoil»
Samara Region Ministry of Forestry
Environment and Nature etc.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Ufa State Petroleum Technological University and Kazan State Power Engineering University is expected to be established.
- The leading foreign and Russian scientists from partner

universities and organizations are invited to give lectures / lecture courses.

- Master internships in University of Naples Federico II, Italy and Riga Technical University, Latvia.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INDUSTRIAL ECOLOGY AND RATIONAL USE OF NATURAL RESOURCES

FIELD OF STUDY

20.04.01 «TECHNOSPHERE SAFETY»

FULL NAME OF THE COURSE DIRECTOR

MIKHAIL I. BALZANNIKOV

Director of ACEI SSTU, Vice-Rector of Architectural and Construction Education, Professor, Doctor of Technical Sciences

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 5 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

Goal of the program is formation of an appropriate level of Master preparation to solve professional problems.

The program aim is forming general cultural and professional competences on industrial ecology and rational use of natural resources according to Masters' curriculum.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Information Technologies in Safety Sphere
- Security Economy and Management
- Risk Management, System Analysis and Modeling
- Business Foreign Language
- Monitoring Safety
- Safety Systems Calculation and Design
- Experiment Planning
- Physical and Chemical Bases of Environment Protection Processes
- Modern River Basin Protection Issues
- Modern Technologies of Physico-Chemical Wastewater Treatment
- Ensuring Environmental Safety in the Field of Professional Activity
- Environmental Diagnosis of Environment State
- Safety Expertise
- Logic and Methodology of Scientific Research
- Modern Regional Issues to Ensure the Necessary Environment Quality
- Environmental Risks

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- For lectures and workshops classrooms are equipped with multimedia stuff.
- Laboratories of Ecology and Technosphere Safety, Civil Defense and Life Safety equipped with the necessary equipment make it possible to carry out a wide range of research.
- Computer classes have Internet access. All computers are equipped with the latest software (MS Office, AutoCad, Mathcad).

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- The John Paul II Catholic University of Lublin (Poland, Stalowa Wola)
- Tashkent State Technical University (Uzbekistan, Tashkent)
- Michelli University of Applied Sciences (Finland, Michelli)

TRAINING PLACES:

- The leading ecological organizations and enterprises of the Russian Federation like LLC «Gazprom Transgaz Samara», JSC «Novokuibyshevsk Oil Refinery» and others.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ENGINEERING SYSTEMS AND ENVIRONMENTAL CONSTRUCTION WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES



Graduate Employability:

The leading ecological organizations and enterprises of the Russian Federation like LLC «Gazprom Transgaz Samara», JSC «Novokuibyshevsk Oil Refinery» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Participation in project work in the field of human protection from man-made influences. Participation in the development of security requirements in the preparation of rational investments and projects.
- Security control operation; selection of well-known methods of protecting human and environment and elimination of emergency situations for specific conditions. Preparation of safety instructions.
- Performing monitoring of fields and danger sources environment; participation in safety assessment, environmental impact assessment.
- Participation in carrying out scientific research in the field of security, perform experiments and processing the results.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

OIL FIELDS DEVELOPMENT

FIELD OF STUDY

21.04.01 «OIL AND GAS ENGINEERING »

FULL NAME OF THE COURSE DIRECTOR

VICTOR V. KONOVALOV

PhD, Head of «Oil and Gas Fields Development» Department

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program is focused on research and development, methodology and methods of design, implementation and management of technological processes and manufactures in fuel energy field which includes development of oil fields.

Professional activities cover the following areas: production processes and devices for construction, repair, reconstruction and rehabilitation of oil wells, production processes and devices for oil extraction, collection and preparation of well production, processes and devices for the control and regulation of commercial hydrocarbon recovery.

Graduates deal with different professional activities such as improvement of design methodologies based on the latest achievements of information and communication technologies, improvement of technology acquisition and presentation of input and output data for the development of design documentation for oil, field control and hydrocarbon recovery control, improvement of oil production process design using special software; the creation of technical devices,

machines and mechanisms, technological processes for oil production; preparation of specifications for the development of design problems solutions, determination of patentability and targets at the technical level of the projected equipment (products, facilities, structures) for oil production, development of preliminary, technical and working of complex product designs and manufacturing processes, with the use of automation design and advanced development experience competitive products; development of technological and project documentation; leading technical calculations for projects, feasibility studies, economic and functional cost efficiency analysis of projected units, structures, processes, development of new technologies in the prevention of complications and accidents in the oil and gas production, the development of design solutions for quality management in the oil and gas industry; design of industrial systems and environmental safety facilities, oil and gas production equipment and technology.

LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling in Oil and Gas Industry;
- Methods of Mathematical Physics;
- General Theory of Dynamical Systems;
- Economy and Management of Oil and Gas Production;
- Design Methodology in Oil and Gas Industry and Project Management;
- Business Planning in Oil and Gas Industry;
- Information Systems;
- Theory of Decision-Making;
- Current Problems in Oil and Gas Science, Engineering and Technology;
- Development of Oil Fields;
- Construction of Oil Fields;
- Operating Oil Wells under Complicated Conditions;
- Numerical Methods in Oil and Gas Industry;
- Computer Aided Design;
- Management of Intelligent Fields Development;
- Methods of Wells and Reservoirs Hydrodynamic Studies;
- Measurement and Control of Oil and Gas Production Technological Processes;
- Oil Fields Operational Management;
- Oil Fields Chemicals;
- Disperse Systems;
- Oil Fields Computer Modeling;
- Special Application Software;
- Technologies Targeted Stimulation;
- Methods of Reservoir and Wells Stimulating.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF PETROLEUM ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Special IT-classrooms, laboratory «Reservoir Physics»; laboratory «Methods of enhanced oil production»

TRAINING PLACES:

- The leading oil production and service companies of the Russian Federation like oil company «Rosneft», OJSC «Lukoil» and others.



Graduate Employability:

The leading oil production and service companies of the Russian Federation like oil company «Rosneft», OJSC «Lukoil» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Saint Petersburg Mining University, Gubkin University and Ufa State Petroleum Technological University is expected to be established.

- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

CONSTRUCTION OF CONTROLLED DIRECTIONAL AND HORIZONTAL WELLS

FIELD OF STUDY

21.04.01 «OIL AND GAS ENGINEERING »

FULL NAME OF THE COURSE DIRECTOR

VERA V. ZHIVAEVA

Head of «Oil and Gas Wells Drilling» Department, PhD, Associate Professor

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program is design to prepare specialists for professional scientific and research activities in the field of construction of controlled directional and horizontal wells.

The graduates possess knowledge and skills necessary to develop scientific bases, creation and implementation of energy and resource-saving, environmentally friendly technologies in design and production processes of construction of controlled directional and horizontal wells, the processes of rocks destruction and designing machinery and structures for production drilling, washing technology and the deep attachment of horizontal workings, risk assessment and economic costs of drilling production.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling in Oil and Gas Industry;
- Methods of Mathematical Physics;
- General Theory of Dynamical Systems;
- Economy and Management of Oil and Gas Production;
- Design Methodology in Oil and Gas Industry and Project Management;
- Business Planning in Oil and Gas Industry;
- Information Systems;
- Theory of Decision-Making;
- Problems of Oil and Gas World Market;
- Safety Process During Wells Construction;
- Wells Rinse under Complicated Conditions;
- Numerical Methods in Oil and Gas Industry;
- Computer Aided Design;
- Intelligent Wells Pumping In;
- Special Software;
- Computer Modeling Methods of Controlled Directional Wells Construction;
- Oil Fields Chemicals;
- Disperse Systems;
- Complications and Accidents Prevention and Elimination;
- Process Fluids for Wells opening, Development and Killing;
- Construction of Controlled Directional Wells on Land and at Sea;
- Measurement and Control of Oil and Gas Production Technological Processes;
- Production Management at Enterprises;
- Oil and Gas Bearing Areas;
- Management and Marketing in Industry;
- Drilling Fluid Mechanics;
- Information Technology in Drilling.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF PETROLEUM ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

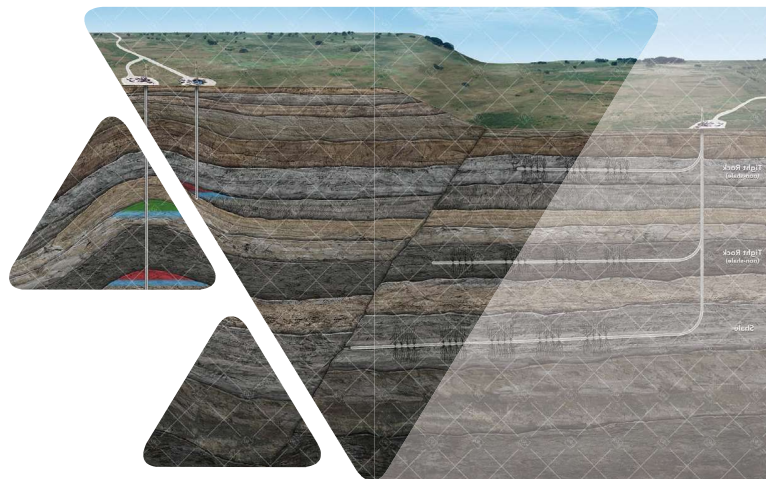
- Laboratory «Drilling simulator»;
- Laboratory «Wells workover simulator»;
- Laboratory «Simulator of controlled directional and horizontal wells drilling on land and at sea»;
- Laboratory «Simulation of drilling technology»;
- Research laboratory;
- Laboratory «Emergency operation»;
- Laboratory «Disperse systems and environmental drilling»;
- Educational Laboratory Complex of drilling mud and fluids completion;
- Laboratory «Rocks Destruction»

TRAINING PLACES:

- The leading oil production and service companies of the Russian Federation like oil company «Rosneft»,
- OJSC «Lukoil»,
- JSC «Gazprom» and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Koblenz – Landau, Germany



Graduate Employability:

The leading oil production and service companies of the Russian Federation like oil company «Rosneft», OJSC «Lukoil», JSC «Gazprom» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Gubkin University is expected to be established.
- The leading foreign and Russian scientists from partner

universities and organizations are invited to give lectures/ lecture courses.

- Master internships in University of Koblenz – Landau, Germany.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

HYDROCARBONS PIPELINE TRANSPORT

FIELD OF STUDY

21.04.01 «OIL AND GAS ENGINEERING »

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR K. TYAN

Head of «Pipeline Transport» Department, Doctor of Technical Sciences

Length of Schooling:

**2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 4 MONTHS OF PART-TIME STUDY**

PROGRAM DESCRIPTION:

The program aims to prepare specialists with in the following spheres:

- Technological processes and equipment for construction, repair, renovation and restoration of oil and gas wells on land and at sea;
- Technological processes and equipment for oil and gas production, collection and preparation of the well production on land and at sea;
- Production processes and devices for control and regulation of commercial extraction of hydrocarbons;
- Production processes and devices for pipeline transportation of oil and gas, underground gas storage;
- Production processes and devices for storage and marketing of crude oil, petroleum products and liquefied gases.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Mathematical Modeling in Oil and Gas Industry;
- Methods of Mathematical Physics;
- General Theory of Dynamical Systems;
- Economy and Management of Oil and Gas Production;
- Design Methodology in Oil and Gas Industry and Project Management;
- Business Planning in Oil and Gas Industry;
- Information Systems;
- Theory of Decision-Making;
- Problems of Oil and Gas World Market;
- Technological Processes of Hydrocarbons Pipeline Transport;
- Methods of Prevention and Elimination of Accidents and Disasters Consequences;
- Computer Aided Design;
- Multiphase Flows;
- Application software in Hydrocarbons Pipeline Transport;
- Measurement and Control of Oil and Gas Production Technological Processes;
- Industrial Safety of Pipeline Systems;
- Evaluation and Risks Analysis;
- Numerical Methods in Oil and Gas Industry;
- Physical and Chemical Research Methods of Materials, Reagents and Hydrocarbon Systems;
- Technological Reliability of Pipelines;
- Methods of Hydrocarbons Pipeline Transport Similarity and Dimension Theory;
- Resource-saving Technologies in Oil and Gas Industry;
- Offshore Oil and Gas Design and Operation

MAIN TEACHING STAFF:

LEADING PROFESSORS OF PETROLEUM ENGINEERING FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Laboratory of metallurgy; laboratory of non-destructive testing;
- laboratory of electrochemical protection;
- laboratory of Soil;
- laboratory of pumping stations;
- laboratory for hydro testing;
- specialized IT-classrooms

TRAINING PLACES:

- The leading oil production and service companies of the Russian Federation like oil company «Rosneft»,
- JSC «Gazprom» and others.



Graduate Employability:

The leading oil production and service companies of the Russian Federation like oil company «Rosneft», JSC «Gazprom» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/ lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

PROJECT MANAGEMENT IN OIL AND GAS INDUSTRY

FIELD OF STUDY

21.04.01 «OIL AND GAS ENGINEERING»

FULL NAME OF THE COURSE DIRECTOR

LARISA A. ILYINA

Head of «Industrial Economics and Production Management» Department,
Dean of Engineering Economics Faculty, Doctor of Economics, Associate Professor

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to prepare the future business leaders capable of managing projects at all stages of implementation, taking effective decisions on their resource and organizational support, integrated innovation and investment processes, carrying out comprehensive planning of the project portfolio in order to achieve sustainable development.

Oil and gas enterprises are crucial for the Russian economy and solve strategic tasks of the country. The scale of these projects require high quality project management.

Project management is an important component of the priority directions of Samara State Technical University, and one of the youngest and fastest-growing directions in the world. Project management in oil and gas industry is an international educational program for those who plan to lead business in Russia or other countries with rapidly changing economy. The mission of the program is to develop managerial skills of the business community through project activities.

LIST OF ACADEMIC DISCIPLINES:

- Foreign Language in Professional Sphere;
- Humanitarian Aspects of Professional Activity;
- Technology of Controlled Directional and Horizontal Wells Construction;
- Technology of Oil and Gas Production;
- Hydrocarbons Pipeline Transport Technology;
- Economy and Management of Oil and Gas Production;
- Problems of Oil and Gas World Market;
- Methodology of Design in Oil and Gas Industry;
- Management Decision-making Technology;
- Business Planning in Oil and Gas Industry;
- Econometrics;
- Management of Marketing and Branding projects in Oil and Gas Industry;
- Organizational Skills and Leadership;

- Team Building Projects;
- Project Management in Oil and Gas Industry;
- Innovation Workshop;
- Basics of Technological Achievements Commercialization;
- Projects Strategic of Oil and Gas Bearing Regions Development;
- Project Management Business Acceleration;
- Economic Analysis of Costs and Effectiveness of Manufacturing Processes in Oil and Gas Industry;
- Evaluation and Planning Margins of Technological Processes and Oil and Gas Industry;
- Production Management at Hydrocarbons Pipeline Transport Facilities;
- Crisis Management in Risk Management System;
- Economic and Legal Issues of Holding Making;
- Legal Business Environment (in English).

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ENGINEERING ECONOMICS AND PETROLEUM ENGINEERING FACULTIES WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Special classrooms for lectures and group work, classrooms equipped with specialized furniture, technical and multimedia equipment; classrooms for independent students work equipped with computers.

TRAINING PLACES:

- The leading oil production and service companies of the Russian Federation like.

**Graduate Employability:**

The leading oil production and service companies of the Russian Federation.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Prospects of the program development are designed taking into account the employers views and. The Department of graduates employment which has the status of a regional center of graduates employment, Engineering Economics Faculty, and its Chairs organize activities to promote employability of graduates.
- Program development is associated with the adjustment of its structure and content, the introduction of interactive forms of learning, the transition to design modular education, systematic updating of the program, taking into account the requirements of professional standards, the annual monitoring of the implementation process of the program.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

SELF-PROPAGATING HIGH-TEMPERATURE SYNTHESIS (SHS) OF POWDER AND COMPOSITE NANOMATERIALS AND NANOCOATINGS TECHNOLOGY

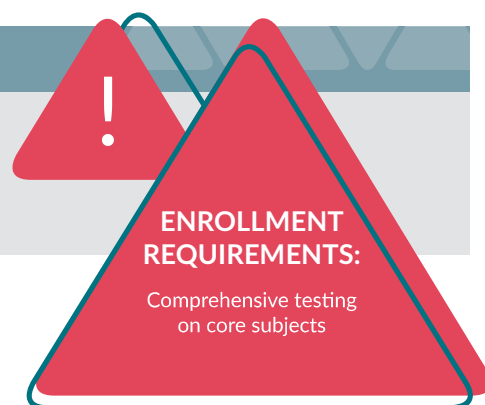
FIELD OF STUDY

22.04.01 «MATERIAL ENGINEERING AND MATERIALS TECHNOLOGY»

FULL NAME OF THE COURSE DIRECTOR

ALEKSANDR P. AMOSOV

Doctor of Physical and Mathematical Sciences, Professor, Head of «Material Engineering, Powder Metallurgy, Nanomaterials» Department, Honored Scientist of the Russian Federation, Russian Academy of Sciences Expert



Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program is aimed to train professionals in the field of materials engineering and materials technology.

The program aims to prepare graduates with the following professional activities:

- basic types of modern structural and functional inorganic (metal and non-metal) and organic (polymer and carbon) materials, composites and hybrid materials, superhard materials, intelligent and nanomaterials, films and coatings;
- methods and means of testing and diagnostics, research and quality control of materials, films and coatings, semi-finished products, blanks, parts and products, all kinds of research, control and test equipment,

analytical instrumentation, computer software for processing of the results and analysis of the data, simulate the behavior materials, evaluation and prediction of their performance;

- technological processes of production, processing and modification of materials and coatings, parts and products, equipment, tooling and fixtures, process control systems;
- normative and technical documentation and certification of materials and products of the system, processes for their preparation and processing, accounting documentation, records and reports progress and results of the experiments, documentation for safety and life safety.

LIST OF ACADEMIC DISCIPLINES:

- Foreign Language in Professional Sphere;
- Humanitarian Aspects of Professional Activity;
- Scientific Discourse;
- Math Modeling;
- Modern Problems of Materials Science;
- Computer and Information Technologies in Science and Production;
- Material Engineering and Technologies of Modern Advanced Materials;
- History and Methodology of Science;
- Physical and Chemical Basics of SHS;
- Synthesis of Nanomaterials in Combustion and Explosion;
- Theory of Sintering and Interfacial Interactions;
- Scientific Basics and Practice of Nanocoatings Application;
- Modern Methods of Structural Analysis in Material Engineering;
- Theory of Heterogeneous Systems Combustion;
- Innovation Workshop;
- Basics of Technological Achievements Commercialization;
- Metal Market and Nonmetal Steel Market Management;
- Innovation Management;
- Intellectual Property Protection and Patenting; Optimization of Economic and Technological Problems; Decisions Management in Material Engineering and Metallurgy;
- Mechanics of Deformation and Fracture;
- Structural Strength of Materials;
- Special Disciplines for Master Thesis.

MAIN TEACHING STAFF:

LEADING PROFESSORS OF MECHANICAL ENGINEERING, METALLURGY AND TRANSPORT FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Laboratory of electron and scanning probe microscopy;
- laboratory of materials chemical analysis;
- laboratory of materials mechanical and physical properties;
- laboratory of metals physical metallurgy and heat treatment;
- laboratory of powder metallurgy and composite materials;
- laboratory of vacuum coating synthesis;
- laboratory of coatings studies;
- SHS laboratory

TRAINING PLACES:

- Leading enterprises and scientific centers of mechanical engineering and aerospace systems like JSC «Progress»,
- JSC «Volgaburmash»,
- JSC «Aviakor» and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- AGH University of Science and Technology, Krakow, Poland,
- University of Notre Dame, USA,
- University of Texas at Brownsville, USA



Graduate Employability:

Leading enterprises and scientific centers of mechanical engineering and aerospace systems like JSC «Progress», JSC «Volgaburmash», JSC «Aviakor» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Institute of Structural Macrokinetics and Materials Science RAS is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

FOUNDRY METALLURGICAL PROCESSES AND TECHNOLOGIES

FIELD OF STUDY

22.04.02 «METALLURGY»

FULL NAME OF THE COURSE DIRECTOR

KONSTANTIN V. NIKITIN

Doctor of Technical Sciences, Associate Professor, Dean of Mechanical Engineering, Metallurgy and Transport Faculty

 **Length of Schooling:**
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to prepare specialists in the following spheres: production processes and equipment for technogenic raw materials processing, production and processing of ferrous and non-ferrous metals; processes and equipment for energy and resource saving and environmental protection in the implementation of technological operations; technical and regulatory documentation; quality management system; mathematical model.

The program aim is to prepare specialists in the field of foundry and metallurgical processes.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Organization of Experiments Mathematical Planning;
- Scientific Research Methodology;
- Modern Problems of Metallurgy and Materials;
- Information Technologies in Metallurgy;
- Modelling and Optimization of Metallurgical Processes;
- Structure and Properties of Steel Alloys;
- Methods of Control and Testing of Metallic Materials;
- High-Technology Treatment of Metals and Alloys;
- Theory and Practice of Structural Heredity;
- Efficient Use of Resources in Metals Production;
- Market of Metals and Alloys (Steel Market Management);
- Cast Composite Alloys (Nanostructured Alloys);
- Technology for Genetic Engineering and Non-Ferrous Alloys;
- Modern Non-Ferrous Alloy Production Technology;
- Metallurgical Processes of Welding and Brazing

MAIN TEACHING STAFF:

LEADING PROFESSORS OF MECHANICAL ENGINEERING, METALLURGY AND TRANSPORT FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Center of Casting Technology including different training laboratories like Laboratory of special casting methods, laboratory of foundry processes, laboratory of laser and plasma technologies, laboratory of physical and technological properties of metals and alloys and others;
- Center for Collective Use;
- Different classrooms equipped with multimedia equipment, classrooms for lectures and group work;
- Information Technology Centre of the Faculty with licensed software, simulators, computer models.

TRAINING PLACES:

- The leading machine tool plants, machinery plants, metallurgical factories of the Russian Federation like JSC «Progress», JSC «Avtovaz» and others.



Graduate Employability:

The leading machine tool plants, machinery plants, metallurgical factories of the Russian Federation like JSC «Progress», JSC «Avtovaz» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- An academic mobility program with the leading Russian universities including Ural Federal University, Siberian Federal University, Ufa State Aviation Technical University is expected to be established.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

CONTROL IN ENGINEERING SYSTEMS

FIELD OF STUDY

27.04.04 «CONTROL IN ENGINEERING SYSTEMS»

FULL NAME OF THE COURSE DIRECTOR

VLADIMIR N. MITROSHIN

Doctor of Technical Sciences, Professor, Head of «Automation and Control in Engineering Systems» Department



Length of Schooling:
2 YEARS FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to train specialists capable of carrying out research, design, engineering and technological, organizational and managerial, scientific and educational activities in the field of design, research, production and operation of systems and controls in industrial, transport and defense sectors of the economy.

Teaching methods include teacher-student interaction, acquiring knowledge, skills, abilities and formation of professional competencies. The combination of modern techniques and approaches, reflecting the shape of teacher-student interaction is based on active and interactive teaching methods.

The method of students' activation aims to stimulate independent student work on comprehension and assimilation of new knowledge, develop skills for practical knowledge application.



ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- History and Methodology of Science and Technology in the Field of Control;
- Mathematical Modeling of Objects and Control Systems;
- Computer Technology Control in Engineering Systems;
- Information Support System Design;
- Automation and Control;
- Modern Problems of Control Theory
- Optimal Control;
- Adaptive Control;
- Object and Control Systems Identification and Diagnosis;
- Integrated Automatic Control System;
- Basics of Systems Analysis and Operations Research;
- Methods of Regulators in Hybrid Continuous-Discrete Control

- Systems Synthesis;
- Control Systems with Distributed Parameters;
- Neural Network System;
- Special Course of Control Theory;
- Typical Models of Technical Objects Control;
- Intelligent Technologies in Control Systems;
- System Simulation;
- Methods of Fuzzy Logic in Control Systems;
- Control under Uncertain Conditions;
- Information and Control Computing Complexes in Automation and Control Systems;
- Information and Organizational Support of Automated Control Systems

MAIN TEACHING STAFF:

LEADING PROFESSORS OF AUTOMATION
AND INFORMATION TECHNOLOGY
FACULTY WITH PHD DEGREES OR DOCTOR
OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- 8 laboratories
- 2 IT-classrooms

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- University of Hanover, Germany,
- University of Padua, Italy

TRAINING PLACES:

- The leading engineering enterprises of the Russian Federation like JSC «Megafon»,
- JSC «PepsiCo»,
- JSC «Progress» and others.



Graduate Employability:

The leading engineering enterprises of the Russian Federation like JSC «Megafon»
JSC «PepsiCo»
JSC «Progress» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Individual students preparation for future employers; training, research and production complex for continuous study of

qualified graduates; intensification of highly qualified specialists training through doctoral studies.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ECONOMY AND REAL ESTATE APPRAISAL

FIELD OF STUDY

38.04.01 «ECONOMICS»

FULL NAME OF THE COURSE DIRECTOR

NATALIYA V. SHEKHOVA

Head of the Department of Economics, Professor, Dr. of Economics



Length of Schooling:
2 YEARS OF FULL-TIME STUDY;
2 YEARS AND 6 MONTHS
OF PART-TIME STUDY;

PROGRAM DESCRIPTION:

The program objective is to develop the students personal qualities, general cultural and professional competences in accordance with the requirements of the educational standards.



ENROLLMENT REQUIREMENTS:

Written examination
on the subject «Economics»

LIST OF ACADEMIC DISCIPLINES:

- Philosophy of Economics
- Modern Techniques and Methods of Economic Phenomena and Processes study
- Business Foreign Language
- Computer Technology in Economic Science and Education
- Corporate Information Systems
- Psychology and Pedagogy
- Psychology of Business Communication
- Microeconomics (advanced level)
- Macroeconomics (advanced level)
- Econometrics (advanced level)
- Finance of a Company
- Business Planning and Organization of the Company
- Asset Management of Companies and Investment Planning
- Business Value Estimation
- Property Management
- Natural Resources as an Object of Property
- Financial Management
- Corporate Finances
- Valuation of Intangible Assets and Intellectual Property
- Property Valuations

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ECONOMICS
WITH PHD DEGREES OR DOCTOR OF
SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classrooms for lectures and practical (seminar) classes are equipped with the specialized technical equipment for presentation of educational information for a large audience. Classes for students' independent work are equipped with computers connected to the Internet.

TRAINING PLACES:

- Federal Tax Service Inspectorate
- LLC «ARTEX»
- LLC «Vega Group Region»

**Graduate Employability:**

LLC «INTEX»
LLC «Lighthouse Stroinvest»
JSC «Design. Building»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Prospects of the program development are considered taking into account the views of employers. Program development is connected with the adjustment of its structure and content, the introduction of interactive forms of learning, the transition to design modular training, systematic updating

to meet the requirements of professional standards, the improvement of the forms of independent evaluation in the framework of professional public accreditation, development of methodological approaches to qualifying sections as part of the final certification.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ENTERPRISE ECONOMY

FIELD OF STUDY

38.04.01 «ECONOMICS»

FULL NAME OF THE COURSE DIRECTOR

INESSA V. KOSYAKOVA

Doctor of Economics, Professor, Head of «National and World Economy» Department, corresponding member of International Academy of Organizational Sciences

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to train highly qualified specialists with deep knowledge in the field of economy, capable of independent professional work, in accordance with modern educational standards leading research and higher educational institutions.

The graduates professional spheres include: economic, financial, marketing and analytical services businesses of different sectors and forms of industry; state and municipal authorities; academic and institutional research organizations; professional educational

organizations, educational institutions of higher education, additional vocational training.

The program aims to prepare economists-researchers, combining in-depth knowledge of modern economic theory with professional knowledge of economic-mathematical methods, including econometrics, methods of economic-mathematical modeling and analysis, ability to work with software applications.

LIST OF ACADEMIC DISCIPLINES:

- Theory and Practice of Microeconomics;
- Modern Problems of Macroeconomics;
- Models and Methods of Econometrics;
- History and Methodology of Economics and Production; Computer Technologies in Economics and Manufacturing;
- Economic Planning and Coordination of Enterprise Activities;
- Banks and Financial Market Institutions;
- Actual Problems in Enterprise Economy;
- Theory and Practice of National Economy;
- Marketing Management;
- Foreign Language in Business and Professional Communication;
- Environmental and Economic Safety Management;
- Actual Problems of Labor Market;
- Strategic Management of Enterprise Human Resources;

- Management of Corporate Finances;
- Enterprise Cost Management;
- Theory and Practice of Production Organization;
- Innovative Marketing;
- Actual Problems of Management;
- Management of Financial and Commercial Risks and Insurance;
- The Problems of International Finance and Banking;
- Enterprise Business;
- Enterprise Innovation Activities;
- Quality Control;
- Actual Problems of Business Planning;
- Management of Enterprise External Economic Activity;
- International Pricing

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ECONOMICS
ENGINEERING FACULTY WITH PHD
DEGREES OR DOCTOR OF SCIENCE
DEGREES

TRAINING PLACES:

- Leading enterprises of Samara region such as «Samara Oil and Gas»,
- «Lironas»
- «Megafon» and others.

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Lecture-type classes, seminar-type classes, classrooms for individual student work; classrooms equipped with specialized furniture and technical equipment, multimedia classrooms.



Graduate Employability:

Leading enterprises of Samara region such as
«Samara Oil and Gas»
«Lironas»
«Megafon» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Expansion of the internship places with different enterprises of Samara region and small business organizations; wider students participation in research projects; development of the commercialization of research work system; involvement

of financial institutions in the implementation of educational programs; special admission, financed by expenses of customer enterprises; students' participation in international programs and projects

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

INNOVATIVE ENTREPRENEURSHIP

FIELD OF STUDY

38.04.02 «MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

EVGENY E. ERMOLAEV

Head of «Urban and Construction Management» Department, Professor, Doctor of Economics

Length of Schooling:
2 YEARS FULL-TIME STUDY

PROGRAM DESCRIPTION:

The purpose of the program is providing society educated, moral, enterprising people, who are able to make responsible decisions, predicting their possible consequences, who are mobile, dynamic, constructive and have a strong sense of responsibility for the fate of the Samara Region and the country.

The program aims to prepare professionals with in-depth professional and linguistic competence, formation of entrepreneurial skills and business ideas ready to apply in the real economy.

Taught in English and Russian.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects.
Interview in English

LIST OF ACADEMIC DISCIPLINES:

- Business Organization
- Cross-Cultural Management
- Business Foreign Language
- Leadership and Business Ethics
- Managerial Economics
- Scientific Research Methodology
- Research Tools and Methods
- Modern Strategic Analysis
- Accounting & Finance
- Financial Statements
- Organizational Theory & Behavior
- Sustainable Business Development
- Innovation and Entrepreneurship
- Project Management
- International Business Law
- Socially Responsible Marketing
- Sustainable Development Management
- Strategic Marketing and Management
- Modern Methods of Designing and Business Decisions Making

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ECONOMICS AND MANAGEMENT IN CONSTRUCTION AND URBAN DEVELOPMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.
- Computer class for practical training equipped with computers connected to the Internet.
- The library is equipped with computers connected to the Internet and to electronic-library system.

TRAINING PLACES:

- The leading economic organizations and companies of the Russian Federation like Fitness club «Botek Fitness»
- SSTU Innovation Center and others.

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- Zuyd University of Applied Sciences (Zuyd), Netherlands
- Leuven University College (KHL), Belgium
- Satakunta University of Applied Sciences (SAMK), Finland
- Cologne University of Applied Sciences (CUAS), Germany



Graduate Employability:

The leading economic organizations and companies of the Russian Federation like Fitness club «Botek Fitness» SSTU Innovation Center and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Extension of internships in partner universities
- Preparation of certificates on specific subjects for Masters in partner universities
- 3. The possibility of obtaining double diplomas

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

PRODUCTION MANAGEMENT

FIELD OF STUDY

38.04.02 «MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

NATALIA A. USHANOVA

Professor of «Urban and Construction Management» Department, Associate Professor, Doctor of Economics



Length of Schooling:
2 YEARS AND 4 MONTHS
OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aim is development of personal qualities of Masters, formation of common cultural, general and professional competences.

The program aims to prepare professionals with in-depth knowledge of theoretical and practical aspects of organization management as a complex socio-economic system and training of professionals, who are able to make strategic and tactical decisions in different areas of the organization functioning.



ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Strategic Management
- Research Methods in Management
- Modern Strategic Analysis
- Corporate Finances
- Organizational Theory & Behavior
- Business Foreign Language
- Modern Quality Management
- Psychology and Pedagogy
- Modern Construction Technology
- Production Management Methods
- Personnel Policy and HR Audit
- Modern Economic Concepts
- Innovative Project Management
- Innovation and Business Process Reengineering
- Strategic Planning

MAIN TEACHING STAFF:

LEADING PROFESSORS OF FACULTY OF ECONOMICS AND MANAGEMENT IN CONSTRUCTION AND URBAN DEVELOPMENT WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

TRAINING PLACES:

- The leading economic organizations and companies of the Russian Federation like LLC «GlavRosStroy»,
- Koshelev Corporation and others.

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- For lectures and workshops classrooms are equipped with a stationary multimedia facilities, computers connected to the Internet.
- Computer class for practical training equipped with computers connected to the Internet.
- The library is equipped with computers connected to the Internet and to electronic-library system.



Graduate Employability:

The leading economic organizations and companies of the Russian Federation like LLC «GlavRosStroy» Koshelev Corporation and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Rational combination of market and state regulation.
- Extensive use of strategic planning and management in organizations.
- Sharp increase in the level of manager skills in organization management.
- Use of management practices for optimal solutions, selected on the basis of a careful analysis of alternative solutions to the problem.
- Improvement of management structures due to the greater decentralization of responsibilities.
- Constant care of professional development organization employees.
- Maximize use of innovation, economic and mathematical methods.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

STRATEGIC MANAGEMENT IN FUEL AND ENERGY COMPLEXES (FEC)

FIELD OF STUDY

38.04.02 «MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

LARISA A. ILYINA

Doctor of Economics, Associate Professor, Head of «Industrial Economics and Production Management» Department,
Dean of Engineering Economics Faculty

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The program aims to prepare specialists with skills and modern management methods, systems analysis, integrated forecasting tools and support strategic decision-making in governmental or FEC related sectors of the economy.

The program aims to prepare the future business leaders capable of managing projects at all stages of implementation, taking effective decisions on their resource and organizational support, integrated innovation and investment processes, carrying out comprehensive planning of the project portfolio in order to achieve sustainable development.

The program is based on the synthesis and critical analysis of the best practices of the best FEC, consulting companies, international research centers in the field of strategic management, system analysis and forecasting of the economy, energy, environment and innovation, expertise, design and operation of energy infrastructure, as well as well-known international, European and American elite training programs on strategic management.

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Organization and Management of FEC Infrastructure;
- Organization of Production;
- Machinery and Equipment of Oil and Gas Refining;
- Basics of Oil and Gas Refining;
- Oil and Gas Refining Enterprise Technology;
- Oil and Gas Enterprise Technology;
- Basics of Oil and Gas Fields Development;
- Strategic Management of FEC

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ENGINEERING ECONOMICS AND PETROLEUM ENGINEERING FACULTIES WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Lecture-type classes
- seminar-type classes
- classrooms for individual student work
- classrooms equipped with specialized furniture and technical equipment
- multimedia classrooms

TRAINING PLACES:

- Leading enterprises of Samara region such as «Transneft»,
- «Giprovtok - Neft» and others.



Graduate Employability:

Leading enterprises of Samara region such as «Transneft» «Giprovtok - Neft» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Prospects of the program development are designed taking into account the employers views and. The Department of graduates employment which has the status of a regional center of graduates employment, Engineering Economics Faculty, and its Chairs organize activities to promote employability of graduates.
- Program development is associated with the adjustment of its structure and content, the introduction of interactive forms of learning, the transition to design modular education, systematic updating of the program, taking into account the requirements of professional standards, the annual monitoring of the implementation process of the program.
- By 2020 a network in a modular format with the participation of several leading Russian universities like Ufa State Petroleum Technological University, Tyumen State University, Ural Federal University is planned to be created.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

PROJECTS AND PROGRAMS MANAGEMENT IN MUNICIPAL SERVICES AND CONSTRUCTION

FIELD OF STUDY

38.04.02 «MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

EVGENY E. ERMOLAEV

Head of «Urban Construction and Management» Department, Professor, Doctor of Economics

Length of Schooling:

**M 2 YEARS OF FULL-TIME STUDY,
2 YEARS AND 4 MONTHS OF PART-TIME STUDY**

PROGRAM DESCRIPTION:

The objective of the program is to train educated, moral, go-a head people who are able to make responsible decisions and predict their possible consequences, to prepare energetic, dynamic professional shaving a strong sense of responsibility for the fate of their region and country.

The program aims to prepare specialists with in-depth professional and linguistic competence, to develop their entrepreneurial skills and ability to create ready made business ideas for the real economy.

ENROLLMENT REQUIREMENTS:

Written examination
on the subject «Management»

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|---|
| <ul style="list-style-type: none">• Organizational Theory and Behavior• Modern Strategic Analysis• Research Methods in Management• Social and Ethical Responsibility in the Development of Projects and Programs• Quality Management of projects and Programs in Municipal Services and Construction• Innovation Management in Municipal Services and | <ul style="list-style-type: none">Construction• Modern Methods of Decision-Making Management• Marketing Research in Municipal Services and Construction• Theory and Methodology of Innovation• System of Financing of Projects and Programs• Projects and Programs Management of Urban Development and Construction• Business Planning in Municipal Services and Construction |
|--|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF THE FACULTY OF ECONOMICS WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.
- There is a computer class for practical training.
- The library is equipped with computers connected to the Internet and an e-library system.

TRAINING PLACES:

- Limited Liability Company «GlavRosStroi»
- Limited Liability Company «Stroileks»
- Homeowners Association «VolzhskyProspect»
- Department of Municipal Economy and Environment Administration of Samara City District



Graduate Employability:

Administration of Samara City District
Department of Municipal Economy and Environment
Limited Liability Company «GlavRosStroi»

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- The rational combination of market and state regulation.
- Extensive use of strategic planning and management in organizations.
- The sharp increase in the level of skills in the management of an organization.
- The use of optimal solutions in management practices selected on the basis of a careful analysis of alternative solutions to the problem.
- Improvement of management structures due to the greater decentralization of responsibilities.
- Constant care of professional development of employees.
- Maximum use of innovation, economic and mathematical methods.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

PROJECT MANAGEMENT

FIELD OF STUDY

38.04.02 «MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

LARISA A. ILYINA

Doctor of Economics, Associate Professor, Head of «Industrial Economics and Production Management» Department,
Dean of Engineering Economics Faculty

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

Project management is an important component of Samara State Technical University priority directions, and one of the youngest and fastest-growing directions in the world.

Professional managers able to manage different types of projects, programs, to carry out specific implementation of innovative projects and the search for investors and attract them to the practical implementation of the resources, improve the competitiveness of the organization are considered to be crucial tasks for any company's success.

The program's audience are: mid-level managers of industrial enterprises, young entrepreneurs, as well as graduate bachelors.

The mission of the program is to develop managerial skills of the business community through project activities.

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Audit in Investment Projects Management;
- Foreign Language;
- Information Technology in Project Management;
- Corporate Finances;
- International Marketing;
- Methodology of Scientific Research in Management;
- Methods and Models of Management Decision-Making;
- Search Methods of Custom Design Solutions;
- Taxation of Investment Activity;
- Legal Support of Investment Activity;
- Forecasting and Modeling of Project Risks;
- Software for Project Management;
- Production Management;
- Network Analysis of Projects in Production Management;
- Strategic Marketing;
- Theory of Investment Analysis and Project Financing;
- Venture Projects Management;
- Innovative Business Activity Management;
- Company's Infrastructure Management;
- Quality control;
- Project Human Resource Management;
- Project Management;
- Production Asset Management of Infrastructure Companies;
- Business Cost Management;
- Management Accounting;
- Accounting and budgeting;
- Econometrics

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ENGINEERING ECONOMICS FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Lecture-type classes, seminar-type classes, classrooms for individual studentwork; classrooms equipped with specialized furniture and technical equipment, multimedia classrooms.

TRAINING PLACES:

- Leading enterprises of Samara region such as «Sberbank»,
- «Giprovestok - Neft» and others.

**Graduate Employability:**

Leading enterprises of Samara region such as «Sberbank», «Giprovestok - Neft» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Prospects of the program development are designed taking into account the employers views and. The Department of graduates employment which has the status of a regional center of graduates employment, Engineering Economics Faculty, and its Chairs organize activities to promote employability of graduates.
- Program development is associated with the adjustment of its structure and content, the introduction of interactive forms of learning, the transition to design modular education, systematic updating of the program, taking into account the requirements of professional standards, the annual monitoring of the implementation process of the program.
- By 2020 a network in a modular format with the participation of several leading Russian universities like Ufa State Petroleum Technological University, Tyumen State University, Ural Federal University is planned to be created.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

HUMAN RESOURCES (HR) MANAGEMENT

FIELD OF STUDY

38.04.03 «HUMAN RESOURCES MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

GALINA P. GAGARINSKAYA

Doctor of Economics, Professor, Head of «Economy and Enterprise Management» Department

ENROLLMENT REQUIREMENTS:

Comprehensive testing on core subjects

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The aim of the program is to prepare highly qualified specialists capable of:

- developing a philosophy, concept of HR policy and HR strategy, execute personnel hiring, evaluation, acceptance, auditing, controlling and accounting, socialization, vocational guidance, adaptation and certification;
- regulating labor relations; managing organizational culture, conflict and stress;
- managing employment; organization, regulation, safety, working conditions and discipline;

- planning personnel skills improvement: training, retraining, internship, career and business management service and professional advancement, talent management;
- developing personnel motivation and stimulation, including salaries, social development, forming and developing human resource management system, including its organizational structure, legal and methodical, clerical and information support of personnel management;
- carrying out assessment of personnel costs, and economic and social effectiveness of projects to improve personnel management system and management consulting.

LIST OF ACADEMIC DISCIPLINES:

- State Social Policy and Social Development Management Organization;
- Organization Theory and Organizational Design;
- Development of Labor Legislation and its Impact on HR Management;
- Development of Management Systems Quality;
- Theory and Practice of State and Enterprise HR Policy;
- Modern HR Management Issues;
- Innovative Technology of Development, Justification and Taking HR Decisions;
- System of Motivation and Stimulation of Labor Activity;
- Technology Management of Personnel Skills Improvement;
- Organizational Culture Management;
- Organization of Research and Teaching in HR Management;
- Modern Methods of Sociological Research;
- Modern Management of Employment Problems;
- Development of HR Strategy;
- Functional and Cost Analysis of HR Management Technology;
- HR Consulting and Auditing;
- Team Building;
- Evaluation of HR Effectiveness;
- Assessing Economic and Social improvement of HR Management Efficiency;
- Budgeting of Personnel Management;
- Strategic Management of Company's HR;
- Foreign Language in Business and Professional Communication;
- Modern Problems of Management;
- Anticrisis HR Management;
- Modern HR Management Problems of State and Municipal Service;
- Risk HR Management;
- HR Controlling;
- Evaluating effectiveness of HR Management Services; Modern Approaches to Workplaces Design

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ENGINEERING
ECONOMICS FACULTY WITH PHD DEGREES
OR DOCTOR OF SCIENCE DEGREES

TRAINING PLACES:

- Leading enterprises and banks of Samara region such as «Sberbank»,
- «VTB 24»,
- «Samara Oil and Gas» and others.

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Department facilities include:
- two rooms for lectures, seminars and individual work with students, equipped with multimedia equipment;
- classroom for course projects and graduation papers preparation;
- computer classrooms.



Graduate Employability:

Leading enterprises and banks
of Samara region such as «Sberbank»
«VTB 24»
«Samara Oil and Gas» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development, program is expected to create a system of mutual exchange courses with leading Russian universities, including Institute of Structural Macrokinetics and Materials Science RAS.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures / lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

STATE AND MUNICIPAL MANAGEMENT

FIELD OF STUDY

38.04.04 «STATE AND MUNICIPAL MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

GALINA P. GAGARINSKAYA

Doctor of Economics, Professor, Head of «Economy and Enterprise Management» Department

Length of Schooling:

2 YEARS OF FULL-TIME STUDY,

2 YEARS AND 4 MONTHS OF PART-TIME STUDY

PROGRAM DESCRIPTION:

The aim of the program is to prepare highly qualified specialists capable of:

- providing strategic management for the benefit of society and state, including stating socially important goals, creating conditions for their achieving, organization of work for the best possible results;
- analyzing state of public economic sectors; individual organizations of determining economic consequences of decisions made or prepared;
- carrying out personnel policy and human resources audit, organizing team work, making maximum use of human resources, motivating and developing personnel to ensure maximum effectiveness of their work;
- organizing interaction with the external environment (in other state and municipal authorities, organizations and citizens).

ENROLLMENT REQUIREMENTS:

Comprehensive testing
on core subjects

LIST OF ACADEMIC DISCIPLINES:

- Economics of Public Sector;
- Theory and Mechanisms of Modern Public Administration;
- Information and Analytical Technology of State and Municipal Management;
- Personnel Policy and Human Resources Audit;
- Legal Support of State and Municipal Management;
- Municipal Management and Local Government;
- Management in Social Sphere;
- History of State Bodies and Institutions in Russia;
- Conflict Management and Stress Technology;
- Theory and Practice of Management Decision-Making;
- Project Management;
- State and Municipal Management System;
- System of Motivation and Stimulation in State and Municipal Management;
- Theory and Practice of Strategic Management;
- State and Municipal Property Management Technologies;
- City Economy and Management of Socio-Economic Development;
- Management and Assessment of Human Resources;
- Modern Personnel Management Problems of State and Municipal Service;
- Anticrisis HR Management;
- Information Competence of State and Municipal Employees;
- Modern Approaches to Workplaces Design;
- Concept of International Organization Strategic Management;
- HR Controlling;
- Business Evaluation;
- Evaluation of Personnel Effectiveness;
- Financial Planning and Budgeting;
- Budgeting of Personnel Management

MAIN TEACHING STAFF:

LEADING PROFESSORS OF ENGINEERING
ECONOMICS FACULTY WITH PHD DEGREES
OR DOCTOR OF SCIENCE DEGREES

TRAINING PLACES:

- Leading enterprises and banks of Samara region such as «Sberbank»,
- «VTB 24»,
- «Samara Oil and Gas» and others.

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Department facilities include:
- two rooms for lectures, seminars and individual work with students, equipped with multimedia equipment;
- classroom for course projects and graduation papers preparation;
- computer classrooms.



Graduate Employability:

Leading enterprises and banks of Samara region
such as «Sberbank»
«VTB 24»
«Samara Oil and Gas» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Within the framework of academic mobility development, program is expected to create a system of mutual exchange courses with leading Russian universities, including Institute of Structural Macrokinetics and Materials Science RAS.
- The leading foreign and Russian scientists from partner universities and organizations are invited to give lectures/lecture courses.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

URBAN MANAGEMENT

FIELD OF STUDY

38.04.04 «STATE AND MUNICIPAL MANAGEMENT»

FULL NAME OF THE COURSE DIRECTOR

ALEXANDER G. PLEKHANOV

Professor of «Urban Management and Construction» Department, Associate Professor, Doctor of Economics



Length of Schooling:
2 YEARS AND 6 MONTHS
OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program aims at the development of personal qualities, formation of common cultural, general and professional competences of a future specialist. The program focuses on training of professionals with in-depth knowledge of the theoretical and practical aspects of organization management who are able to make strategic and tactical decisions in different areas of functioning of a state and municipal organization.



ENROLLMENT REQUIREMENTS:

Written examination
on the subject «State and Municipal
Management»

LIST OF ACADEMIC DISCIPLINES:

- Economics of Public Sector
- Theory and Mechanisms of Modern Public Administration
- Personnel Policy and Human Resources Audit
- Legal support of State and Municipal Management
- Municipal management and Local Self-Government
- Management in Social Sphere
- Ethics and Civil Responsibility of Public Servants
- Theory and Methodology of Innovation
- Strategic Planning of Urban (Municipal) Facilities
- Project Management of Programs for the Development of Urban (Municipal) Facilities
- Managerial Economics
- Information and Analytical Technologies of State and Municipal Management
- Territorial Organization of Facilities
- State and Municipal Finances
- Engineering and Economic Foundations of Urban Development
- Program Management of Municipal Infrastructure
- Psychology and Pedagogy
- Business Foreign Language
- System of Financing of Projects and Programs in the Housing Complex
- Modern Methods of Real Estate Organization and Management
- Basics of Management and Regulation of Housing-and-Municipal Services
- Organization and Management of Energy and Resource Saving in a housing-and-municipal complex
- Innovation Management in the City (Municipal) Sector

MAIN TEACHING STAFF:

LEADING PROFESSORS OF THE FACULTY OF ECONOMICS WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

TRAINING PLACES:

- Administration of Samara City District
- Department of Municipal Economy and Environment
- Homeowners Association «Volzhsky Prospect»

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classrooms for lectures and workshops, group and individual counseling, monitoring and interim assessment are equipped with a stationary audience multimedia equipment and computers connected to the Internet.
- There is a computer class for practical training.
- The library is equipped with computers connected to the Internet and an e-library system.



Graduate Employability:

Administration of Samara City District
Department of Municipal Economy and Environment

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- The rational combination of market and state regulation.
- Extensive use of strategic planning and management in the activities of state and municipal government organizations.
- Maximum use of innovation, economic and mathematical methods in the state and municipal administration.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

GRAPHIC DESIGN

FIELD OF STUDY

54.04.01 «DESIGN»

FULL NAME OF THE COURSE DIRECTOR

ELENA V. SHLIENKOVA

Associate Professor of «Innovative Design» Department, Associate Professor, PhD

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The program includes a number of projects on the basis of systems engineering methods and principles, creation a variety of visual communication systems using modern information technologies.

The program aim is future Masters formation of a unique trajectory and self-realization based on holistic and systematic approach in the space of current visual culture and graphic design, improvement of professional skills and techniques of complex objects, services and systems design engineering.

Objectives: to learn how to develop and implement new creative and communication technologies, appropriate to current state of market and industry of graphic design, to learn how to make the necessary project documentation taking into account the specifics of the project.

ENROLLMENT REQUIREMENTS:

Enrollment is carried out on the basis of two entrance tests:

- 1) building parti diagram
- 2) interview on graphic design theory and terms of reference

LIST OF ACADEMIC DISCIPLINES:

- Design Engineering
- Scientific Research and Creative Work
- Research Practice
- Design Theory in the Context of Modern Science
- Design Social Foundations
- Modern Design Issues
- Industrial and Technological Basics of Graphic Design
- Graphic Design Colouristics
- Colouring
- Academic Drawing
- Modern Printing Technology
- Editorial Activity
- Multi-page Publication Design
- Design Research Techniques
- History and Methodology in Design Engineering
- Economy in Design Engineering
- Marketing and Management in Design
- Psychology and Pedagogy
- Business Foreign Language
- Visual Design Psychometry

MAIN TEACHING STAFF:

LEADING PROFESSORS OF DESIGN
FACULTY WITH PHD DEGREES OR DOCTOR
OF SCIENCE DEGREES

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classes are held in the classrooms and computer labs equipped with necessary equipment and teaching materials: notebooks, a projector, monitors, system units, copier, printer, scanner. Classrooms are equipped with the Internet.

TRAINING PLACES:

- The leading design companies of Samara Region like LLC «Samarskiy traktir» (firm «From Palych»),
- LLC «Tandem Print» and others.



Graduate Employability:

The leading design companies of Samara Region like LLC «Samarskiy traktir» (firm «From Palych») LLC «Tandem Print» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Students get the necessary knowledge in the design engineering, project management and marketing, identity and brand strategies, computer technology, photo- and infographics, illustrations and design of periodicals and multi-paged publications, advertising, media and art design, web- and interactive design, augmented reality, printing technology, management and marketing, economy in design.
- Obtained communication skills in the field of economic, marketing, socio-cultural areas provide a wide range of options for solving design problems of varying levels of complexity.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

COSTUME DESIGN

FIELD OF STUDY

54.04.01 «DESIGN»

FULL NAME OF THE COURSE DIRECTOR

TATIANA V. KARAKOVA

Head of «Design» Department, Professor, Doctor of Architecture, Counsellor of the Russian Academy of Architecture and Construction Sciences, member of the Russian Union of Architects

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The main goal of the program is the systematic training of highly qualified professionals for analytical, advisory, research and teaching activities in the Russian and international design organizations, companies, institutions of higher education.

The program aim is increasing the level of knowledge acquired during training and work on the topic of scientific research, familiarization with current trends of research approaches to problem solving, acquirement the basics of research activities organization in the scientific team, etc.

ENROLLMENT REQUIREMENTS:

Written examination on the design engineering, which includes the following sections:

- Fundamentals of theory and design methodology;
- Composition basics;
- Design project techniques;
- Ergonomics in design engineering;
- Modern technologies and materials in costume design

LIST OF ACADEMIC DISCIPLINES:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Modern Design Issues • Psychology and Pedagogy • Business Foreign Language • Academic Drawing • Academic Painting • Design Research Techniques • Marketing and Management in Design • Social Design Fundamentals • Economy in Design Engineering • Design Engineering • Computer technologies in Design • Information Technology • History and Methodology in Design Engineering • Costume Design Colouristics • Project Implementation in Material | <ul style="list-style-type: none"> • Fashion Philosophy • Contemporary fashion history • Design Theory in the Context of Modern Science • Professional Communication in Design • Costume Design • Modern Foreign Aesthetics • Costume Design Industrial and Technological Foundations • Contemporary Technologies in Design • Organization of Project Activities • The Russian Federation Regulatory Framework of Project Activities • Historical Cut • 20th Century Styles History • Fashion Brands Designing Methodology • Fashion Industry PR Strategy • Visual Design Psychometry • History of Design Methods for Costume Design |
|---|--|

MAIN TEACHING STAFF:

**LEADING PROFESSORS OF DESIGN
FACULTY WITH PHD DEGREES OR DOCTOR
OF SCIENCE DEGREES**

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

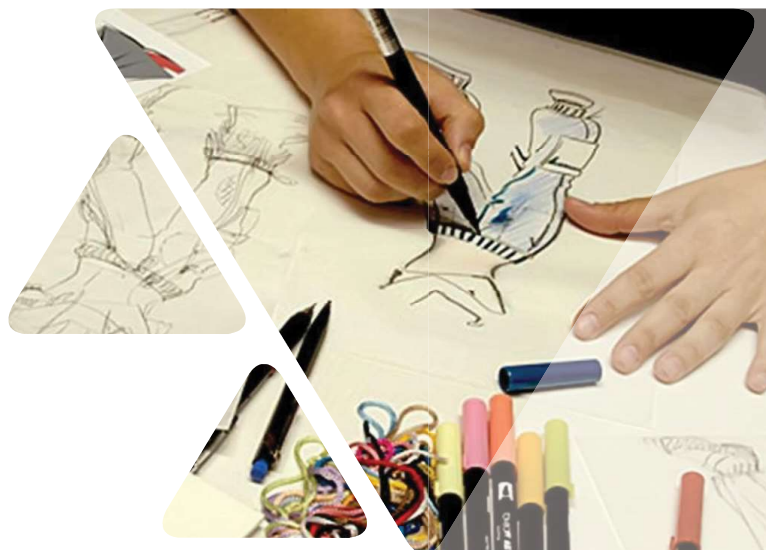
- L.N. Gumilyov Eurasian National University (Kazakhstan, Astana)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classes are held in the classrooms and computer labs equipped with necessary equipment and teaching materials: notebooks, a projector, monitors, system units, copier, printer, scanner. Classrooms are equipped with the Internet.
- Sewing laboratory is equipped with sewing machines, tables, steam generators, etc for the manufacture of clothing samples.

TRAINING PLACES:

- The leading costume design companies of Samara Region like OV 27 Center of advertising and costumes design,
- Atelier «Look fashion» and others.



Graduate Employability:

The leading costume design companies of Samara Region like «OV 27» Center of advertising and costumes design Atelier «Look fashion» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Formation of highly qualified personnel in the field of fashion design.
- Introduction of a variety of students participation forms in interdisciplinary research projects, in the creative intellectual and scientific events; enhance graduates performance

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

ENVIRONMENTAL DESIGN

FIELD OF STUDY

54.04.01 «DESIGN»

FULL NAME OF THE COURSE DIRECTOR

TATIANA V. KARAKOVA

Head of «Design» Department, Professor, Doctor of Architecture, Counsellor of the Russian Academy of Architecture and Construction Sciences, member of the Russian Union of Architects

Length of Schooling:
2 YEARS OF FULL-TIME STUDY

PROGRAM DESCRIPTION:

The main goal of the program is the systematic training of highly qualified professionals for analytical, advisory, research and teaching activities in the Russian and international design organizations, companies, different city management levels agencies (Urban District Administration, the Chief Architect Office), institutions of higher education.

ENROLLMENT REQUIREMENTS:

Written examination on the design engineering, which includes the following sections:

- Fundamentals of theory and design methodology;
- Composition basics;
- Design project techniques;
- Ergonomics in design engineering;
- Modern technologies and materials in design of environmental objects

LIST OF ACADEMIC DISCIPLINES:

- | | |
|--|---|
| <ul style="list-style-type: none"> • Philosophical Problems of Science and Technology • Modern Design Issues • Psychology and Pedagogy • Business Foreign Language • Academic Drawing • Academic Painting • Design Research Techniques • Marketing and Management in Design • Social Design Fundamentals • Economy in Design Engineering • Objective-Spatial Environment of the City Colouristics • Design Engineering • Computer technologies in Design • Information Technology • History and Methodology in Design Engineering • Typology of Architectural Environment Forms • Modern Technologies of Building Materials | <ul style="list-style-type: none"> • Design Theory in the Context of Modern Science • Professional Communication in Design • Methods of Urban Environment Spatial Analysis • Spatial Perception Theory • Environmental Design Engineering and Technological Foundations • Contemporary Technologies in Design • Organization of Project Activities • Modern Foreign Aesthetics • Ecology in Environment Design • Engineering Equipment of Urban Areas • Barrier-Free Urban Environment • Visual Communication in Design • Visual Design Psychometry • Theoretical Foundations of Visual Perception • Organic Approach to Urban Environment Design • Landscape-Ecological Bases of Urban Environment |
|--|---|

MAIN TEACHING STAFF:

LEADING PROFESSORS OF DESIGN FACULTY WITH PHD DEGREES OR DOCTOR OF SCIENCE DEGREES

FOREIGN PARTNERS (ACADEMIC AND INDUSTRIAL PARTNERS, JOINT DEGREE PROGRAMS)

- L.N. Gumilyov Eurasian National University (Kazakhstan, Astana)

FACILITIES (CLASSROOMS, LABORATORIES, ICT-ROOMS)

- Classes are held in the classrooms and computer labs equipped with necessary equipment and teaching materials: notebooks, a projector, monitors, system units, copier, printer, scanner. Classrooms are equipped with the Internet.

TRAINING PLACES:

- The leading environment design companies and architecture organizations of Samara Region like the Chief Architect Office,
- LLC «Art-Design» and others.



Graduate Employability:

The leading environment design companies and architecture organizations of Samara Region like the Chief Architect Office, LLC «Art-Design» and others.

PROSPECTS FOR THE DEVELOPMENT OF THE PROGRAM:

- Formation of highly qualified specialists in the sphere of environmental problems solving of the city. Their active participation in the work of the Chief Architect Office upon

the development of Samara environmental cadastre included in the strategy for socio-economic development of Samara until 2025.

Contact Information:

443100, Samara, Molodogvardeyskaya street, 244, main building

Phone: +7 (846) 278-43-71, e-mail: international.samgtu@gmail.com, web-page: www.samgtu.com

