



Why Lithuania:

Facts and figures

3 million inhabitants

Located at the geographical centre of Europe

A member of the EU and NATO since 2004

Has been in the eurozone since 2015

Fastest public WiFi

Vilnius, Lithuania’s capital:

Has a population of over 500,000.

Has been rated by the New York Times alongside Barcelona and Copenhagen as one of the best places to live.

Is only a short 2-3 hour flight away from most major European capitals.

Has been ranked among the TOP 10 cities globally for work-life balance.

Is one of the greenest capitals in Europe, green spaces occupy 68.8 %.

Has one of the biggest historic centres listed in UNESCO heritage.

Inhabitants of Vilnius are the most satisfied people in Europe.

Source: Eurostat, New York Times, Expert Market, rottenwifi.com, Invest Lithuania

To find more, please visit [www.lietuva.lt/100/en](http://www.lietuva.lt/100/en)



PHOTO MADE BY BALTIJOS MEDIA CENTRAS

Alfonsas Daniūnas  
Rector of Vilnius Gediminas  
Technical University

Dear colleagues and friends,

Technologies is the keyword in the time of transformation we are living. Vilnius Gediminas Technical University being the leader of technological sciences in Lithuania is a part of this transformation. Instead of contemplating the future changes, we create the future. By nurturing technogene as the key element of our

identity and integrating technological science with management, law and art, we create the quality that is essential for the social development, competitiveness and security of Lithuania and Europe.

None of the technical universities in the world focused solely on technology. Nowadays, all fields of science are interrelated, and the importance of interdisciplinary approach is critical.

CreaTech, LegalTech, FinTech, artificial intelligence, big data, virtual reality. This is what shapes the nowadays reality. Everything that goes on in the global technology arena you will also find here, at VGTU.

We are confident in saying that technologies shape our lives, and we shape the technologies. It is my pleasure to welcome you at the University to explore the VGTU technogene!

Who we are:

Facts and figures

The leader in technological sciences in Lithuania

- 10 faculties
- 3 research centres
- 13 research institutes
- 23 research laboratories
- Over 100 study programmes
- 10400 students
- 80000 alumni

Over 500 business, research and other social partners in Lithuania

Over 480 partner universities globally

International recognition:

VG TU is ranked 41st in the Emerging Europe and Central Asia region according to the “QS World University Rankings” and is the leading technical university in Lithuania.

VG TU is the best Baltic university in the subject area of Civil Engineering and Building Construction (QS Top 101–150) according to the “QS World University Rankings by Subject”.

VG TU is the best university in Lithuania in the subject areas of Architecture (QS Top 101–150), Business and Management (QS Top 201–250) and Economics and Econometrics (QS Top 201–250) according to the “QS World University Rankings by Subject”.

University vision:

Prestigious higher education institution in Lithuania, which meets the science and education standards of the best technical universities in Europe, is attractive for both Lithuanian and foreign researchers and students, is able to respond to the global challenges and creates a great social value to the national progress.

University mission:

To nurture socially responsible, creative and competitive individuals who are open for science and new technologies as well as cultural values; to promote the scientific progress, social and economic welfare; to create value that ensures the development of Lithuania and the region in the global context.

Values:

- Openness
- Transparency
- Innovation
- Continuous development
- Responsibility
- Strong community



VG TU SCIENCE AND ADMINISTRATION CENTER BUILDING

2 /

Studies at VGTU:

# DEVELOP- MENT OF SCIENCE AND TECHNOLOGY LEADERSHIP

## #technogene

The message spread the world – VGTU Creativity and Innovation Centre *LinkMenų fabrikas* and its partners created the world's smallest nativity scene #NanoJesus - an exact 10 000 times reduced replica of the nativity scene at the Cathedral square in Vilnius. The scene is so small that it can be placed on a single human eyelash. It was presented to Pope Francis as a gift on behalf of the Lithuanian President Dalia Grybauskaitė. Also it has been submitted for the Guinness World Records title. The interdisciplinary project was developed by the team of 30 persons, VGTU students among them.

Studies at VGTU:

Development of science and technology leadership

#NanoJesus project is just an example of our technogene: pragmatic engineering thinking combined with creativity and aspiration to expand the boundaries of technologies. VGTU students have numerous opportunities to work on such complex and interdisciplinary projects together with researchers, businesses and social partners.

Focus on the future technologies and interdisciplinary approach creates the unique ecosystem of innovation and allows engaging the students. Study process constantly combines theory and practical tasks in the labs. The theoretical and practical knowledge is applied in the students' final theses aimed at exploring and solving the real world problems which requires not only demonstration of excellent knowledge, but also innovative thinking.

Creative analytical thinking is promoted by using modern

teaching methods and welcoming business partners' contribution to the academic process. Company representatives are delivering lectures and seminars, proposing topics for the final theses, inviting students to test their ideas during internships.

The modern infrastructure of the University encompassing library, laboratories and research centres to name a few is also stimulating the development of the technogene. The Creativity and Innovation Centre *LinkMenų fabrikas* is already wide-known as a modern

experimentation and innovation hub, providing students with all the tools for practical learning, developing and implementing their ideas using up to date modern equipment.

University develops the lifelong positive attitude towards innovation based on knowledge and expertise. It results in the new products and services developed by our alumni, their technological innovations and leadership. It has a positive effect on the development of community, the country and the region.

Studies at VGTU:

Facts and figures

10 

Study fields:

- Engineering Sciences
- Information Sciences
- Business and Public Administration
- Mathematical Sciences
- Social Sciences
- Technological Sciences
- Arts

10 Faculties

Over 100 study programmes:

51 Bachelor's study programmes

55 Master's study programmes

3 integrated study programmes

Over 50% of study programmes are interdisciplinary.

Study programmes in the field of engineering sciences make 60% of all study programmes offered by the University.

10400 

Students in total

Study cycles:

- Bachelor's studies
- Master's studies
- Integrated studies
- Doctoral studies

Form of studies:

- Full-time
- Part-time (distance learning)

Students by faculties:

Faculty

Percentage

Environmental Engineering

9,5 %

Architecture

4,7 %

Electronics

8,8 %

Fundamental Sciences

19,8 %

Creative Industries

7,8 %

Mechanics

10,3 %

Civil Engineering

10,4 %

Transport Engineering

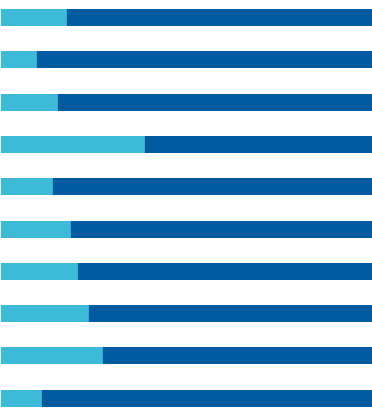
11,1 %

Business Management

12,6 %

Antanas Gustaitis' Aviation Institute

5 %



# Studies at VGTU:

## Study programmes

### Engineering sciences

VGTU has a long and highly valued history of engineering studies. Future engineers learn how to design and implement engineering solutions and know-how, improve existing materials, products and processes, plan and organise the production. VGTU is the only university in Lithuania educating aircraft pilots and air traffic control professionals.

#### Aerospace engineering

Aviation Mechanics Engineering (BSc, MSc ENG)  
Avionics (BSc)  
Aircraft Piloting (Integrated ENG)  
Air Traffic Control (Integrated ENG)

#### Safety Engineering

Fire Protection (BSc)  
Security Systems Engineering (BSc)  
Safety Engineering (MSc)

#### Bioengineering

Biomechanics (BSc)  
Biomedical Engineering (MSc)

#### Environmental Engineering

Environmental Protection Engineering (BSc)  
Environmental Protection Technology and Management (MSc ENG)  
Environmental Engineering (MSc)  
Water Engineering (MSc)

#### Measurement Engineering

Geodesy (BSc)  
Geodesy and Cartography (MSc)  
Innovative Solutions in Geomatics (MSc ENG)

#### Civil Engineering

Civil Engineering (MSc)

Geotechnics (MSc)  
Innovative Road and Bridge Engineering (MSc ENG)  
Road Safety Engineering (MSc)  
Road, Railway and Urban Engineering (BSc)  
Urban Engineering Information Systems (MSc)  
Structural Engineering (MSc ENG)  
Civil Engineering (BSc ENG)  
Building Information Modelling (MSc)  
Construction Technologies and Management (MSc)  
Construction and Real Estate Management (BSc)  
Construction Materials and Products (MSc)

#### Mechanical Engineering

Mechanical Engineering (BSc ENG, MSc ENG)

#### Electrical Engineering

Automation (BSc, MSc)  
Electrical Energetics Engineering (BSc)  
Electrical Energetics System Engineering (MSc ENG)

#### Electronics Engineering

Electronics Engineering (BSc, MSc ENG)  
Computer Engineering (BSc ENG, MSc ENG)  
Telecommunication Engineering (BSc, MSc)  
Event Engineering (BSc)

#### Production Engineering

Digital Manufacturing (BSc ENG)  
Production Engineering and Management (BSc)  
Mechatronics (MSc)  
Mechatronics and Robotics (BSc ENG)  
Mechatronics Systems (MSc ENG)  
Materials and Welding

Engineering (MSc)  
Industrial Product Design (BSc)  
Industrial Engineering (MSc)  
Industrial Engineering and Innovation Management (MSc ENG)  
Industrial Design (MSc)  
Printing Engineering (BSc, MSc)

#### Transport Engineering

Transport Engineering (BSc ENG, MSc ENG)  
Traffic Safety Engineering (BSc)

#### Energy Engineering

Building Energy Engineering (MSc)  
Building Energetics (BSc ENG)

### Technological sciences

Studies in this field focus on the link between natural and engineering sciences (i.e. studies in biotechnology and renewable energy), which contributes to the development of technologies in science and everyday lives.

#### Material Technologies

Solar Cells and Module Engineering (MSc)

#### Biotechnology

Bioengineering (BSc, MSc)  
Nanobiotechnology (MSc)

### Information sciences

Classic university courses in informatics are combined with trends in internet of things, cybersecurity. Createch - the mix of technologies and art covering such areas as multimedia design, virtual reality solutions, etc.

#### Informatics

Internet of Things Engineering (BSc)  
Information Technologies (BSc)  
Management of Services of Information Technologies (MSc)  
Information System Engineering (BSc ENG)

#### Informatics Engineering

Multimedia and Computer Design (BSc)  
Information and Information Technologies Security (MSc ENG)  
Information Electronics Systems (MSc)  
Information Technologies (BSc ENG, MSc)  
Information Systems Software Engineering (MSc)

#### Information Systems

Information Systems (BSc ENG)

#### Software Systems

Software Engineering (BSc)

### Mathematics

Students learn general principles of mathematics and informatics and their application for the development of modern technology products and services, forecasting and assessing the market. VGTU educates highly demanded big data professionals, who are able to apply methods of forecasting and analysis.

#### Applied Mathematics

Mathematics of Modern Technologies (BSc)

#### Statistics

Applied Statistics (MSc)  
Data Analysis Technologies (BSc)

### Social Sciences

Social sciences are closely linked to technical sciences at VGTU in order to enable future economists and representatives of creative industries to Master the technologies, and provide engineers with economical background. Young professionals with interdisciplinary knowledge and competences are especially on demand at the labour market.

#### Economics

Economics Engineering (BSc ENG, MSc ENG)

#### Communication

Communication of Innovations and Technologies (MSc)  
Creative Industries (BSc ENG)  
Communication of Creative Society (MSc)  
Entertainment Industries (BSc)

### Business and management

Successful business development depends on modern technologies. VGTU connects technological and business leadership. Highly demanded real estate, transport, logistics, finance engineering, organisation and business management, business analytics professionals are educated at VGTU.

#### Management

Engineering Economics and Management (MSc)

Organisation Management (BSc)  
Real Estate Management (MSc)

#### Business

Transport Engineering Economics and Management (BSc, MSc)  
Business Analytics (BSc)  
Business Logistics (BSc)  
Business Management (BSc ENG, MSc ENG)

#### Finance

Finance Engineering (BSc ENG, MSc ENG)

### Arts

Architecture studies are especially significant on national and regional levels, having formed the strongest and brightest architecture traditions in Lithuanian history. Alumni of this study programme are recognised as the elite of Lithuanian architecture as their works have gained immense international recognition.

#### Architecture

Architecture (Integrated, MSc ENG)

Legend:  
Bachelor's studies – BSc,  
Master's studies – MSc,  
Programmes taught in English - ENG



3 /

# THE GLOBAL NETWORK OF THE TECHNOGENE

Internationalisation at VGTU:

#technogene

Nino Tabatadze, Nino Inasaridze, Mariam Čhivimiani and Merab Šabešovi from Sakartvelo (Georgia) studying in Master's degree programmes at VGTU chose Lithuania for high quality of studies, especially in engineering. "We know that VGTU is the best technical university in Lithuania, it is much important for us," they say.

N. Tabatadze and N. Inasaridze have been studying the Environmental Engineering programme, M. Šabešovi – IT, Data Mining Technologies specialisation, and M. Čhivimiani – Water Engineering. They all study in Lithuanian language as they have learned it at the Centre for Lithuanian Language and Culture in Georgian Technical University.

**Internationalisation at VGTU:**

**The global network of the technogene**

**Studies and research have long moved beyond the borders of universities and countries. Research and study projects as well as mobility programmes have united the universities, scientists and students into a global network, where VGTU is an active actor.**

VGTU network of partnerships – more than 480 partner universities – has spreaded across Europe, Asia, Africa, North and South America, and Australia. International cooperation is built on mutually beneficial activities and high quality of studies and research.

We contribute to the development of technology leaders, introduce them to specific trends of the country and region as well as a wider perspective which gives an opportunity to share their experience and learn from others, understand the global context, and take an active role in the global progress.

Every year the geography of the University technogene expands: more international students choose the University as their study exchange destination or a place for full-time studies; an increasing number of international academic staff are giving lectures and run creative workshops.



# Internationalisation at VGTU:

## Facts and figures

### Partnerships:

480 

480 partner universities  
in 67 countries: 28 in Europe,  
39 outside Europe

30 Bachelor's and Master's  
programmes are taught in English

8 joint or double degree programmes  
with universities abroad

40 international research and  
study projects

### International students:

10% 

Over 10% of all VGTU students are  
international (degree seeking or  
exchange) from all over the world  
(more than 80 countries)











Every 7th VGTU student goes  
abroad for long-term study or  
internship mobility

VGTU has the highest number of  
international degree seeking  
students in Lithuania

Most degree seeking students  
come from India, Turkey, Belarus  
and Ukraine

Most exchange students come from  
partner universities in Spain, France,  
Germany and Turkey

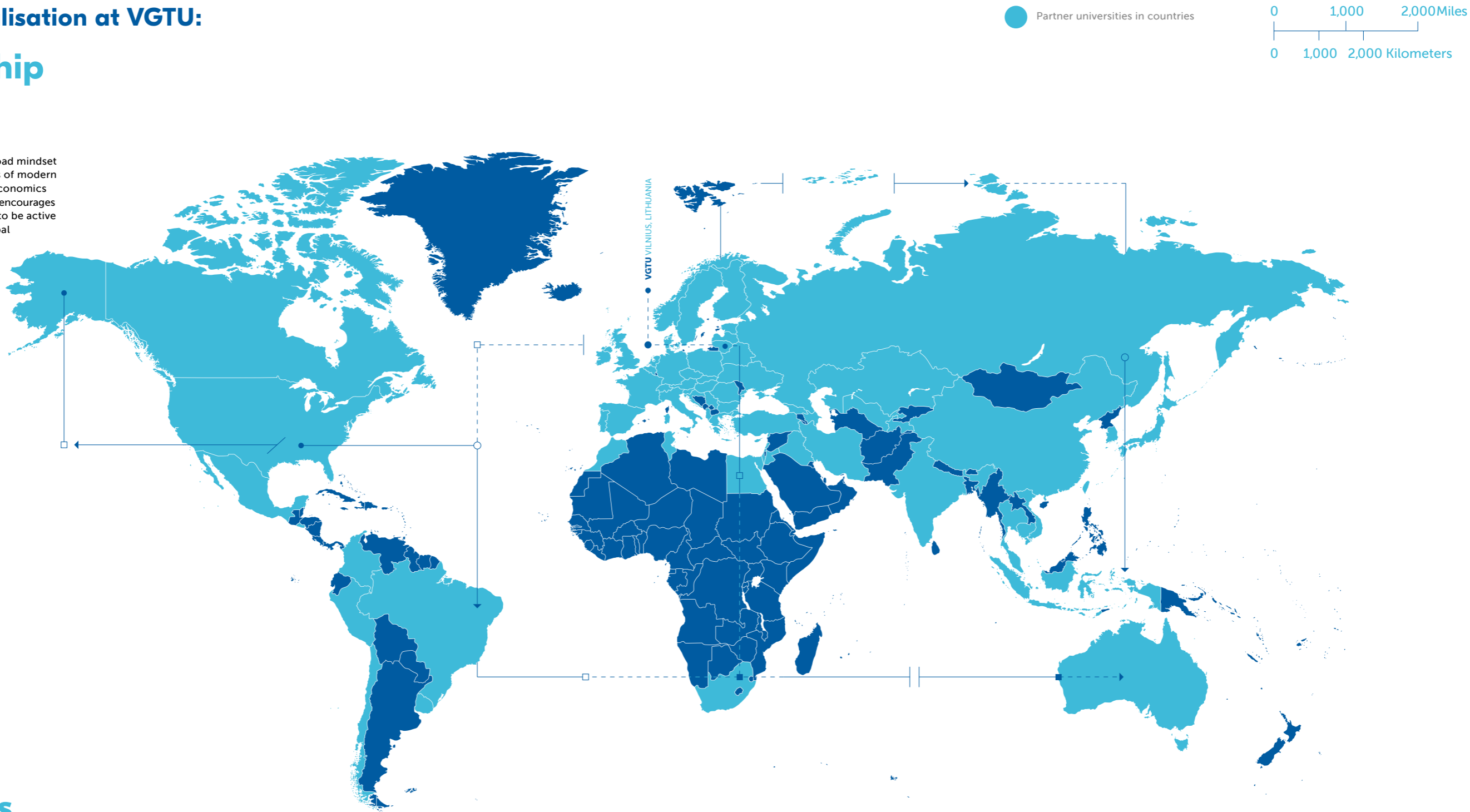
### All study cycles international students at VGTU during 2013–2018

Year	Incoming exchange students	International degree seeking students
2013-2014	474 	284 
2014-2015	446 	354 
2015-2016	417 	505 
2016-2017	526 	616 
2017-2018	534 	663 



Partnership map

Nowadays, openness and broad mindset play a crucial role in all areas of modern society: science, business, economics and culture. Therefore, VGTU encourages students and academic staff to be active in using the University's global network of partnerships.



Countries

- |            |          |                |             |           |            |             |          |              |             |                |            |
|------------|----------|----------------|-------------|-----------|------------|-------------|----------|--------------|-------------|----------------|------------|
| Albania    | Brazil   | Cyprus         | El Salvador | Greece    | Ireland    | Latvia      | Norway   | Serbia       | Sweden      | Turkey         | Uzbekistan |
| Australia  | Bulgaria | Colombia       | Estonia     | Hungary   | Italy      | Lebanon     | Peru     | Slovakia     | Switzerland | Ukraine        | Vietnam    |
| Austria    | Cambodia | Croatia        | Finland     | India     | Israel     | Malaysia    | Poland   | Slovenia     | Taiwan      | United Kingdom |            |
| Azerbaijan | Canada   | Czech Republic | France      | Indonesia | Japan      | Morocco     | Portugal | South Africa | Tajikistan  | Uruguay        |            |
| Belarus    | Chile    | Denmark        | Georgia     | Iran      | Jordan     | Mexico      | Romania  | South Korea  | Thailand    | USA            |            |
| Belgium    | China    | Egypt          | Germany     | Iraq      | Kazakhstan | Netherlands | Russia   | Spain        | Tunisia     |                |            |



SENIOR RESEARCHER AT VGTU DR. VITALIJ NOVICKIJ

4 /

Innovation priorities

# TECH- NOLOGIES FOR THE FUTURE

#technogene

Wound infections caused by micro-organisms is one of the most common complications after surgeries and burns. Researchers from Vilnius Gediminas Technical University are looking into the new treatment methods. A senior researcher at VGTU Dr. Vitalij Novickij together with partners developed a new surface infection biocontrol method based on electroporation.

“Traditionally, representatives of biophysics and biology sciences are looking for solutions to this problem. Meanwhile, I as a representative of an interdisciplinary research field – bioelectronics – looked at this challenge from another perspective, i.e. technological,” he says.

VGTU is one of the biggest centres of technical sciences not only in Lithuania, but also in the region of Central and Eastern Europe.

The innovations successfully applied in industry and manufacturing, the solutions enabling more effective business competition and better living environment are developed at VGTU. The University does not only functions as a research centre, but also as change agent of economic growth and progress. Most of the innovations having contributed to the progress of engineering, industry and economy were developed, tested and implemented by the scientists of the University.

Today, our technogene is applied in the new areas such as cell research, artificial intelligence, unmanned aerial vehicles, or development of digital society; this way, expanding our opportunities.

# Research and innovation: Facts and figures

## Research priorities:

- Sustainable building
- Environmental and energy technologies
- Sustainable transport
- Mechatronics
- Information and communication technologies
- Economics engineering, management and communication
- Fundamental research on materials and processes

Over 30 scientific conferences annually.

The University currently publishes 15 scientific journals, 9 of which are listed on the Clarivate Analytics Web of Science databases.

The work of VGTU researchers is highly regarded in the academic world: 19% of them have h-index 10 or higher.

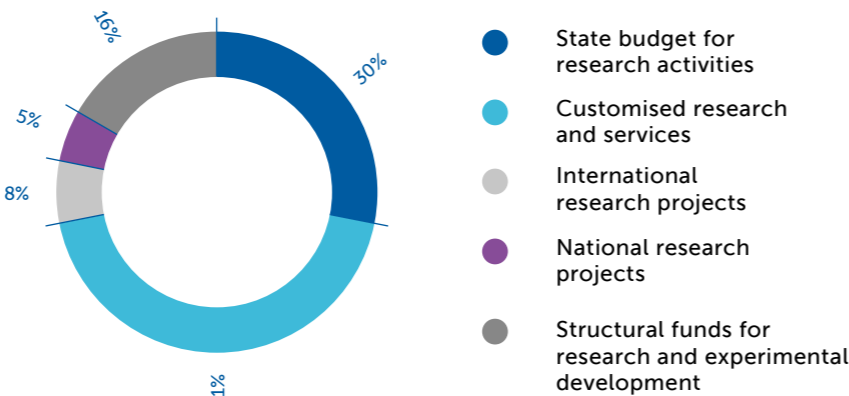
323 scientific articles are published in journals which are listed on the Clarivate Analytics Web of Science databases and have their citation index.

15 research projects under Horizon 2020 programme.

Over 770 customised research contracts.

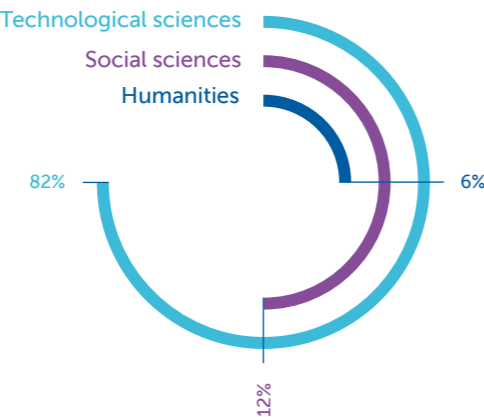
Leading in Lithuania according to the number of patent applications: 34 valid patents.

## Sources of funding of research activities:



## Doctoral students by study area:

The University is accredited to organise PhD studies in 11 science fields



# Research and innovation: Research areas

## VGTU is targeted at carrying out research, which corresponds to the international standards as well as:

attracting prominent scientists, developing research based innovations for society and business, becoming a leading institution among the universities in the Baltic countries in the research areas of sustainable construction, transport, sustainable environment, information technologies and communication.

VGTU priority research areas are in line with the European research area and calls scientists for the joint interdisciplinary action.

## Sustainable building

Sustainable construction is one of the key areas of research at the University. World-class research facilities and highly regarded academic staff are the solid foundation of one of the best civil engineering centres for research and studies in Europe. The research is carried out in two research centres, four research institutes and five accredited research laboratories. The University publishes five scientific journals in this area. The University's researchers participate in international projects promoting the development of the green buildings and green cities in Europe. Innovations created by VGTU researchers are widely applied in the civil engineering sector.

### Research topics

- Modern building structures
- Environmentally friendly materials and technologies
- Architecture and urban environment
- Building information modelling and sustainable lifecycle
- Geodesy technologies

## Environmental and energy technologies

Research in this area is carried out in two research centres, four research institutes and three laboratories; four scientific journals are published. Researchers participate in the European and regional projects of territorial development, cohesion and energy efficiency, examine the impact of climate change on cultural heritage. VGTU researchers together with other scientists, public and private sector representatives participate in preparation of Lithuania's energy and environmental sustainability strategy.

### Research topics

- Efficient use of resources and energy
- Environment protection technologies
- Building energetics
- Renewable energy
- Changes in anthropogenic environment

## Sustainable transport

Sustainable transport VGTU scientists together with other European researchers are contributing to the transport policy development. They participate in the European and Asian rail research excellence network, implement the priorities of the EU strategy for the Baltic sea

region and develop best practices for freight transportation. Innovative solutions for the improvement of sustainable environment are sought in two research institutes and a competence centre.

Moreover, research is carried out in the fields of technologies for air traffic control and digital simulation of air traffic systems, also researchers are developing autopilot systems used in emergency flights. Sustainable transport articles published in four VGTU scientific journals.

### Research topics

- Autonomous land and air transport
- Environment-friendly transport
- Green logistics, international transport corridors
- Road safety technologies
- Urban mobility

Research and innovation:

# Research areas

## Mechatronics

Mechatronics research is carried out in two research institutes and three laboratories at the University. VGTU Faculty of Mechanics has a *Technical Creativity and Innovation Centre* is open for all University students and staff who are keen on engineering project development, manufacturing and prototyping. Researchers are actively engaged in the development in the field of mechatronics.

Research topics

- Smart embedded systems
- Mechatronic manufacturing systems on the Industry 4.0 platform
- Metamaterials and nano-structures
- Bionics and biomedicine engineering systems
- Innovative electronic systems

## Information and communication technologies

Research in this area is carried out in two research institutes and five laboratories. VGTU publishes three scientific journals in this field. An active cooperation with business is ongoing in the development of solutions of information and cyber security, as well as virtual and augmented reality. VGTU geodesy researchers are performing the inspection of technical equipment components and calibration of GPS network of the Republic of Lithuania.

Research topics

- Information and IT security
- Smart signal processing and communication technologies
- Artificial intelligence and decision making systems
- Geoinformation technologies
- Virtual and augmented reality

## Economics engineering, management and communication

Economics engineering, management and communication complement the research in technical sciences. VGTU publishes five scientific journals in this research area. The University's researchers actively participate in international projects, and investigate the conditions of qualification, innovation, and cooperation for SMEs in the Baltic Sea Region.

The methodology of economic efficiency assessment for public and private sector has been developed, the modelling and simulation of the country's economic activity and integration to the EU as well as sustainable development opportunities and implications has been performed. The urban competitiveness evaluation model is also a product of VGTU researchers, as well as the computerised problem solving programme, used for the investment management in global financial markets, preparing sustainable development projects, analysing complex risk management problems, delivering commercial orders. In addition, research is carried out in the fields of communication, information and creative industries.

Research topics

- Management of modern organisations
- High value-added economy
- Dynamic management
- Communication management in an inclusive and creative society
- Creative industries for the development of digital society

## Fundamental research on materials and processes

One of the innovations developed by the researchers in this field is fire-resistant concrete with nanostructures used in power devices, and special asphalt mix, reducing vehicle noise and, thus, improving the quality of life. The researchers are also actively engaged in biotechnology and biopharmaceutical sectors, carry out research, train and provide further development for the specialists. Fundamental research on materials and processes is carried out in two University laboratories. VGTU publishes two scientific journals in this research area.

Research topics

- Mathematical models of physical, technological and economic processes
- Research on cells and their bio-active components





5 /

Meaningful leadership:

# PEOPLE, BUSINESS, TECH- NOLOGIES

## #technogene

VGTV together with the Lithuanian Railways and other partners are developing an liquefied natural gas (LNG)s and electricity powered rail locomotive. It is a global flagship project of a hybrid rail locomotive.

According to the preliminary estimation new technologies will reduce the locomotive's fuel consumption by 40% and CO<sub>2</sub> emissions by 25%. At the same time, work is carried out on the development of the related legislation and new technological solutions pertaining to the logistics of this type of fuel. The locomotive is expected to be put into service by 2020.

**Meaningful leadership:**  
**People, business, technologies**

**Leadership manifest itself in actions via successful application of innovations in industry, students accelerating business with their knowledge and energy, alumni sharing their achievements and experience with wider audience.**

**VGТУ seeks to establish and support meaningful relationships with business and alumni, to become a co-creator of their success stories.**

Their success is our success and contribution to the economic and social progress. The same goes for innovation springing out the labs and turning into new products and technologies which provides business with competitive advantage and improves the quality of life.

Therefore, we have a broader approach to studies. It's not only knowledge, but also development of ones' attitudes using our technogene to connect business and research, and, above all, connect people and their ideas.



## Meaningful leadership:

# People, business, technologies

### Science for business

Customised research for government, business and social partners in a number of fields represents the significant contribution of the University to the country's well-being.

Our research in the fields of building materials and construction, thermal insulating materials, transport and logistics, as well as notified and accredited acoustics is unique in the region.

In recent years, the majority of customised work was carried out in the field of road research. The Lithuanian Road Administration under the Ministry of Transport and Communications initiated the experimental road pavement studies that include surface slip resistance, noise-reducing coating and sustainable road maintenance technologies.

### From idea to innovation: how do you make a flying house?

The Creativity and Innovation Centre *LinkMenų fabrikas* is already wide-known as a modern creative community where students, researchers and entrepreneurs find each other and connect for creative projects. It also hosts a number of workshops equipped with the modern tools for prototyping & media: 3D printing, electronics, wood, metal, 3D modeling, animation, virtual and augmented reality, foto, video, audio.

VGTU *LinkMenų fabrikas* bustles with activity: hackathons, film production festivals, creative workshops, filming of advertisements and music videos, development of smart installations, or prototype production. The famous 4G car, a flying house, installation of modern art for the Burning Man festival held in Nevada desert, the US, #NanoJesus – they all have been developed here.

### The technogene generation

VGTU graduates are highly valued in the labour market for their innovative and creative ideas. They first meet their potential employers during the career days, internships in business companies, or lectures by business leaders.

Often the conversation during career days or an internship turns into a job offer and a beginning of a successful career. The career path may as well begin abroad – almost 500 VGTU students per year gain international experience by studying or doing their internships abroad.

Majority of VGTU alumni successfully work in fields closely related to their major studies. Out of 80 thousand of all VGTU alumni, many are seeking professional success not only in Lithuania, but also around the world. More and more VGTU students start innovative business.

Study environment at the University offers perfect conditions to prepare for such a step. *The University's Knowledge and Technology Transfer Centre* assists students in turning

their ideas to innovations, by providing consultations on business development, knowledge transfer, intellectual property and research commercialisation.

Students who want to enable their technogene can use the University's top-notch labs, make prototypes, employ the scientific infrastructure, 3D printers and other modern technologies. Recently 10 prototypes have been made at VGTU: beer flavour enhancer, paddleboard control mechanism, remote control system for security surveillance system among them.

Two courses – Design Thinking of Start-ups and Start-up Commercialisation – are of exceptional help for VGTU students who want to turn their ideas into reality. Over 30 innovative companies have been started by VGTU students and scientists.

### The network of leaders

One of the key role of the University – be a technology visionary, inspire and bring together partners who contribute to building the society that is open to innovation and creativity.

VGTU's partnership network connects over 500 innovative companies, about half of them – well-known global brands, such as *ABB Sweden, AIG, Arcadia Laboratories, Bentley Systems, SEB, Cognizant Technology, Danske Bank, Swedbank, HAAS, Euromonitor International, Huawei, IBM, Barclays, CITCO, WIX.com, DXC. technology, COWI, Panda Connect, Telia, Ernst & Young Baltic, Luminor, Transcom, Western Union, Nasdaq, Visma, Exadel, FESTO, Siemens, Scandia Steel, Intersurgical, Sicor Biotech, Thermo Fisher, Sweco, Booking.com* etc.

Business representatives are members of study programme committees, they also provide scholarships, suggest topics for final thesis and offer internships.

Another example of leadership and strong community is the alumni of the University. They develop and implement innovations, are inspired rather than threatened by challenging tasks, are active citizens, innovators, sponsors of science and culture. VGTU alumni work in the government, ministries, science and research institutes, as well as lead businesses and are highly regarded professionals and influencers.

**Graduates join VGTU alumni club and share their success with current students and their Alma Mater. Many of them return to the University as lecturers, researches or members of the University Council and share their knowledge and contacts in search for new talents and innovative solutions.**

6 /

Student life:

# CONNECTING TECH- NOLOGIES AND CREATIVITY

## #technogene

Pasta bridges, or creative engineering. An event launched by VGTU's Faculty of Civil Engineering seven years ago has developed into the National Championship of Pasta Bridges. Teams of pupils, students and VGTU Alumni gather to compete in building bridges out of pasta. In the Championship of 2018 a record-braking pasta bridge made from less than 1k g of pasta withstood a 361kg load!

HEIGHT - 650MM

LENGTH - 1300MM

## Student life:

### Connecting technologies and creativity

**Leadership in technology requires broadening the horizon, thus VGTU encourages every student not only to seek the knowledge, but also to develop their unique talents. Dynamic university life is an attribute of an open and creative community. Every September the University announces the start of the study year with an annual festival “Gediminas Days”. Student parade in Vilnius streets, concerts, entertainment and experimentation spaces – this way VGTU presents itself and welcomes all the students, staff, alumni and University fellows.**

We are proud of our energetic, enthusiastic, talented students and encourage them to further develop their skills at the University. There are several art clubs, the most significant and oldest being theatre, choir, orchestra and dance clubs.

Theatre studio *Palėpė* invites students to act, direct and create, mixed academic choir *Gabija* – to sing, folk dance ensemble *Vingis* to dance and play the folk instruments. These are the University's art clubs keeping the longest tradition, which recently have celebrated their 50-th anniversaries.

VGTU athletes – basketball, volleyball, football, tennis players, wrestlers, track and field athletes, powerlifters, and representatives of many other sports – participate in inter-university, national, international, European and World championships and tournaments.



Vilnius Gediminas  
Technical University

Saulėtekio al. 11  
LT-10223 Vilnius,  
Lithuania

+370 5 274 4958  
vgtu@vgtu.lt

[www.vgtu.lt](http://www.vgtu.lt)



[/vgtuuniversity](https://www.facebook.com/vgtuuniversity)



[/vgtu\\_university](https://www.instagram.com/vgtu_university)



[/manovgtu](https://www.youtube.com/manovgtu)



[/school/vilnius-gediminas-  
technical-university](https://www.linkedin.com/school/vilnius-gediminas-technical-university)