

**Dmitry Bykov,**Rector, Doctor of Technical Sciences,
Honorary Figure of Russian Higher Education

#### Dear friends!

The main feature of our University has always been the polytechnic formation of skills in various areas of design, management, engineering and research activities. Responding to the main challenges of our time, the Flagship University is ready to act as the main platform for the modernization of the Samara region, to become a testing ground for the best Russian industrial and economic practices and initiatives.



# Strategic Council of Flagship University

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Today we need for a qualitative technological breakthrough for the development of the Samara region. Samara State Technical University has always been a flagship university for us, as Samara Polytech scientists develop projects in all strategic economic sectors. Samara Polytech possesses such core competences as petrochemicals, oil and gas production and processing, energy, information, pharmaceuticals and food technologies, construction and architecture.



**Dmitry Azarov,** Acting for the Governor of the Samara region, Strategic Council Chairman

In 2018 the University formed the Strategic Council chaired by the Acting for the Governor of the Samara region, **Dmitry Azarov**. The co-chairman is the rector of the university, **Dmitry Bykov**.

The Council has become a public advisory structure with the functions of a supervisory body for the management and expert evaluation of the implementation of the flagship university "road map". Now the university is involved in processes aimed at sustainable socio-economic development of the region, acting as the initiator of regional and federal projects. The Strategic Council made it possible to create an effective mechanism for communication between education, business and government.

The Council also includes the State Duma Deputies Vladimir Shamanov and Yevgeny Serper, Senator Sergei Mamedov, Rosqvardia Director's Counsellor Alexander Khinshtein. Director of the Department for Regional Industrial Policy and Project Management of the Ministry of Industry and Trade of the Russian Federation Sergey Bezrukov, Head of Samara Elena Lapushkina, General Director of "Gazprom Transgaz Samara", Samara Regional Duma Deputy Vladimir Subbotin, General Director of "Samaraneftegaz" Gani Gilayev, President of the Group of Companies "Amond" Rostislav Khugaev.











I decree to establish a polytechnic institute in the city of Samara. It should consist of two faculties: a commercial-economic (with economic and commercial-technical departments) and an agricultural one. Everyone should consider this institute a higher educational institution



Nicholas II, Russian Emperor, 1914

#### 1934 1935 1962 1914 Samara Middle Volga Kuibyshev Kuibyshev Polytechnic Polytechnic Industrial Institute Industrial Institute Institute named after Institute named after

V.V. Kuibyshev

V.V. Kuibyshev. The opening of the branch in Syzran

## 200 000+ graduates during 100 years

1980	1992	2014	2015	2016	2017
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According to the Decree of the **USSR Supreme** Soviet Presidium the Kuibyshev Polytechnic Institute is awarded the Order of the Labor Red Banner

Samara State Technical University (SSTU)

The opening of the branch in Novokuybyshevsk

Merging with Samara State University of Architecture and Civil Engineering

Obtaining the status of the Flagship University

Establishing of "Samara Polytech. Flagship University" Brand. Implementation of strategic projects



More about the history in the book

"Novomy Veky Navstrechy (Towards the New Century). SSTU is 100 years old. 1914 - 2014". Samara, 2014.

## **Outstanding Alumni**



#### **Viktor Chernomyrdin**

Minister of the USSR Gas Industry, Chairman of the Russian Federation Government, Ambassador Extraordinary and Plenipotentiary of Russia in Ukraine

Year of graduation: 1966



#### **Rem Vyakhirev**

Deputy Minister of the USSR Gas Industry, Board Chairman of "Gazprom". laureate of the USSR State Prize, State Prize of the Russian Federation in the field of science

∀ Year of graduation: 1956



#### **Dmitry Azarov**

Head of Samara in 2010 - 2014, Member of the Federation Council of the Federal Assembly of the Russian Federation, since September 2017 -Acting for the Governor of the Samara region.

X Year of graduation: 1992

## **Testimonials**

#### **Professionals**



#### **Eric Brisset** "Elektroshchit Samara" **Group President**

The "Electroshield Samara" Group which is a part of "Schneider Electric" company, has a long history of cooperation with Samara State Technical University. We are very proud that the graduates of the oldest Samara university choose our company as a place of work. We are glad to make our modest contribution into the maintenance of the high quality of education at SSTU. I think I won't be exaggerating to say that not only the prospects for the electrical industry development but also the economic well-being of the country largely depend on you, Russian academic elite.

#### **Students**



Joel Nkangi 2017 Graduate

Studying at SSTU in itself is an experience of its own. Apart from being a historic university in this region, its one of the best of its kind in areas of Engineering, Chemistry and Physics, as its equipped with modern technology.

As a student here, you'll be equipped with the necessary skills required to face the demands of the current job market, and with the supportive staff who are at the same time working professionals in their respective fields, you're guaranteed to have the best information you'll ever need from experience after all, who else knows better how to teach a particular trade than a person working in that same trade. Feel free to apply to this great university, the international office will always be there to help you through the process and when you arrive, with hard work and determination, you will enjoy the ride to success.



More about alumni in the book Famous Alumni of Samara State Technical University. Samara, 2014



More testimonials at https://samgtu.com/node/22



560+ International Students

**36** Countries

4670

Freshmen in 2017

138 Volunteers

**12** 

Faculties and Institutes + Academy of Civil Engineering and Architecture

## **Facilties**

83 Departments

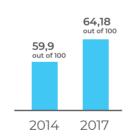
8 Dormitories

**26** Study Buildings

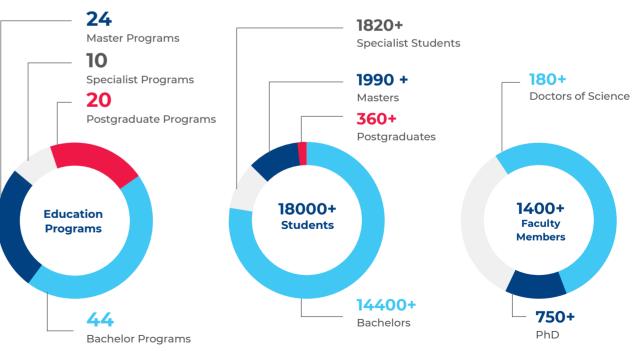
Branches

Co-Working Center

## **Average Points** of Unified State **Examinations**









Russian Engineering Universities Ranking **3** rd position



**171-180** position



539

position

in the world

66

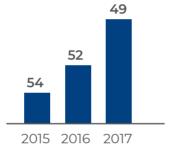
I believe that we can deal with your university. We are ready to prepare joint mutually beneficial projects in the field of high technologies for successful people's lives. It is important that such cooperation also brings commercial profit.

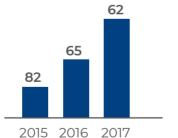


**Thomas Gale,**Daimler Chrysler Vice President on the market strategy, design and external affairs, 1999



Ranking "100 Russian Best Universities"





rank Worldwide
Professional
TO University Rankings

UNIVERSITY RANKINGS

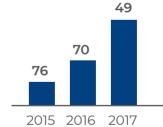
EMERGING EUROPE & CENTRAL ASIA



263
position
in Europe

position in Russia





National University Ranking
"Interfax"

**Национальный рейтинг** университетов

## **Development Projects**



#### **Global Aims**

- Creating the Image of Regional Society
- Managing Today's Economy Markets
- Making the Future Economy Markets



#### For the Region

- Technological Breakthrough
   Development of Youth
- EntrepreneurshipNew Form of Educational Activities:Team Work on Projects
- Strategic Management Mechanism in the Region



#### For the University

 University's Own Development Mechanism



**CREATION** of the Project Office for the strategy implementation of the Samara region development until 2030



**ACTING** as the regional operator and coordinator of the information system "TECHRESURS" which covers the innovative activities of enterprises, scientific and educational organizations



MANAGEMENT
of the petrochemical
cluster development
of the Samara region



## **Strategic Projects of Samara Polytech**

## Territory of Life

Creation of science-intensive environmental, pharmacological and food technologies for sustainable improvement of people's life quality in the region



Creation of the innovations and future technologies center in all key economic clusters of the Samara region

**Design and Technology Holding** 

Creation of a project consortium capable of solving the problems of organizing and initiating large-scale innovation and investment projects

Communication Platform – 2020

Creation of the main regional platform for forums, symposium, conferences at the University

Competences Builder.
Multi-Disciplinary Team
Projects

Creation of Multi-Disciplinary Team Projects (MDTP) including professors, students and experienced industry specialists for developing innovative products and creating economy markets of the future

## Educational Hub in the Region

Increasing in the number of schoolchildren and students engaged in research activities under the qualified scientific and methodological supervision

## **Transformational Activities**

Intensification of the University development, development of the new University activities content due to the project analytical sessions technologies

## The Seventh Redistribution

Creating special conditions for changing the dominant use of natural gas, collaboration of scientific schools, industries, state government and potential investors in order to create a new gas chemical production

## My City

Creation of a regional competences center for urban environment planning and design for the development and implementation of modern methods of urban planning







I appreciate the work of your University. It is a great pleasure for us that it is open for cooperation with British companies and promotion of different common projects



Roderick Line. British Ambassador to Russia, 2000



## **Project-Based** Learning

Creation and realization of individual educational programs that allow to participate in complex research and (or) scientific and technical projects.



## Interprofessional **Competences**

Selection, modulation and design of competences for solutions of specific scientific, technical and engineering problems.



## **Continuous Engineering Training**

Various educational programs of research and project activities for schoolchildren, practice-oriented engineering training of students in the context of University and industrial partners cooperation.



## **Electronic Training**

for intra- and interuniversity cooperation, co-learning centers using videoconferencing functions to broadcast and record events, professors' and scientists' open lectures on the Youtube University channel.



## **Academic Mobility**

Postdoctoral programs with partner universities from Azerbaijan, France, Germany and other countries.

## Professional Training Navigation





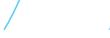


RADIOTECHNICS



APPLIED
MATHEMATICS
AND INFORMATICS

ELECTRIC -AND HEAT POWER ENGINEERING



网

#### TRANSPORT

- Technology of Transport Processing
- Exploitation of Transport and Technological Machines and Complexes



**PEDAGOGY** 



## CONTROL IN TECHNICAL SYSTEMS

- · Standardization and Metrology
- · Quality Management
- System Analysis and Control



## FOOD PRODUCTION TECHNOLOGIES

- Food Production
   from Plant Raw Materials
- Food Production and Food Services





APPLIED GEOLOGY



**OIL AND GAS ENGINEERING** 



#### **CONSTRUCTION**

- · Unique Buildings and Structures Constriction
- Constriction, Exploitation, Reconstruction and Technical Protection of Highways, Bridges and Tunnels





#### INSTRUMENT ENGINEERING

#### **MECHANICAL ENGINEERING**

- · Technological Machines and Equipment
- Automation of Technological Processes and Production
- Design and Technological Support of Mechanical Engineering Industries





#### IT-sphere

- Informatics and Computer Science
- Information Systems and Technology
- Applied Informatics
- Software Engineering
- Information Security



#### **CHEMISTRY**

- Chemistry, Physics and Mechanics of Materials
- Basic and Applied Chemistry
- · Chemical Technology
- Energy and Recourse-Saving Processes in Chemical Engineering, Petrochemistry and Biotechnology
- Chemical Technology of Energy-Packed Materials and Products



#### **ECOLOGY**

- Technosphere Safety
- Protection in Case of Emergency
- Engineering Environmental Protection



#### **TECHNOLOGY OF MATERIALS**

- Material Engineering and Technology of Materials
- Technology of Artistic Processing of Materials



## ECONOMICS AND MANAGEMENT

- Management
- · Human Resources Management
- Governmental and Municipal Management
- Merchandizing
- Economics Security
- Customs

**DESIGN** 

· Graphic Design

· Costume Design

· Industrial Design

· Environmental Design



# "The Golden Pool" of Samara Polytech

Artem Pivovarov is the best graduate of the year 2017. He was an Electrical Engineering Faculty student, he was awarded Rector's and University Academic Board's Scholarships, Alabin's Scholarship, Samara Region Governor's Scholarship and President's Scholarship. He is the author of 13 scientific publications in various journals

41 graduates

of 2017 belong to "the Golden Pool" of the University

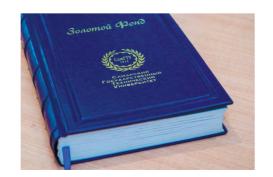
The winners were awarded in 4 nominations for:

"Achievements in Scientific Activities"

"Social Activities"

"Contribution to the Sports Development"

"Achievements in Cultural Activities"





# Schools for Applicants

- Mathematics School "Talent"
- Samara Mendeleev's School

## **Competitions in Polytech**



Tournament of M. V. Lomonosov



Interregional School Math Competition "SAMMAT"



Multidisciplinary Engineering "Zvezda"



Interregional School Competition
"Future Researchers –
Future of Science"



Russian as a Foreign Language Summer School

## "Vzlet" Program

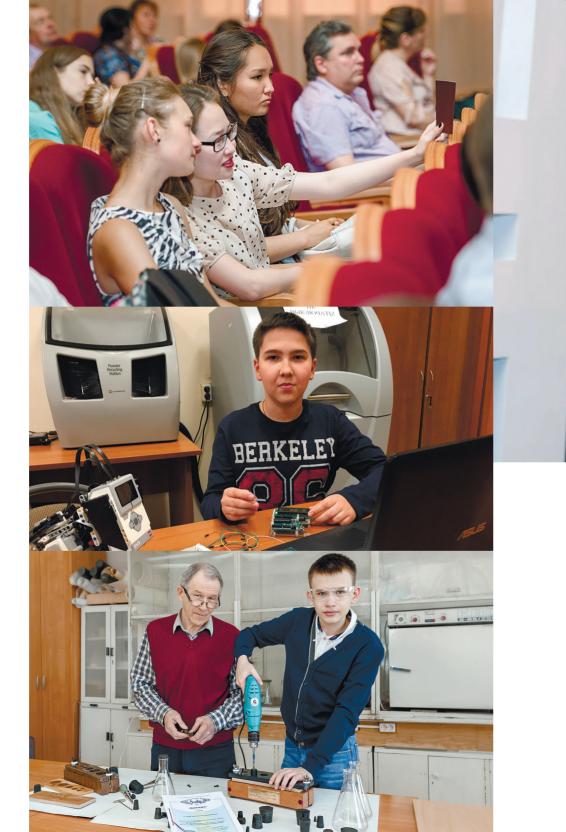
Coordination Council under the Governor of the Samara region for work with intellectually gifted children was established on the initiative of the interuniversity Department of Information and Educational Systems and Technologies of Samara Polytech in 2015. "Vzlet" Program was developed at the same time.

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Flagship University is a modern multidisciplinary University with a developed system of all levels of education and management. It is considered to support economic, innovative and technological development of our region. The government of the region lays high hopes on Samara Polytech.



Alexander Kobenko, Vice-Governor - Minister of Economic Development, Investments and Trade of the Samara region, 2016





5000+ Scho

Schoolchildren registered on the website Vzletsamara.ru in 2017

500+

topics selected by children and teenagers for research and project work under the supervision of University professors

200

winners of the program are included in the Governor's register



1060+

Samara Polytech articles are in the Web of Science database

1980+

Samara Polytech articles are in the Scopus database

journals

of Samara Polytech are included in the list of State Commission for Academic Degrees and Titles

journal

is included in the Scopus database

90 active patents of the Russian Federation

Dissertation Councils

60+ PhD (Candidate) and Doctor's thesis

defenses per year

million rubles

is total funding of scientific research and design experimental works

> 90 million rubles

of Megagrant of the Government of the Russian Federation for realization of research "Thermodynamics and catalysis as the basis of the strategy of creation of perspective processes of obtaining fuels from renewable raw materials and technologies of hydrogen accumulation using unsaturated organic compounds"

**WHAT** The program for the accelerated development of startups. Includes weekly tracking sessions, workshops, mentoring sessions and seminars

**WHO** Leading Russian business experts and specialists of Samara Polytech give advice to businessmen beginners



FOR WHAT Teams have the opportunity to go to the Federal program of the Fund for the development of Internet initiatives and GenerationS to receive a grant of 2 million from the Promotion of Innovation Fund.

FOR WHOM The accelerator is open for students and employees of any University in the region, as well as independent teams with projects at the stage of idea and/ or prototype.



More about the Accelerator at **kb37.samgtu.ru** 

# TOP-5 Latest Scientific Projects of Samara Polytech







Partnership with Samara Polytech makes possible the development of joint Russian-Swiss projects in the fields of medicine, education, culture and science. I am confident that such a fruitful cooperation will allow us to make new scientific discoveries.



Frederik Paulsen, President of the international pharmaceutical company "Ferring Pharmaceuticals", Honorary Consul of the Russian Federation in Lausanne, 2016 Innovative Way to Control Flexible Mirrors, Allowing to Avoid Distortions in Telescopes

Yakov KLEBANOV

Doctor of Technical Sciences, Head of "Mechanics" Department

**Konstantin POLYAKOV** 

Candidate of Physical and Mathematical Sciences

**Ravil AKHMETOV** 

Doctor of Technical Sciences, First Deputy General Director, General Designer, Head of "SRC-Progress" Methods for Producing Soil-Like Materials from Various Industrial Wastes

**Dmitriy BYKOV** 

Doctor of Technical Sciences

**Konstantin CHERTES** 

Doctor of Technical Sciences

Olga TUPITSYNA

Doctor of Technical Sciences

Vitaliy PYSTIN

Candidate of Technical Sciences







Pitless Technology of Trunk Pipeline Repair with the Use of Innovative Overriding Device

**Vladimir TIAN** 

Doctor of Technical Sciences, Head of "Pipeline Transport" Department

Nikolay DEDOV

Candidate of Technical Sciences

Irina FEDOTOVA

**Natalia IVANOVA** 

Complex for Neutralization of Odorant Natural Gas Wastes and Residues

Andrei PIMENOV

Candidate of Chemical Sciences, Head of "Chemistry and Technology of Organic Nitrogen Compounds" Department

Pavel KRASNIKOV

Candidate of Chemical Sciences

Development of New Inhibitors of Influenza Virus A, Hepatitis C and Variola Viruses

Yuriy KLIMOCHKIN

Doctor of Chemical Sciences, Head of "Organic Chemistry" Department

**Vitaliy OSIANIN** 

Doctor of Chemical Sciences

**Dmitriy OSIPOV** 

Candidate of Chemical Sciences

**Marat BAIMURATOV** 

Candidate of Chemical Sciences

## **Youth Science**

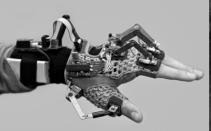
### Program «UMNIK» 2017-2018

**Best Ideas** 

The university has a glorious history and wonderful traditions. Here it is possible to adapt existing technologies for recycling to the Russian reality. It is important that representatives of a specialized business create basic departments in collaboration with the university, initiate the opening of joint laboratories this is the right step that allows young people to enter the real sector of the economy.



Vladimir Gutenyov, Deputy of the State Duma of the Russian Federation, Vice-President of Russian Engineering Union, 2017



Vibro-glove — hearing aid for people with deep hearing loss

Artem BRAZHNIKOV



Development of edible biodegradable packaging based on apple raw materials

Yana DAVYDOVA

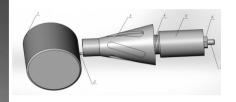


Automated control system for isolated power system modes with distributed

Artem PRONICHEV

Wind turbine with energy-efficient electromechanical converter for autonomous power supply systems

Alexey TABACHINSKIY



Device for forming regular surface microrelief using ultrasound to improve the performance characteristics of workpieces

Nadezhda KRYLOVA



Device for overriding pipe nippers

**Aleksandr LESHCHENKO** 

Controlled point retarder

Stanislav VAVILIN



Rotor winding protective equipment "ZORO"

Mikhail KRITSKIY



recognition system

**Aleksandr GOREV** 



Anti-parking device with "friend-or-foe" Installation of continuous monitoring of aluminum grain size on the basis of acoustic emission measurement for use in foundries

**Andrey BOCHKAREV** 

## **Inter-Disciplinary Project Teams**

**Open Competition** 

**External Experts** 

Real Project

**Unique Selection** Criteria

Mixed-Age Students from Different Study Programs

Replacement of Traditional Educational **Technologies** 



We are making an informationmeasuring system for determining alloy quality

#### Disciplines:

- Measuring Technology
- Physics
- · Metallurgy and Foundry
- · Mathematical Modelling
- · Non-Destructive Control



We are building a prototype of heliolithography laboratory for 3D printing on the Moon surface

#### Disciplines:

- Metallurgy
- · Materials Science
- Architecture
- · Space Engineering



We are using neural networks in computer vision systems

#### Disciplines:

- Automation
- Programming
- · Machine Learning



We are designing flat gas cylinder

#### Disciplines:

- Metalworking
- · 3D-modelling
- Computer Engineering



We are creating a digital model of cardiovascular system

#### Disciplines:

- Energy
- · Mathematical Modelling
- · Computer Engineering
- Medicine



We are developing a technology of obtaining edible food wraps and packaging materials on their basis

#### Disciplines:

- · Chemistry
- Design
- Economics



We are eliminating environmental damage by reagent treatment and washing methods

#### Disciplines:

- Geology
- Geophysics
- Ecology
- · Chemistry · Oil and Gas
- Petrochemistry



We are visualizing historical places using 3D-modeling

#### Disciplines:

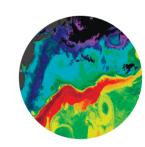
- Physics
- Architecture
- Programming



We are planning urban environment

#### Disciplines:

- Architecture
- Anthropology
- Economics Sociology
- Design



We are developing sectors of hyperspectral monitoring

#### Disciplines:

- · Information Technology
- Physics
- Ecology
- Cartography

## **The Largest International Forums and Conferences**



Russian - Swiss
INNOVATION DAY

X International Winter Symposium on Chemometrics (WSC-10)



IX International Policy Forum on Urban Growth and Conservation in Euro-Asian Corridor (The Silk Road)





II International Swiss-Russian Forum "Innovation Day"



VI International

Ecological Congress ELPIT-2017

International Scientific Conference High-Rise Construction-2017











SANATORIUM



TOURIST RECREATION CENTERS



MODERN DORMITORIES





SKI CENTER «CHAIKA»







#### **Academic Library**

8 Storage Facilities

Reading Rooms

Circulation Departments in 5 Buildings

**1,3**Million

Copies of Various Documents

## Dormitory on Revolutsionnaya street

Opened in 2014

**16 300+** Residential Places

## Geological and Mineralogical Museum

Works since 2004

3000+

Mineralogical and Paleontological Samples

## **Sport Complex**

✓ Boxing Hall ✓

Shooting Range

Martial Arts Hall

Small Mirror Room

for Fitness Aerobics

✓ Aerobics Room
✓ Game Room



More information about the museum in the book

Sidorov A.A. Geologo-mineralogicheskij muzej Samarskogo gosudarstvennogo tekhnicheskogo universiteta. Mineralogicheskaya kollekciya. Kniga pervaya [Geological and mineralogical museum of Samara State Technical University. Mineralogical collection. The first book]. Samara, 2014.



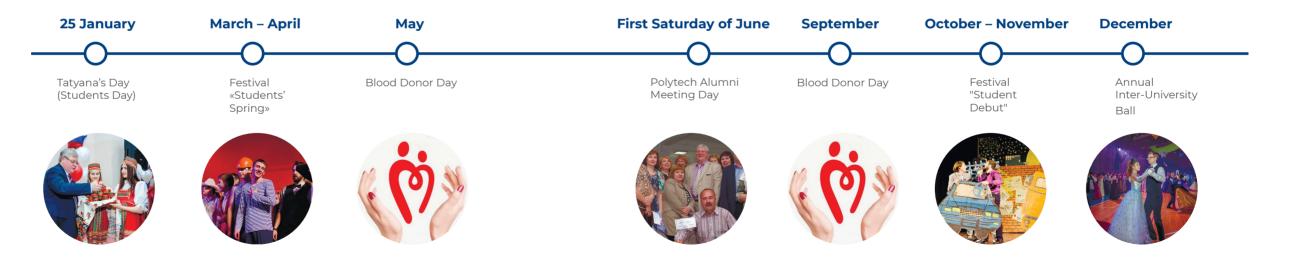
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The early 60's in our country were called "hungry times" and it was difficult to study at the Polytechnic Institute. But there were wonderful teachers who gave us the real life lessons.



**Viktor Chernomyrdin,**Prime Minister of the Russian
Federation, 1995

## **Traditions Calendar**



## **Sport**

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Social life in Polytech is in full swing. This university has always given the opportunity to progress comprehensively - in science, in sports, in creativity. Samara Polytech has always had excellent teachers - the titans of science and life experience.



**Dmitriy Azarov**, Acting for the Governor of the Samara Region

#### Basketball



#### "Polytech-SSTU"

Women's team playing in the Super League of the Russian Basketball Championship

#### "Energy-SSTU"

Men's basketball team, member of the VTB student league



Since 2011 – the only one of its kind Department "Chess Art and Logic"

#### **Swimming**

Alexander Kudashev, a Heat Power Engineering Faculty student, international master of sport in swimming, silver and bronze medals owner of the World Summer Universiade - 2017 as part of the Russian national team

#### **Modern Pentathlon**

Alexander Lifanov, a Petroleum Engineering Faculty student, international master of sport, winner of the Youth Olympic Games in Nanjing, world champion in pentathlon among juniors

#### Box

Annual boxing tournament for prizes of the University President in Syzran branch of Samara Polytech

#### Mini-Football

"Techuniversity"
The team is a two-time winner of the Samara Championship in mini-football

#### **Step Aerobics**

"Madis-SSTU"
The team is winner of the All-Russia competitions in fitness aerobics in the age category from 17 years and older

## Youth Forum of the Volga Federal District "iVolga"

Samara Polytech is a regular participant of the forum

# Club of the Funny and Inventive (KVN)

KVN team "Volzhane – SSTU" in the 2017 season reached the semifinal of the Premier League on the First TV Channel

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"Volzhane" from Samara is a very promising, interesting team, which, seems to me, is on the right track, unlike the previous several projects that appeared after Samara KVN team "SOK". This is not just a project but it feels like it's a real Funny and Inventive team



**Aleksandr Maslyakov (jr.),** host of the KVN Premier League



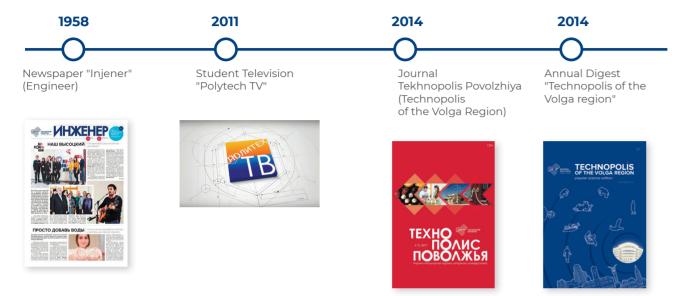
# Student Choir "Majolica"

The choir repertoire includes spiritual music, foreign classics, Russian folk songs, jazz, modern popular compositions

## **Fashion**

Samara Polytech is a permanent venue for the Festival of Fashion and Theater Costumes "Volga Seasons of Aleksandr Vasiliev"

## Media



## **Academic Partners of Samara Polytech**





















**50+** European and Asian Universities











Student Project – CYC LIVE (Cultural and Youth Center)



rector@samgtu.ru international.samgtu@gmail.com



samgtu63

#### **Industrial Partners**























