

THE MINISTRY FOR SCIENCE
AND HIGHER EDUCATION
OF THE RUSSIAN FEDERATION



DON STATE
TECHNICAL
UNIVERSITY

# DON STATE TECHNICAL UNIVERSITY

www.donstu.ru

### **ROSTOV-ON-DON**

### SOUTHERN BUSINESS AND INDUSTRIAL CAPITAL

1352000

population

348 km<sup>2</sup>

area

90 000+

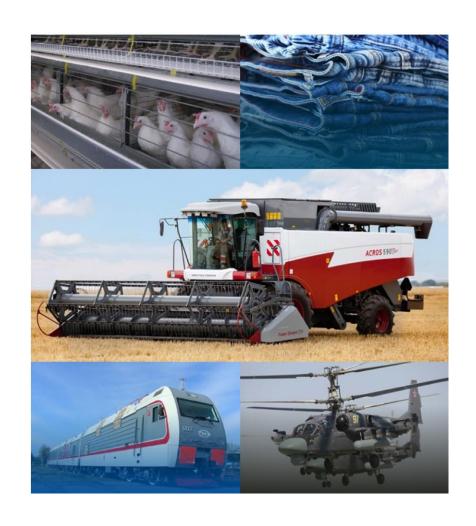
enterprises and companies

### **TOP-10 AWARDEE**

"investment attractive city" www.rostov-gorod.ru

# STRATEGIC CLUSTERS

- Machine engineering and equipment
- Food industry
- Aircraft engineering
- Chemical industry
- Light industry
- Metallurgy



# DON STATE TECHNICAL UNIVERSITY

1930

North-Caucasus Institute of Agricultural Machine Building

1992

Don State Technical University

2016

The Flagship University

5 000+

staff

24

**134** 

faculties

departments

45 000+

students

3 000+

international students



branches



students' dormitories

- DON UNIVERSITY SJU-DSTU (CHINA, SHANDONG PROVINCE)
- **5 COLLEGES**
- TECHNICAL LYCEUM
- **GYMNASIUM**
- DON CADET SCHOOL
- **KINDERGARTEN**

### **DSTU IN UNIVERSITY RANKINGS**



Times Higher Education World University Ranking

501-600



The Three University Missions

1501-1650



World University Rankings

1201+



Ranking of Green Universities in Russia

3



100 best universities in Russia

**78** 



QS: Emerging Europe and Central Asia

301-350

### **DSTU STRUCTURE**

fields of study

**ARTS & HUMANITIES** 

LIFE SCIENCES & BIO MEDICINE

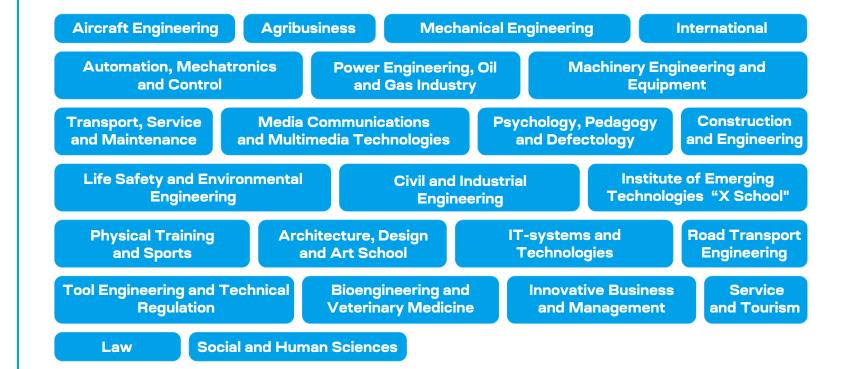
**NATURAL SCIENCES** 

**SOCIAL SCIENCES** 

**ENGINEERING & IT** 

24 faculties

134 departments



## STUDY PROGRAMS

PHD (3 YEARS)

ENGINEERING & IT NATURAL SCIENCES SOCIAL SCIENCE ARTS & HUMANITIES

MASTER (2 YEARS)

BACHELOR (4 YEARS) ENGINEERING & IT

NATURAL SCIENCES SOCIAL SCIENCE ARTS & HUMANITIES

LIFE SCIENCES & BIO MEDICINE

PRE-UNIVERSITY

**KINDERGARTEN** 

TECHNICAL LYCEUM

**GYMNASIUM** 

COLLEGES

EMPEROR NIKOLAY II DON CADET SCHOOL



study programs

LIFELONG AND LIFEWIDE LEARNING

PRIMARY EDUCATION

SECONDARY EDUCATION

PREPARATORY EDUCATION

HIGHER EDUCATION

POST -GRADUATE PROGRAMS

CAREER GUIDANCE CENTRES



## **DSTU INFRASTRUCTURE**

#### **CONGRESS HALL**

- Concert hall 1500 seating capacity
- Multimedia rooms
- Press conference venue
- Multimedia equipment
- Multi-language broadcasting
- Satellite TV link-up



#### **MEDIAPARK**

- Media Lab
- (Radio and TV broadcasting)
- Production center
- Design studio
- TV school



#### **TECHNOPARK MAGIKA**

"Soyuzmultfilm" is the strategic partner of Technopark

- Animation, 2D and 3D visualization
- Game design
- Mobile apps development
- Sound design
- VR\AR
- Motion capture equipment



- 4 research and education centers
- 30 labs (Camozzi, Mitsubishi, Alcoa, Festo, Kovosvit MAS, etc.)
- Rosatom Nuclear Energy Centre
- Nanotechnologies Education Park
- South Russia Engineering Centre
- Robotics Resource Centre
- Agrotechnopark
- 10 spin-off companies





# **DSTU CAMPUS**







«Nauka» Industrial facility







Scientific-educational facilities

New dormitories

# **NEW CAMPUS**









### NATIONAL AND INTERNATIONAL PARTNERS























































# **ENTERPRISE-UNIVERSITY DEPARTMENTS**

21

corporate departments

13

degree-granting departments



Transport systems and logistics



Orthodox culture and theology



Non-ferrous metal processing



Transport machinery



Aircraft systems for special operations manufacturing technology



Veterinary dentistry and oral surgery



Design and engineering support of drive systems production



Ichthyology and fish pathology



Hardware and software systems





РОСТСЕЛЬМАШ

Agricultural machinery engineering and production



Steel and its alloys production technologies



Automated control systems



Agribusiness products processing technologies and equipment



Drive systems



Technical means of fish farming



Engineering management in construction



Industrial metrology



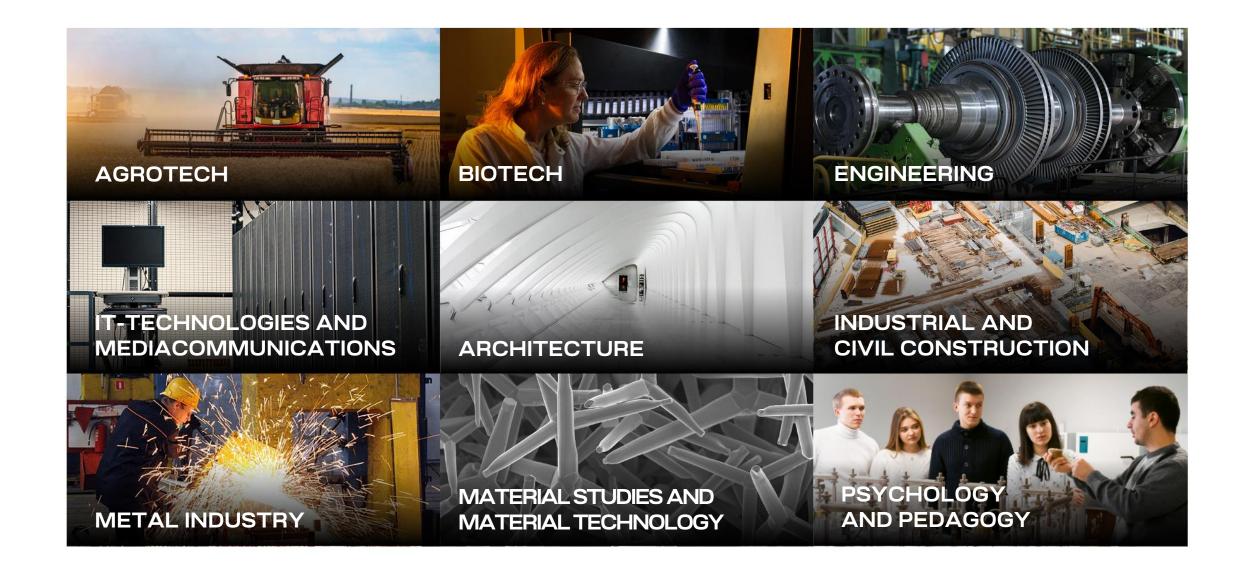








## **KEY STUDY AREAS**



## INNOVATION CENTRE WITH AMAZONE WERKE



Delegation from DSTU at AMAZONE-WERKE plant



Negotiations at Osnabrück University



Joint participation with the international partners in "Golden Autumn 2018" fair



DSTU delegates testing Pantera selfpropelled sprayer in Germany



Amazone-Werke and Scientific Centre "Donskoy": working together on unmanned robot for soil analysis

# INNOVATION CENTRE WITH AMAZONE WERKE



Rostov Region Governor visit to DSTU



Cooperation agreement between DSTU and Amazone-Werke



Precision Agriculture Class



A PINISH AND A PIN





Fertilizer Spreader ZA-M Stand in the Precision Agriculture class

# **ROSTSELMASH**



Rostov Region Governor visit to DSTU



Developing design documentation of final drive for the tractor



RSM Projectorium. 2 weeks of intensive training 13 April – 25 April 2019



Students internship at Rostselmash plant





# **BIZON TRADE: MODERN AGRICULTURE**



Partnership agreement between DSTU and "Bizon Trade"



Lemken (Germany) и Gaspardo (Italy) training agriculture stands



Opening ceremony of the "Bizon Trade" modern agriculture class



Training stand: "Systems of precision agriculture" with quadrocopter Mavic Pro 2 and virtual reality glasses DJI



Stara Imperador sprayer cabin (Brazil) –agro simulator for preparing specialists in agriculture

# SOUTHERN SCIENCE AND EDUCATION CENTER (SSEC)

- Since August 7, 2019
- Created to unite science, real sector of economy and government
- Supervisory Board headed by Vassily Golubev, the Governor of the Rostov Region
- Aimed at becoming one of the leading centers of advanced technologies in the agro-industrial sphere in Russia and Europe by 2030



# **SOUTHERN SCIENCE AND EDUCATION CENTER: CONSORTIUM**

higher education institutions

scientific organizations 12

real sector of economy organizations

development institutions



professional associations















































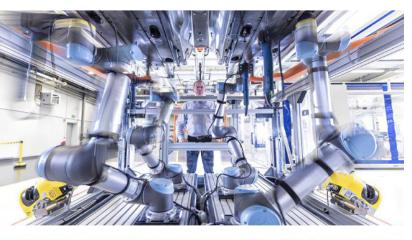






Консорциум Интеллектуальная агросистема и карбоновый инжиниринг

# INNOVATIVE SCIENTIFIC AND TECHNOLOGICAL CENTER (INTC) «DON VALLEY»



### THE GOAL

to create the enabling environment for innovative development in Rostov Region



### THE OBJECTIVES

- Innovative infrastructure creation
- Competitive advantage in economics and GDP growth
- New investors attraction
- Human capital improvement
- Welfare gains
- Urban environment development

### **INITIATORS**









REGIONAL DEVELOPMENT CORPORATION

## DON ENGINEERING CENTER









# JOINT CENTER DSTU + ROSTSELMASH

# Agriculture and industrial complex digitalization projects

- New generation machines digital design
- Strength and resource calculations
- Simulation modeling and developing advanced technology digital twins

# **SOCIAL LIFE**

### STUDENT HEALTH AND SPORTS **COMPLEX «RADUGA»**

residences 1500

holding capacity

sports fields

700

seating capacity of the conference hall





### **DSTU-REAL MADRID ACADEMY**

#### **PROJECT OVERVIEW:**

- Promotion of civil responsibility, tolerance and social activity
- Real Madrid methodical support, coaching and manager training
- Regional sports infrastructure development





# STUDENT SPORT

36

student sports teams



- football
- track-and-field athletics
- basketball
- handball
- cheerleading for kids and adults









### **DSTU SCIENCE**

RISK-ORIENTED
TRANSFORMATION
OF THE
AG-INDUSTRIAL
COMPLEX

- Digitalization of agricultural land monitoring
- Precision farming
- The Internet of Things, cyberphysical systems and cloud services
- Intelligent and self-driving means of agricultural mechanization

BIOLOGICAL AND MEDICAL ENGINEERING

- Organic, individualized and functional food products
- Nano- and biotechnologies
- Additive technologies in medicine
- Prospective technologies and devices in medicine

RESOURCE-SAVING ENERGY

- Alternative energy
- Deep processing of hydrocarbon raw materials
- New energy source
- Smart energy networks
- Innovative methods of energy storage and recycling

RATIONAL KAP
PRODUCTION CYCLE

- Biomanipulations, biocontrol, biologization of agriculture
- Green economy and sustainable development
- Deep processing of agricultural products
- Technologies and equipment for feed production

DIGITAL
TRANSFORMATION
OF THE INDUSTRIAL
COMPLEX

- The Internet of Things, cyber-physical systems and cloud services
- Equipment diagnostics and non-destructive testing
- Additive technologies and generative design
- Industrial robotic systems

TECHNICAL MEANS OF AQUACULTURE

- Farming and commercial breeding of fish, invertebrates, algae
- Ensuring the ecological safety of water bodies
- "Story" technologies for multi-trophic aquabioculture
- Digital modeling

## **DSTU SCIENCE**

# ADVANCED ROBOTIC MACHINES AND COMPLEXES



Machines for balancing flexible rotors development, high technology multi camera systems and unmanned aircraft for threat detection

# AGRO-BIOTECHNOLOGY



Veterinary probiotic drugs for targeted animal health modeling

# ADVANCED MATERIALS



Multi-layer composite materials for aircraft industry and medicine

# **DON UNIVERSITY SJU-DSTU**









18.06.2019

Every year:
100 students
per program

JOINT EDUCATIONAL PROGRAMS

CONSTRUCTION OF BRIDGES AND TUNNELS

ORGANIZATION OF TRANSPORTATIONS AND TRANSPORT MANAGEMENT

INDUSTRIAL AND CIVIL ENGINEERING

### RUSSIAN AS A FOREIGN LANGUAGE TEXTBOOK FOR CHINESE STUDENTS













### INSTITUTIONAL NETWORKING

# **«BILINGUAL SECTIONS»**PROJECT





MINISTRY OF EDUCATION, CULTURE AND SPORT (SPAIN)



introductory courses::2-3 forms



advanced courses:4-9 forms



special subjects: 10-11 forms RUSSIAN
CERTIFICATE
OF SECONDARY
EDUCATION



DIPLOMA DEL BACHILLERATO

# «DIGITAL SCHOOL» PROJECT

in collaboration with educational organizations of China, Georgia, Kazakhstan, Spain, Kyrgyzstan and Uzbekistan

#### **PROJECT'S AIM:**

replication of best practices for the development of digital literacy of schoolchildren on the basis of Russian schools and educational organizations abroad

700 +

Educational organizations



ROSSOTRUDNICHESTVO



# INTERNATIONALIZATION OF EDUCATION: EDUCATIONAL PROGRAMS IN FOREIGN LANGUAGES

8

educational programs in English:

# BACHELOR'S DEGREE

- Digital Content Production
- Reconstruction and Restoration of Architectural Heritage

### EXTENDED BACHELOR'S DEGREE (5 YEARS)

Veterinary Medicine

### MASTER'S DEGREE

- Smart Systems based on BlockChain Technology
- Multimedia Projects Production
- Industrial and Civil Engineering
- Transport Logistics
- Urban Planning

30

modules\subjects in English

#### THE MAJORS ARE:

- Construction
- Veterinary Medicine
- Tool Engineering
- Technosphere Safety
- System Cybersecurity
- Software Engineering

- International Economics
- Applied Informatics
- Robotics and Mechatronics
- Psychophysiology and Clinical Psychology

### INTERNATIONAL FACULTY

### PROGRAM STRUCTURE



### **ADDITIONAL EDUCATION COURSES**

- Russian as a foreign language (in accordance with TORFL levels).
- The Russian language for business
- The Russian language for engineers
- Teaching Russian as a foreign language (from Elementary to Advanced levels)

### **HEAD TESTING CENTER**

 Preparation for a test to obtain an international certificate confirming the level of the Russian language proficiency

### INTERNATIONAL FACULTY

### **EDUCATION FORMATS**

### **ONLINE**

- Individual educational plan
- Convenient schedule considering time zones
- Tutors' assistance

### **MIXED**

- Individual educational plan
- A wide range of online coursesFlexible system of online grading

### **OFFLINE**

- Small groups (maximum 8 students)
- Language labs
- Science research projects
- Buddy service systemComfortable accommodation

### **Application dates:**

10 June - 30 October

#### Start dates:

As groups are completed (September-November)

The module framework of educational process organization

# 12 modules

The Russian language general course Specialized disciplines

### **Program types**

Intensive-936 academic hours. / 26 ECTS Standard - 2160 academic hours. / 60 ECTS Long-term - 3240 academic hours. / 90 ECTS

#### Final documents:

Certificate in standard format and TORFL/B1 Certificate

### **ACADEMIC MOBILITY**

### LONG-TERM AND SHORT PROGRAMS





### **SUMMER SCHOOLS LANGUAGE+**







Logistics and Management in Road Transport

- Archicom
- Media camp
- Cross-cultural communication
- Aquaculture
- Urban planning and reconstruction
- Pet veterinary medicine

# CONTACTS

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