

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 Machinery Building

**1992** 



Don State Technical University

2016



The Flagship University



5 000+ staff

46 000+

students



2 608 international

students



6 branches















134
departments

23
faculties

**341** study programs

## **DSTU STRUCTURE**



5 fields of study

**ARTS & HUMANITIES** 

LIFE SCIENCES & BIO MEDICINE

**NATURAL SCIENCES** 

**SOCIAL SCIENCES** 

**ENGINEERING & IT** 



23 faculties 134
departments

**AGRIBUSINESS** 

AIRCRAFT ENGINEERING

ARCHITECTURE, ART AND DESIGN SCHOOL

AUTOMATION,
MECHATRONICS AND
CONTROL

CONSTRUCTION AND ENGINEERING

INNOVATIVE BUSINESS AND MANAGEMENT

**INTERNATIONAL** 

IT AND ECONOMIC SYSTEMS

PSYCHOLOGY, PEDAGOGY AND DEFECTOLOGY

**SERVICE AND TOURISM** 

MECHANICAL ENGINEERING

MEDIA
COMMUNICATIONS
AND MULTIMEDIA
TECHNOLOGIES

**OIL AND GAS INDUSTRY** 

PHYSICAL TRAINING AND SPORTS

ROAD TRANSPORT ENGINEERING

SOCIAL AND HUMAN SCIENCES

TOOL ENGINEERING AND TECHNICAL REGULATION

TRANSPORT, SERVICE AND MAINTENANCE

CIVIL AND INDUSTRIAL ENGINEERING

**MILITARY EDUCATION** 

IT-SYSTEMS AND TECHNOLOGIES

MACHINERY ENGINEERING AND EQUIPMENT

**LAW** 

LIFE SAFETY AND ENVIRONMENTAL ENGINEERING

## **STUDY PROGRAMS**

PHD (3 YEARS)

ENGINEERING & IT

NATURAL SCIENCES

SOCIAL SCIENCE

ARTS & HUMANITIES

MASTER (2 YEARS)

BACHELOR (4 YEARS) ENGINEERING & IT

ARTS & HUMANITIES

NATURAL SCIENCES

SOCIAL SCIENCE

LIFE SCIENCES & BIO MEDICINE

SECONDARY EDUCATION

TECHNICAL LYCEUM

**GYMNASIUM** 

**COLLEGES** 

EMPEROR NIKOLAY II DON CADET SCHOOL



#### LIFELONG AND LIFEWIDE LEARNING

PRIMARY EDUCATION

SECONDARY EDUCATION

PREPARATORY EDUCATION

HIGHER EDUCATION

POST -GRADUATE PROGRAMS



## **NATIONAL AND INTERNATIONAL PARTNERS**

#### FOR SUSTAINABLE INSTITUTIONAL AND REGIONAL DEVELOPMENT

#### РОСТСЕЛЬМАШ

Rostov Combine-harvest



MTF Kovosvit MAS



Realmadrid Foundation



Gloria Jeans Plant



LLC Bizon



Rostov Helicopter Plant



ALCOA inc.



PHYWE systeme GMBH&Co



Siemens



South Region Mediagroup



**ELBUZD** 

Plant



Mitsubishi Electric



Novocherkassk Locomotive Plant



Russian Post



JSC Commercial Bank "Center-Invest"



Azov Optical Mechanical Plant



Camozzi Automation



Industrial Zone

LEMKEN Lemken



Aviatest





## **CORPORATE DEPARTMENTS**





Transport systems and logistics



Multimedia communications and technologies



Clothes design and production



Steel and its alloys production technologies



Industrial metrology



Aircraft engineering



Transport machinery



Drive systems



Power plant engineering



Hardware and software systems



Ecological inspection and permitting activities



Automated control systems



Radiolocation complexes and navigation systems



Aircraft systems for special operations manufacturing technology



Technical means of fish farming



Agribusiness products processing technologies and equipment



Heat and gas supply systems



Agricultural machinery engineering and production



Non-ferrous metal processing



Orthodox culture and theology



Design and engineering support of drive systems production

#### RDI AND SPIN-OFF POOL



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















faculty buildings

students residence houses

**6** branches

#### **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
- Cartoon studio



#### INDUSTRIAL CO-WORKING SPACE



- one-stop operation principle
- access to industrial laboratories
- project promotion support
- open-plan area
- mobile equipment and facilities
- ideas and experience exchange platform
- excellent environment for business development





13 project teams (9 with student participation)















## CENTRE OF EXCELLENCE «ADVANCED ROBOTIC MACHINES AND COMPLEXES »

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



Innovative technological solutions for energy saving for businesses





## CENTRE OF EXCELLENCE «ADVANCED MATERIALS»

Multi-layer composite materials for aircraft industry and medicine

## CENTRE OF EXCELLENCE «BIOTECHNOLOGIES»

Next generation agricultural machines and innovative solutions for ecological restoration of regional river basins











CENTERS OF EXCELLENCE

«ADVANCED ROBOTIC MACHINES

AND COMPLEXES»



- Pressing machines for assembly and disassembly of cardan shafts
- Machines for balancing flexible rotors
- High technology multi-camera systems and unmanned aircraft for threat detection
- Batch manufacturing of container-type greenhouses (hydroponics)



CENTERS OF EXCELLENCE 
«PROSPECTIVE MATERIALS»

#### **AVIATION CONSTRUCTION**

Creation and implementation of cutting edge technologies:

- Multi-layer composite materials
- Varnish and paint coatings

Reduction of aircraft fuel consumption by

3-5%

Mechanochemical technologies for production of functional hybrid materials based on graphene

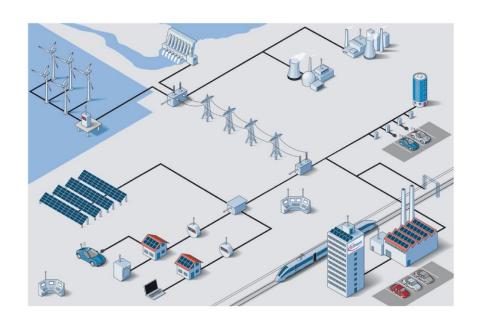
#### **MEDICINE**

Biomechanics of mouth and eyeball tissue, and optimized biocompatible materials for implantation

Grant

90 million rubles

Project Leader –
Prof. Michael Vincent
Swayne, University
of Sydney



CENTERS OF EXCELLENCE «INTELLIGENT ENERGY»



**30** 

innovative technological solutions for implementation by businesses **50** 

intelligent energy projects for state-owned companies



15%

decrease in
energy resource
consumption
through construction
streamlining and
intellectual control

**30%** 

decrease in power losses and electricity usage costs to businesses



Next generation agricultural machine production (joint project with JSC Rostselmash)

2,5%
Increased grain purity, and halving of grain loss during harvesting

## **CENTERS OF EXCELLENCE «BIOTECHNOLOGIES»**

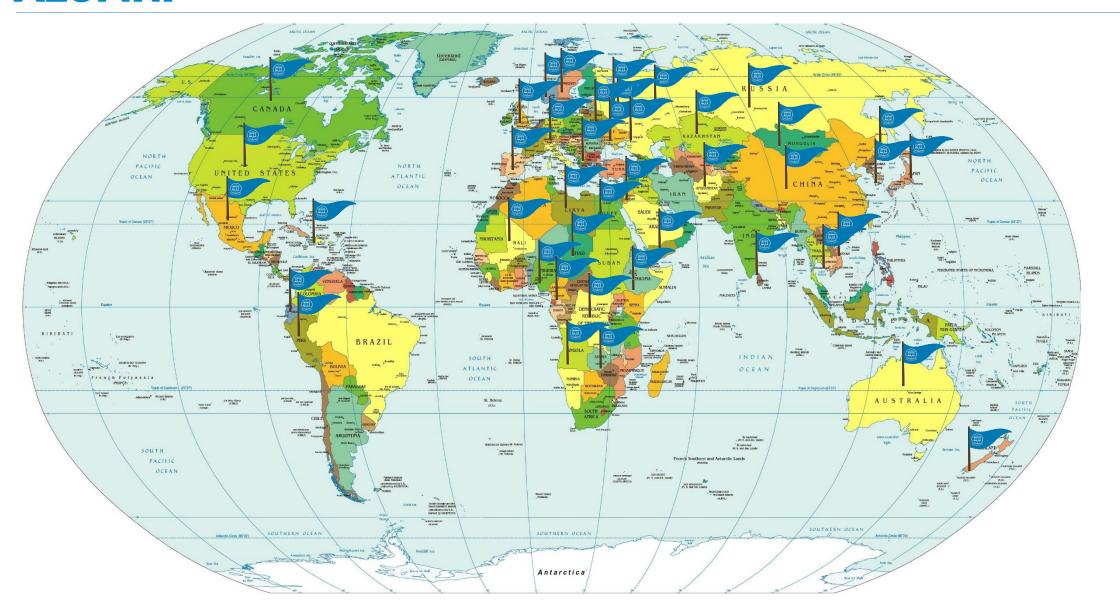


Innovative solutions in ecological restoration of river basins (through increasing food potential with microalgae)

## **Tenfold**

increase in biological productivity of rivers

## **ALUMNI**



## **PARTNER COUNTRIES**

#### EUROPE

Spain

Germany

H: Georgia

🔢 Belgium

Belarus

Denmark

Estonia

Finland

France

Italy

Poland

Portugal

United Kingdom

Czech Republic

**U**kraine

#### ASIA

Armenia

Azerbaijan

China

India

Indonesia

Iran

Israel

Japan

Kazakhstan

Kyrgyzstan

Moldova 🌉

Palestine

💹 Sri-Lanka

Tajikistan

Turkey

Uzbekistan

Vietnam

Nepal

#### **AFRICA**

Algeria

Egypt

Ghana

Kenya

Namibia

#### **AMERICA**

**USA** 

Chile

Brazil

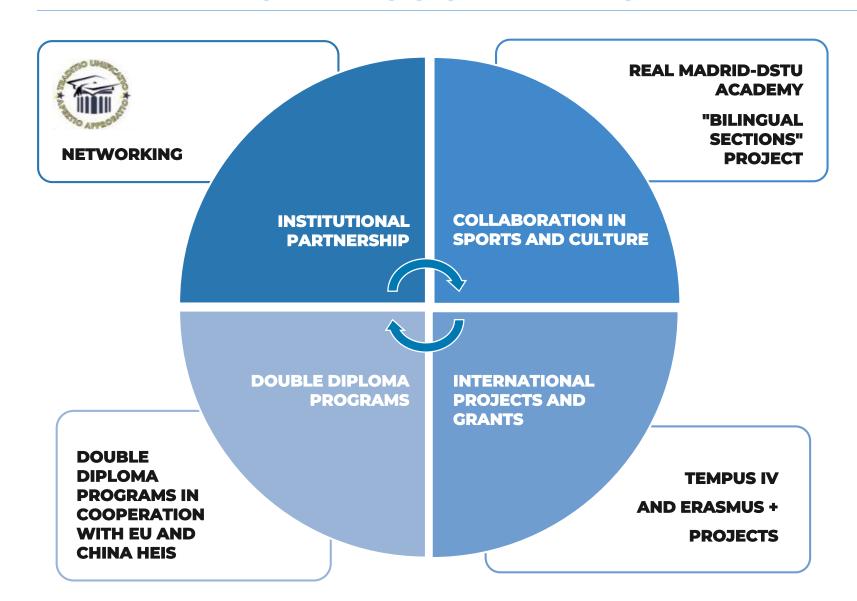
Venezuela







## **INTERNATIONAL COOPERATION**







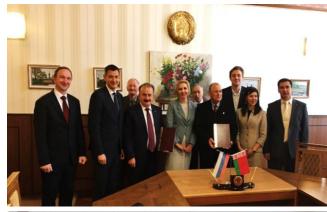


## **DSTU - BRAND PROMOTION**

## OUTREACH INTERNATIONAL EVENTS

## IN-HOUSE INTERNATIONAL EVENTS

## OFFICIAL VISITS AND DELEGATIONS















**58** Russian HEIs

23 international partners

#### **ASSOCIATED PARTNERS:**

- ASIIN (Germany)
- NQA (UK)
- **EURASHE**
- The Holy See
- Flemish community

#### **FOREIGN PARTNERS RUSSIAN FEDERATION** 60 40 20 20 2021 2013 2013 2014 2015 2016 2011 2018 2011 2012 2013 2014 2015 2016 2011 2018



UNIVERSITY OF AGRICULTURE

**INTERNATIONAL PROJECTS** Tempus IV, Erasmus+



## **TEMPUS** Erasmus+

#### **EDUCATION**

Social work

Material science

**Ecology** education

Discover Europe

Jean Monnet Chair

**Engineering education** 

#### **RECOGNITION**

Validation of non-formal and informal learning

Independent quality assurance of programs

Electronic quality assessment of programs

Qualification framework for "tourism"

#### **REGIONAL DEVELOPMENT**

**Employability** centers

University-to-Business partnership

Spin-off companies network

















#### THE CDIO INITIATIVE



(Conceive, Design, Implement and Operate) An innovative educational framework for producing the next generation of engineers



**154** HEIs

**42** countries



SPACE European Network for Business Studies and Languages September 2017



Silk Road High-Tech Parks Alliance June 2016

#### **DSTU**

coordinator of CDIO standards and principles dissemination

#### THE MAIN GOAL:

bringing authentic engineering challenges to inspire next generation of engineers





























## "SILK ROAD HIGH-TECH PARKS ALLIANCE"



## **5 July 2016**

Yantai

### **SILK ROAD HIGH-TECH PARKS ALLIANCE**

Pact Signing (SRSPA Pact)





























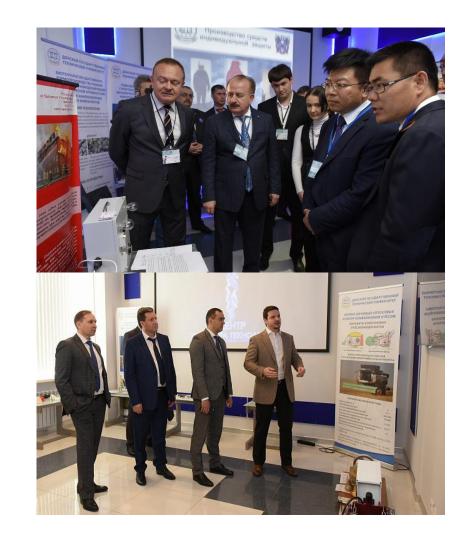




## INTERNATIONAL TECHNOLOGY TRANSFER CENTER



- regular webinars with business
- show-rooms and partner enterprises exhibitions
- R&D catalogue /online promotion
- project from a start-up to the final implementation



## **DON UNIVERSITY SJU-DSTU**



Goal:

implementation of the strategy "One Road One Belt" JOINT EDUCATIONAL PROGRAMS

CONSTRUCTION OF BRIDGES
AND TUNNELS

ORGANIZATION OF TRANSPORTATIONS AND TRANSPORT MANAGEMENT

FINANCIAL MANAGEMENT (since 2020/2021)





## **STU-DSTU PARTNERSHIP - SINCE 2004**

joint project in the framework of Don Institute STU-DSTU

## RUSSIAN AS A FOREIGN LANGUAGE TEXTBOOK FOR CHINESE STUDENTS











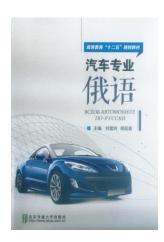


#### **OTHER TEXTBOOKS AND STUDY GUIDES**













## RUSSIAN AS A FOREIGN LANGUAGE TEXTBOOK «MЫ»

- communicative method
- cultural and country studies activities
- project work activities











## **PROGRAMS TAUGHT IN FOREIGN LANGUAGES**

#### POST GRADUATE SPECIALIZED COURSE (5 YEARS)

Veterinary Medicine



- Smart Systems Based on BlockChain Technology
- Media and Communications
- Economics
- Civil Engineering
- Urban Planning













#### **«BILINGUAL SECTIONS» PROJECT**

DON STATE TECHNICAL UNIVERSITY

(RUSSIA)

MINISTRY FOR EDUCATION, CULTURE AND SPORT

(SPAIN)

RUSSIAN CERIFICATE OF SECONDARY EDUCATION

**DIPLOMA DEL BACHILLERATO** 

- coordination and support
- dissemination of Spanish language
- special courses for last year students
- introductory courses
- in-depth courses





### **DSTU-EDUMOBILE**

## **ACADEMIC MOBILITY CHANNELS 2018-2019:**

- AM programs monitoring
- outreach info sessions
- face-to-face sessions
- database of AM applicants

#### **LANGUAGE ASSISTANTS - 28**











**VISITING PROFESSORS - 34** 

- Georgius Agricola Czech Republic
- Munde, Supe Spain
- DAAD Germany
- Fulbright the USA
- Cargill Europe-Asia
- TU Wien Austria
- Sorbonne-Identite, Campus France France
- Griffith College Dublin Ireland
- Glasgow Kelvin College ,
   University of the West of Scotland GB
- Stipendium Hungaricum Hungary
- Mevlana Turkey
- Shenyang University, Harbin University,
   Shandong Jiaotong University- China

## **SUMMER SCHOOLS**

## TRANSPORT AND ROAD MANAGEMENT



54
STUDENTS
FROM CHINA

#### **ENERGY SAVING**



18
STUDENTS
FROM GERMANY

## URBAN REDEVELOPMENT FOR HOSTING FIFA WC 2018



9 STUDENTS FROM THE UK







#### SUMMER SCHOOL COORDINATORS

Sergei Meshcheriakov, Head of International Cooperation Department Maria Seninets, Director of International Education and Tuning Center Don State Technical University, Segarin square 1, room 511 Rostov-on-Don, 344000, Russia centers-tuning/806nstu.ru. International Summer School
URBAN REDEVELOPMENT FOR HOSTING
FIFA WORLD CUP 2018 IN ROSTOV-ON-DON















## INTERNATIONAL EDUCATION

### **PREPARATORY PROGRAMS / INTERNATIONAL FACULTY:**



#### **COURSES**

- RFL courses
- International Summer schools
- Russian for business and entrepreneurship
- Module-based Russian language study programs

#### **TORFL**

• National certificate/6 levels



### **EUROPEAN DIPLOMA SUPPLEMENT**

Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.).



DS is issued by the <u>Center of Evaluation of Educational Documents of Don State</u> <u>Technical University</u> and enables our graduates to continue their education or start career in any of European Higher Education Area countries.





## **SOCIAL LIFE**

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

4 residences 1500 person holding capacity

sports fields

seat conference room **700** 





## **DSTU-REALMADRID ACADEMY**

### **Project overview**

- promotion of civil responsibility, tolerance and social activity
- Real Madrid methodical support, coach and manager training
- regional sports infrastructure development





## **STUDENT SPORT**

**36** 

student sports teams

#### **TEAMS:**

football
track-and-field athletics
basketball
handball
cheerleading for
both kids and adults, etc.









## **TECHNOPARK "QUANTORIUM" FOR CHILDREN**



#### FIELDS:

- aeroquantum
- bioquantum
- IT-quantum
- roboquantum
- energyquantum
- industrial design
- hi-tech cluster

#### **MAIN AIM:**

to train future engineers and to unravel talented children by their creative work in the field of science and technology.



#### CONVENTION AND EXHIBITION CENTER "DON COSSACK GUARD"



400+
exhibition
showpieces

years spent on collection creation

complete set of historical uniforms and equipment

20 000 photos in the center archives

### **MAPPING FURTHER COOPERATION**



CONTACTS
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and Protocol Centre
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- Russian language module study programs for all age groups and purposes
- R&D and spin-off companies for implementation of joint research
- promotion platform for regional academic and business collaboration
- creation of joint educational programs based on the "universitybusiness" model, including upgrade-courses and MBA/MPA programs
- technical expertise, consulting, project management
- academic mobility programs
- MICE-services: organization and holding of intercultural events, forums, workshops, show-rooms and others



THE MINISTRY FOR EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION



DON STATE TECHNICAL UNIVERSITY

# THANK YOU FOR YOUR ATTENTION!

www.donstu.ru

## CONTACTS

## **ALINA VINITSKAYA**

## INTERNATIONAL PARTNERSHIP AND PROTOCOL CENTRE

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