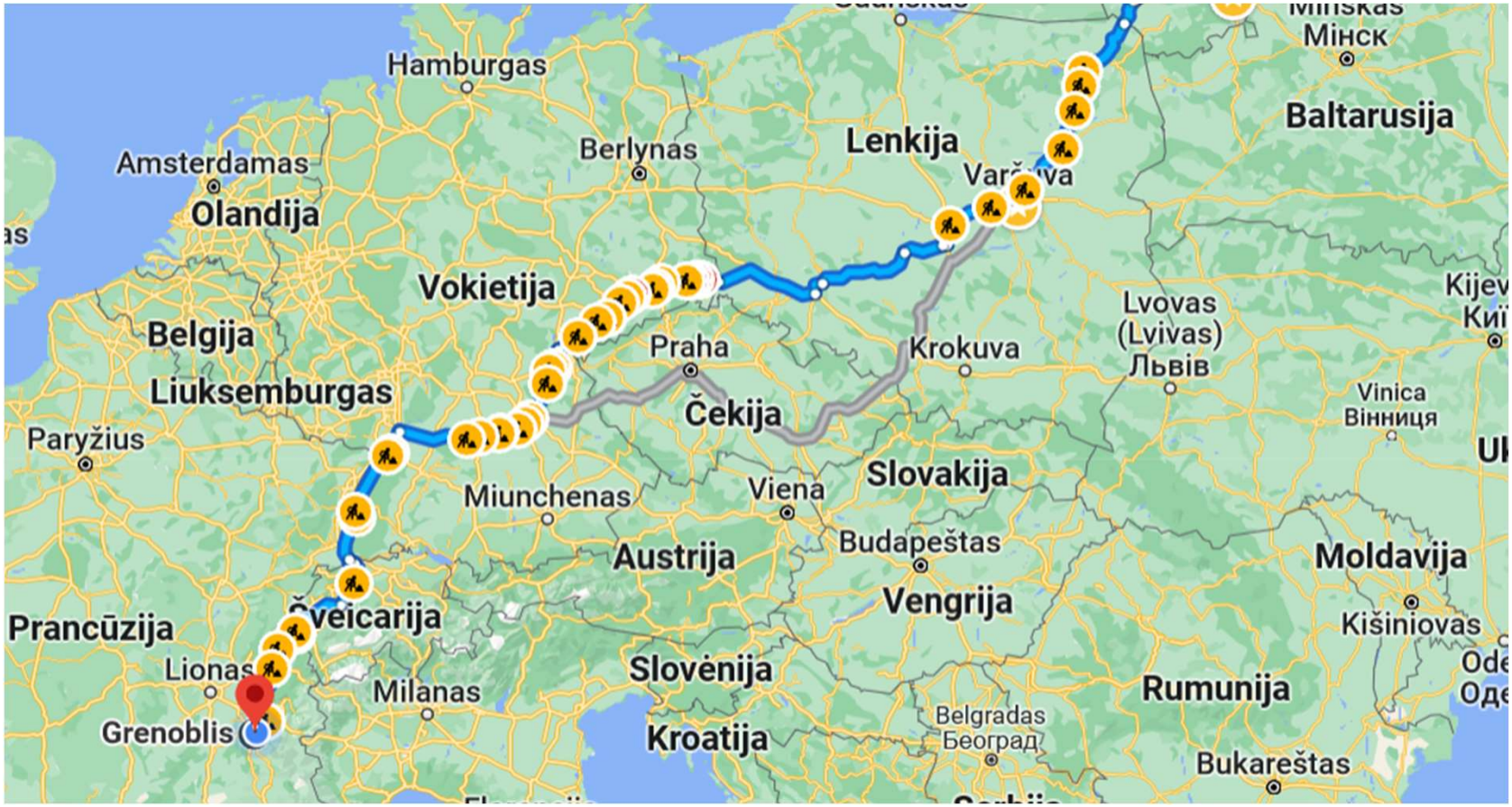
VILNIUS TECH
Vilnius Gediminas Technical University

ATHENA
EUROPEAN UNIVERSITY

VILNIUS GEDIMINAS TECHNICAL UNIVERSITY (VILNIUS TECH)

LITHUANIA and FRANCE



Lithuania - northern European country

THE CURRENT POPULATION OF LITHUANIA ~2 700 000

VILNIUS

- ~550 000 INHABITANTS
- 402 SQ. KM
- 46% OF GREEN SPACE
- OLD TOWN - UNESCO WORLD HERITAGE SITE SINCE 1994
- AFFORDABLE LIVING QUALITY
- CLEAN TAP WATER
- 80% OF THE YOUTH – ENGLISH SPEAKERS
- ONE OF THE FEW EUROPEAN CAPITAL CITIES WHERE HOT AIR BALLOONS ARE ALLOWED TO FLY

VILNIUS GEDIMINAS TECHNICAL UNIVERSITY (VILNIUS TECH)

There is four year seasons:

winter

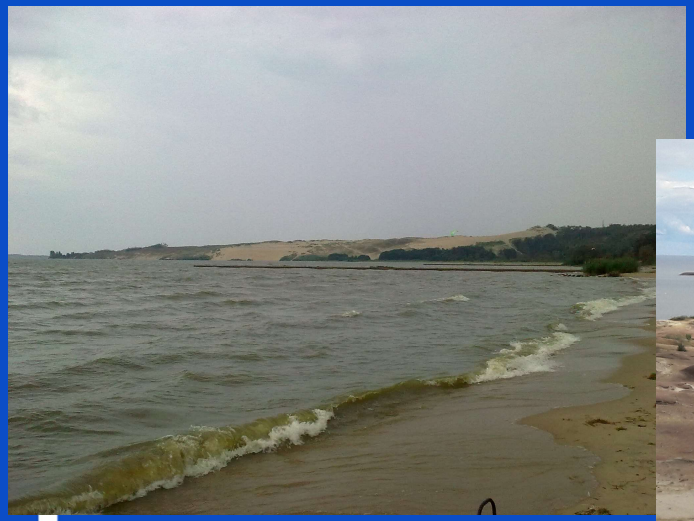
The lowest temperate can be -30°C (in winter time) and the highest +30°C (in summer time).

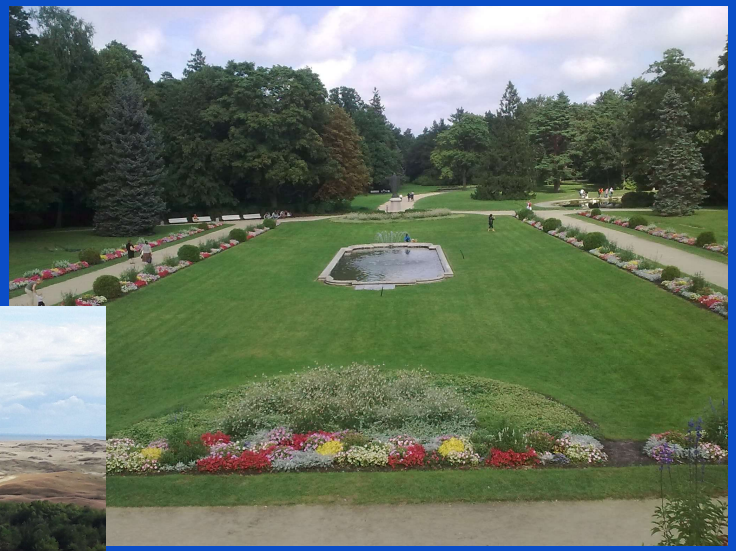
VILNIUS TECH
Vilnius Gedminas technical university

spring

VILNIUS TECH
Vilnius Gedminas technical university

summer





VILNIUS TECH
Vilnius Gedminas technical university

autumn

VILNIUS TECH
Vilnius Gedminas technical university

The most visiting places:

Vilnius (capital) old town;

Trakai - historical capital;

Klaipeda – the port town

Rumsiskes - heritage village with old traditional living;

The crosses hill …..

VILNIUS GEDIMINAS TECHNICAL UNIVERSITY

RANKED 2022 Engineering Civil Structural — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

TOP 300 2022 Economics Econometrics — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

RANKED 2022 Computer Science Information Systems — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

RANKED 2022 Engineering Mechanical Aeronautical & Manufacturing — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

RANKED 2022 Engineering Electrical Electronic — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

TOP 200 2022 Architecture Built Environment — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

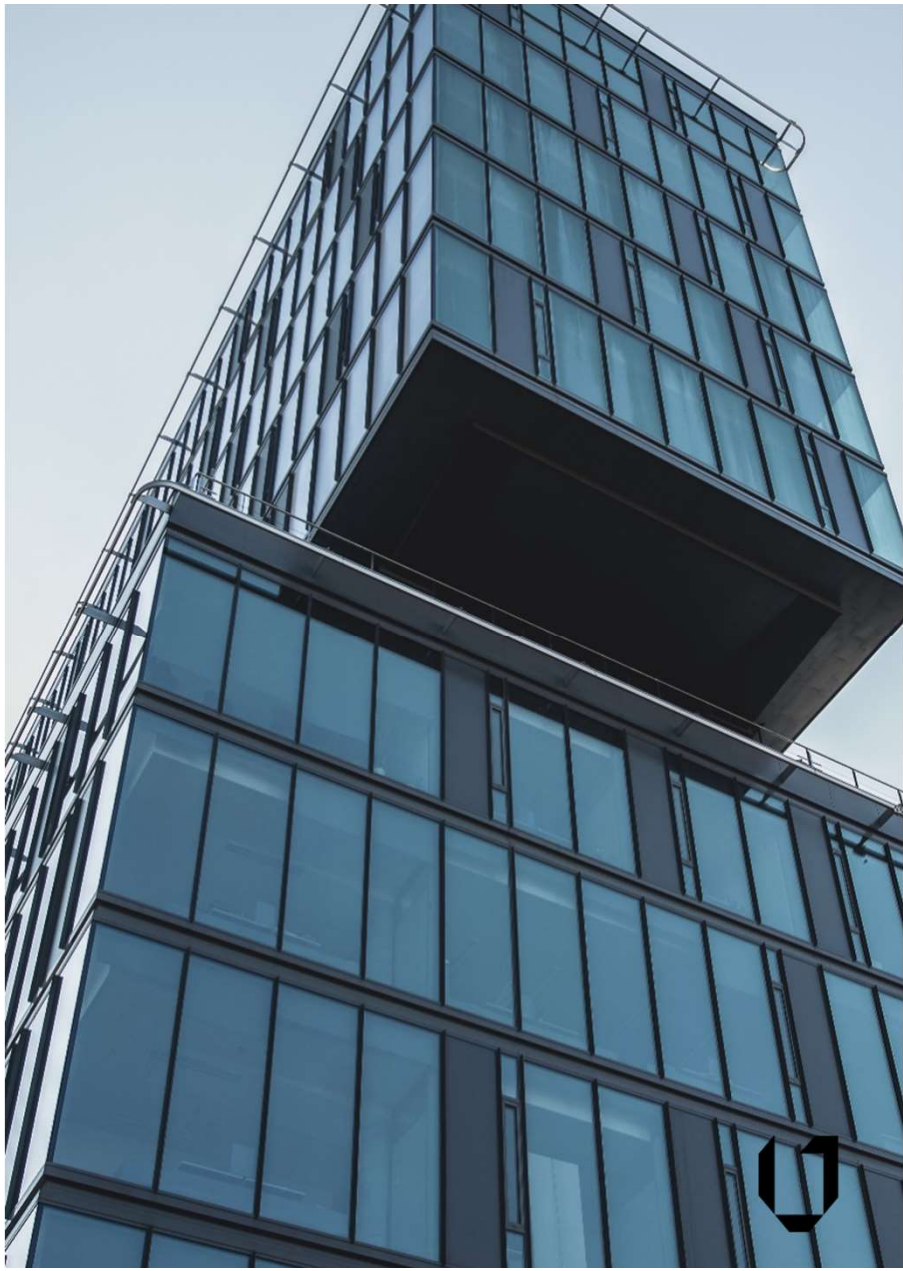
RANKED 2022 Business Management Studies — QS WORLD UNIVERSITY RANKINGS BY SUBJECT

56 in QS Emerging Europe & Central Asia Rankings 2022

VILNIUS GEDIMINAS TECHNICAL UNIVERSITY (VILNIUS TECH)

FACTS AND FIGURES

- ESTABLISHED IN 1956
- 8 400 STUDENTS
- 15% OF THEM ARE INTERNATIONAL STUDENTS
  from over 80 countries
- 940 ACADEMIC STAFF MEMBERS
  9:1 student / academic staff ratio
- 88 000 ALUMNI
- AROUND 300 BUSINESS PARTNERS
- 460 PARTNER UNIVERSITIES
  in 60 countries globally



10 FACULTIES OF VILNIUS TECH

- ANTANAS GUSTAITIS' AVIATION INSTITUTE
- ARCHITECTURE
- BUSINESS MANAGEMENT
- CIVIL ENGINEERING
- CREATIVE INDUSTRIES
- ELECTRONICS
- ENVIRONMENTAL ENGINEERING
- FUNDAMENTAL SCIENCES (ICT & Computer Sciences)
- MECHANICS
- TRANSPORT ENGINEERING

4 RESEARCH CENTRES

12 RESEARCH INSTITUTES

22 RESEARCH LABORATORIES

VILNIUS GEDIMINAS TECHNICAL UNIVERSITY (VILNIUS TECH)

COVID-19

- It is recommended to wear a mask at the University;
- The University constantly performs disinfection of its premises;
- Disinfectant liquid for hands can be found at all the entrances to VILNIUS TECH;
- Plan for 2022-2023 academic year – 100% face-to-face studies for Bachelor students, 50% face-to-face / 50% online studies for Master's students.

More information about preventive measures and studies during the pandemic at VILNIUS TECH can be found at https://vilniustech.lt/covid-19/318340

VILNIUS TECH

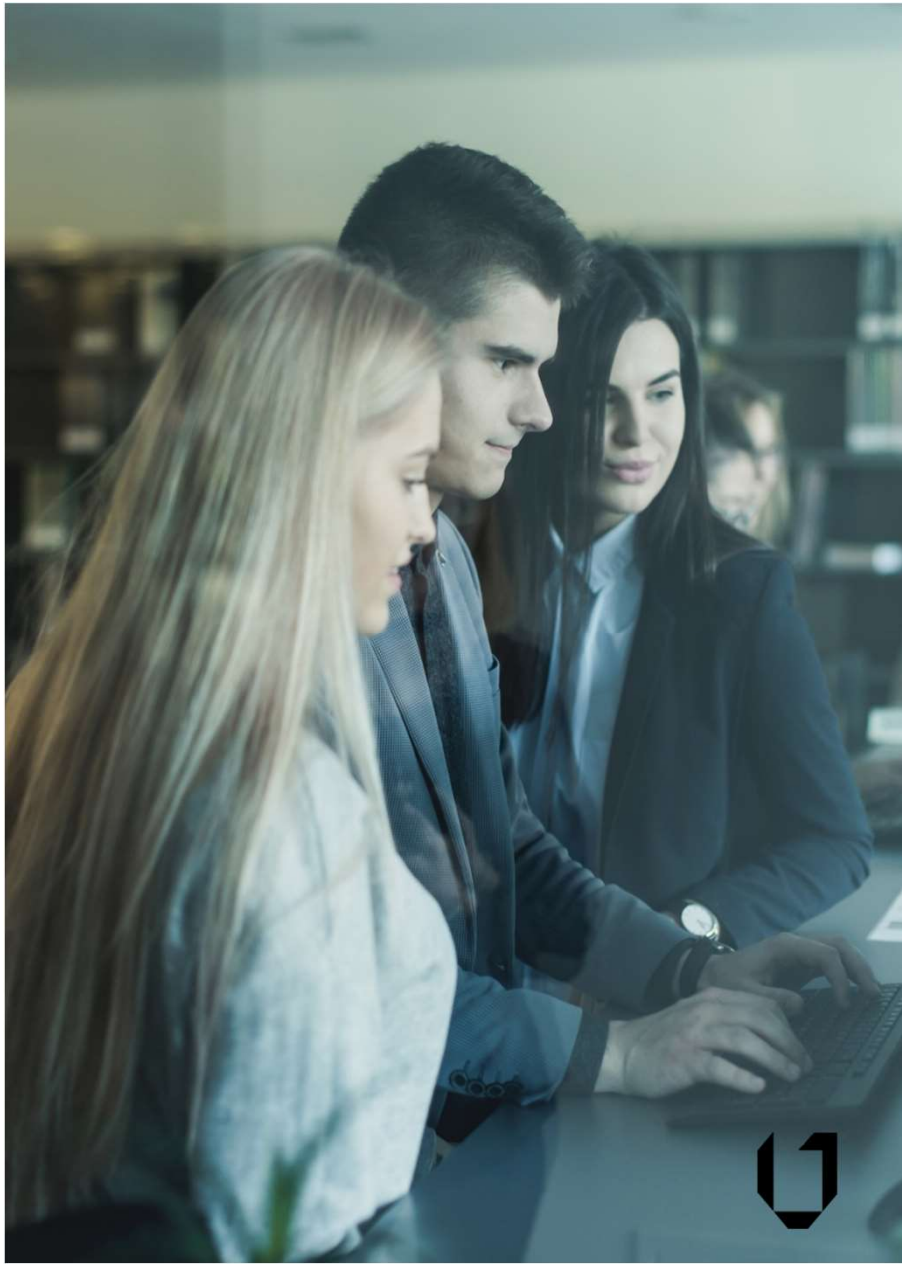
STUDIES AT VILNIUS TECH

104 STUDY PROGRAMMES

(64% in the field Engineering, Information and Technological Sciences)

41% TAUGHT IN ENGLISH:

- Bachelor's (undergraduate) 240 ECTS
- Integrated (undergraduate) 300 ECTS – Master's degree awarded
- Master's (graduate) 90 ECTS
- Master's (graduate) 120 ECTS



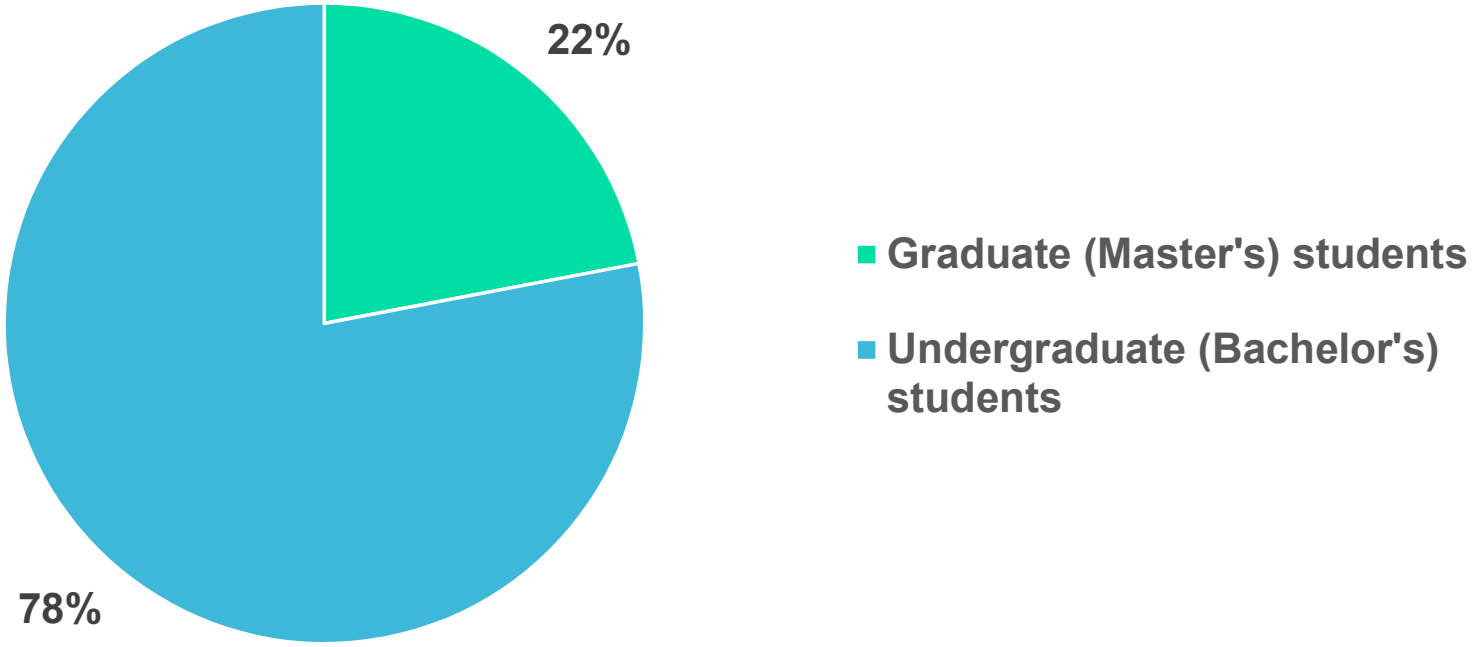
BACHELOR'S DEGREE (UNDERGRADUATE) PROGRAMMES
IN ENGLISH (240 ECTS):

- Applied Artificial Intelligence
- Automotive Engineering
- Bioengineering
- Biomechanics
- Building Energy *(DDP* with South-Eastern Finland University of Applied Sciences)*
- Business Management
- Civil Engineering
- Computer Engineering
- Creative Industries *(DDP* with Kiel University of Applied Sciences)*
- Economics Engineering *(DDP* with Kyungpook National University; DDP* with Dnipro University of Technology)*
- Environmental Protection Engineering
- Financial Engineering
- Information and Communication Technologies
- Information Systems Engineering
- Information Technologies
- Landscape Architecture *(3 years)*
- Mechanical Engineering
- Mechatronics and Robotics
- Multimedia Design

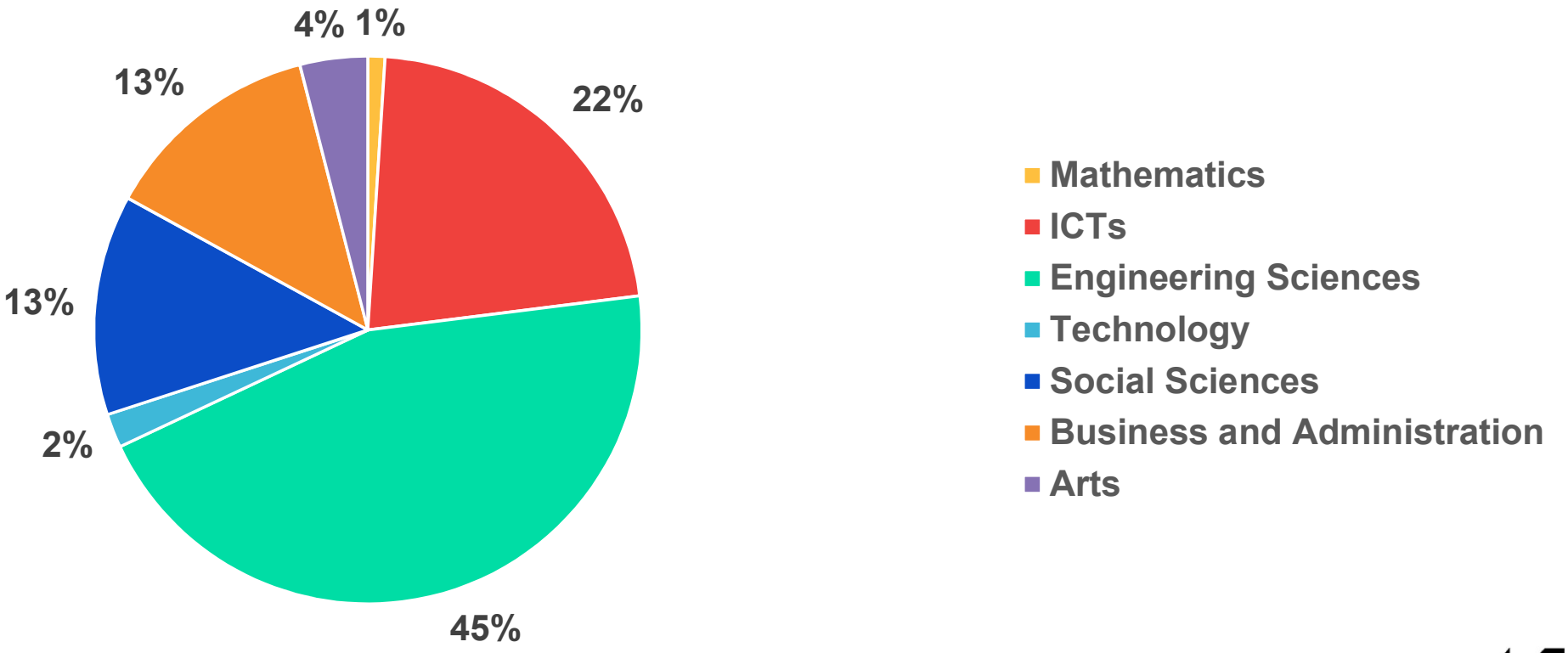
MASTER'S (GRADUATE) DEGREE PROGRAMMES
IN ENGLISH (120 ECTS):

- Aeronautical Engineering
- Automotive Engineering
- Biomedical Engineering
- Building Energy Engineering
- Computer Engineering
- Civil Engineering *(DDP* with University of Strathclyde)*
- Electrical Energetics Systems Engineering *(DDP* with National Sun Yat-sen University)*
- Electronics Engineering
- Environmental Protection Technology and Management *(DDP* with Riga Technical University)*
- Industrial Engineering and Innovation Management *(DDP* with University of Palermo; DDP* with TalTech)*
- Information and Information Technologies Security *(DDP* with National Sun Yat-sen University)*
- Information Systems Software Engineering
- Mechatronics *(JDP** with Braunschweig Technical University)*
- Mechanical Engineering
- Mechatronics Systems
- Nanobiotechnology
- Structural Engineering *(DDP* with University of Strathclyde)*

VILNIUS TECH STUDENTS BY STUDY LEVEL 2021-2022

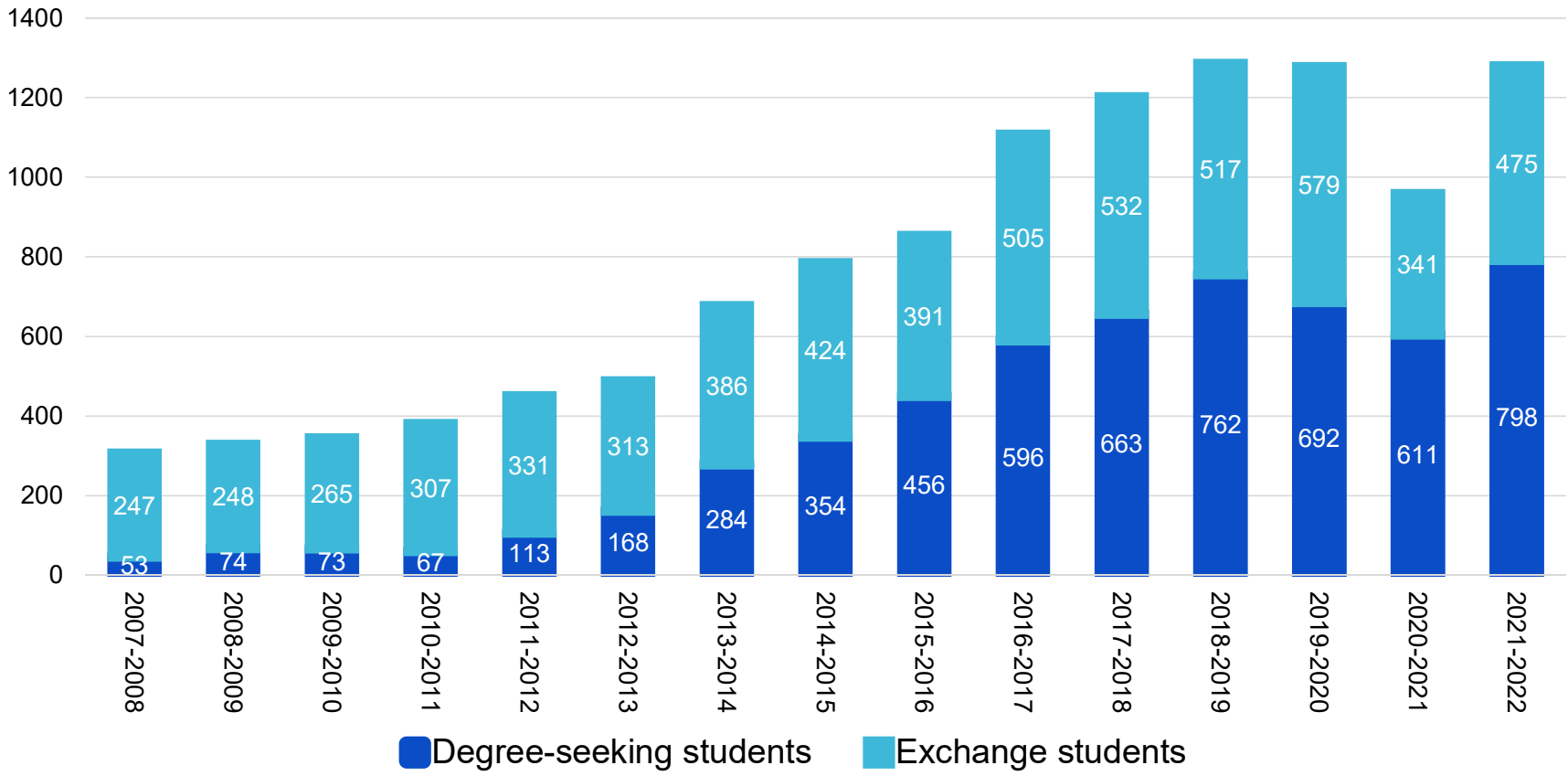


VILNIUS TECH STUDENTS BY STUDY FIELD 2021-2022

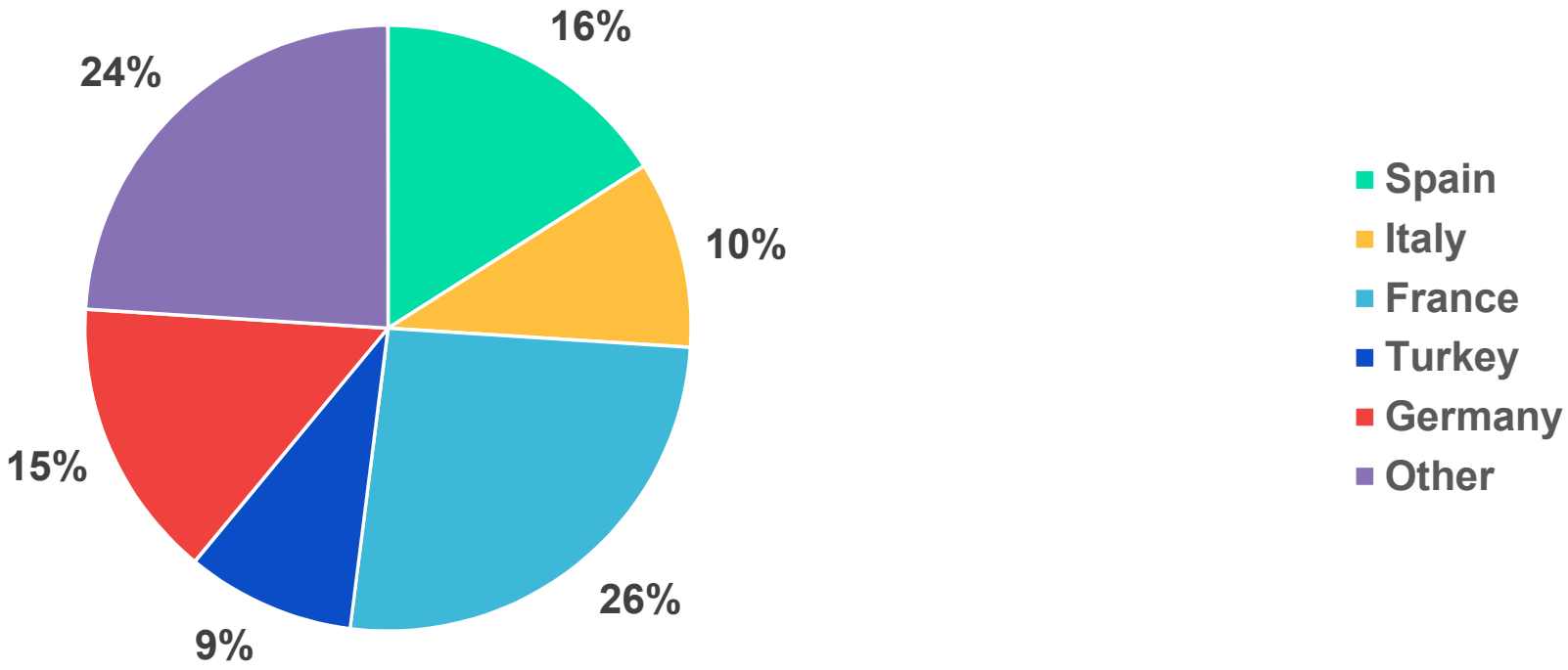


VILNIUS TECH INTERNATIONAL STUDENTS

(from 81 country in 2021-2022)



EXCHANGE STUDENTS 2021-2022



VILNIUS TECH

EXCHANGE STUDENT MOBILITY

ADMISSION

APPLICATION ONLINE https://exchange.vgtu.lt/

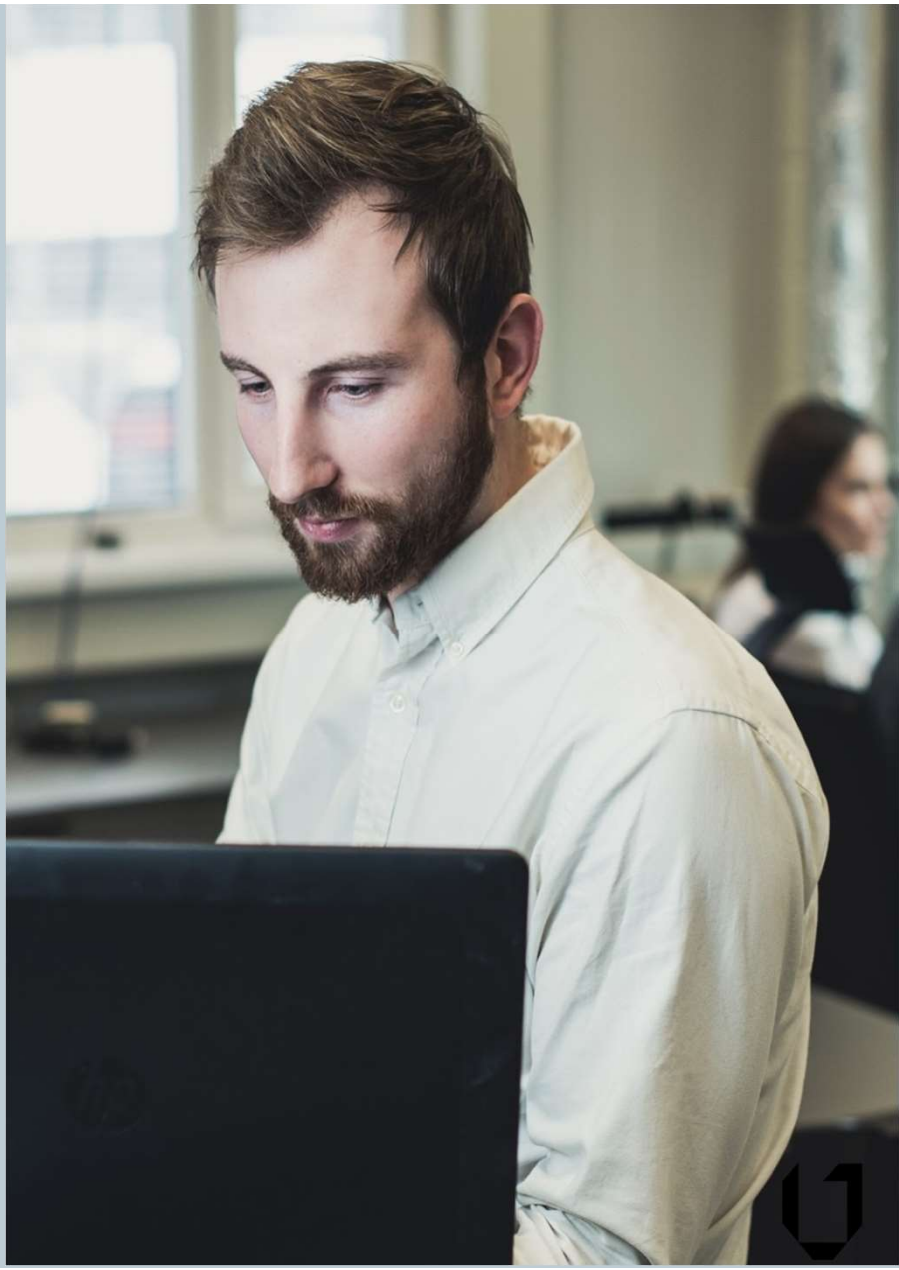
APPLICATION DEADLINE

- Autumn semester/full academic year – 15 May
- Spring semester – 30 November

ACADEMIC CALENDAR

- Autumn semester 2022-2023

Orientation Days:	2023-02-01 – 2023-02-05
Lectures:	2023-02-06 – 2023-05-21
Examination Session:	2023-05-29 – 2023-06-30
Retakes:	2023-07-03 – 2023-07-07



ADMISSION REQUIREMENTS

APPLICATION DOCUMENTS

- Photo
- Copy of your passport / personal ID
- Transcript of Records
- English language certificate
- Learning Agreement (completed during the application phase)

ENGLISH LANGUAGE PROFICIENCY

- English language knowledge at the minimum B2 level of CEFR.
- Accepted certificates - IELTS 6.0, TOEFL Paper 513, TOEFL iBT 65, TOEFL CBT 183, TOEIC 785 or a certificate issued by the language department of your Home University.

LIST OF COURSES
FOR EXCHANGE STUDENTS

- **The list of courses taught in English is updated by mid-March and mid-October and is available on our website (*vilniustech.lt -> for international students -> for exchange students -> studies*).**
- **Students may choose courses from different faculties and study levels, however, schedule conflicts may occur.**
- **For any academic questions about the course (content, objectives, contact hours) please contact the faculty coordinator.**

VILNIUS TECH

STUDENT LIFE AT VILNIUS TECH

CLUBS AND ACTIVITIES

- Theatre studio „Palėpė“
- Academic choir „Gabija“
- Folk dance ensemble „Vingis“
- VILNIUS TECH Tourist Club
- Orchestra
- Erasmus Student Network (ESN VILNIUS TECH)
- Creativity and Innovation Centre „LinkMenų fabrikas“
- VILNIUS TECH Gym
- Various sports (volleyball, basketball, soccer, wrestling, field and track, tennis and others)

LITHUANIAN LANGUAGE COURSE

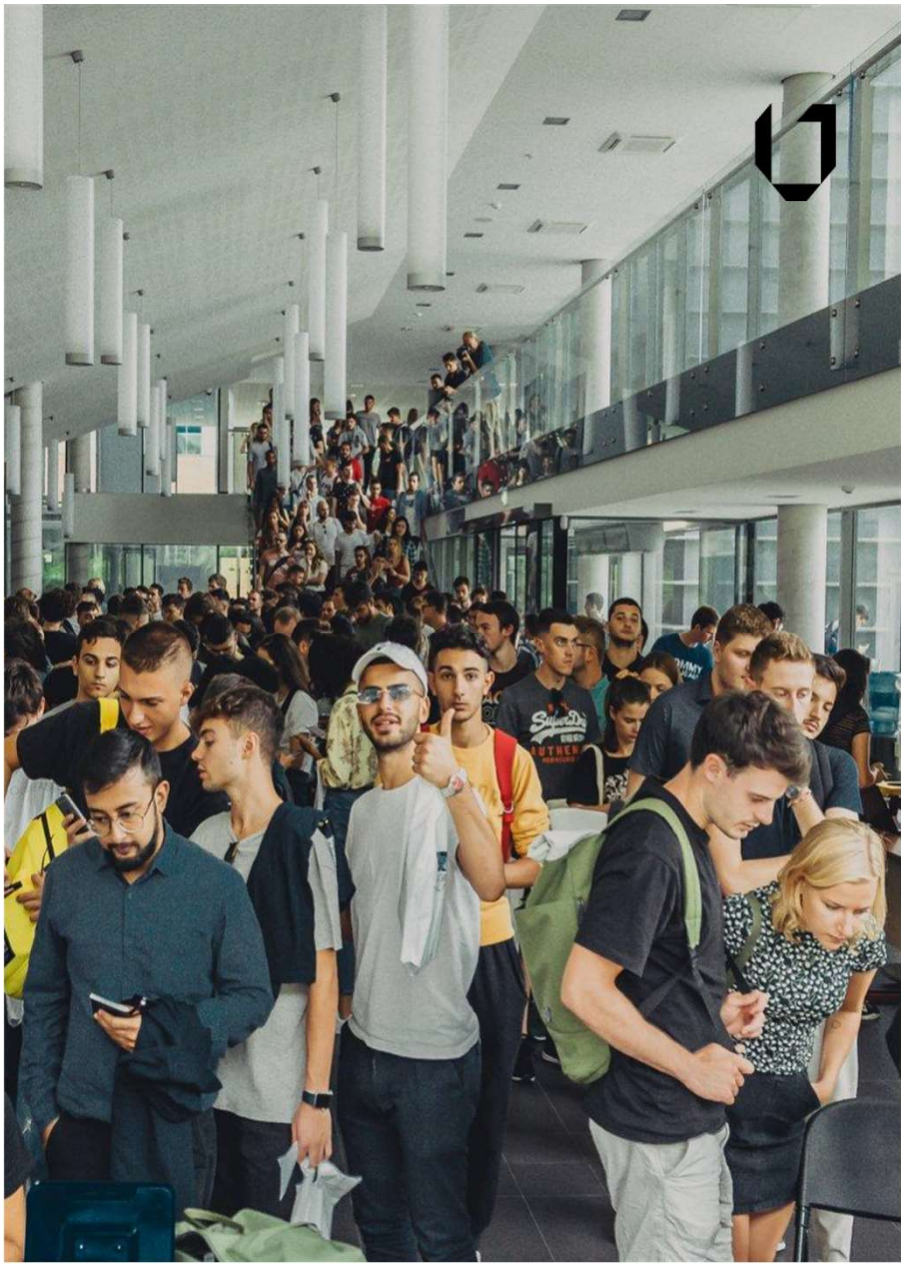
- Lithuanian language course offers international students the opportunity to study one of the oldest languages in the world.
- Successful completion of the course is worth 3 ECTS credits.
- The course is open to all international students.

ORIENTATION DAYS

Orientation Days start approx. 5 days before the beginning of the semester.

PRELIMINARY PROGRAMME:

- **Introduction session (information about University, studies, living in Vilnius);**
- **Meetings with faculty coordinators;**
- **Introduction to Lithuanian language;**
- **Campus tour;**
- **Social activities organised by ESN.**



LANGUAGE CLUB

- The Language Club is an opportunity for VILNIUS TECH students to learn a foreign language or teach other students their native language.
- The Language Club helps students to enrich their international experience, make new friends and learn about different cultures.

All language lessons are free!

VILNIUS TECH –
Creators of Tomorrow

ACCOMMODATION
VILNIUS TECH DORMITORIES

- VILNIUS TECH student‘s dormitory is located on the university campus (within a 7-10 min walk to the Central building).
- The accommodation fee is 140-180 EUR for 1 person per 1 month.
- The deposit is 300 EUR, paid upon arrival.
- Double rooms, a limited number of places.

ESN VILNIUS TECH

The voluntary student organisation is active since 2009.

- **Cultural evenings**
- **Leisure events**
- **Sport tournaments**
- **Social activities**

For more information – ESN VILNIUS TECH Facebook

THE CAUSES OF ESN

ESN offers a variety of activities that are focused on the following six topics: culture, education & youth, environmental sustainability, health & well-being, skills & employability and social inclusion.

ESN

Erasmus Student Network

MENTOR PROGRAMME

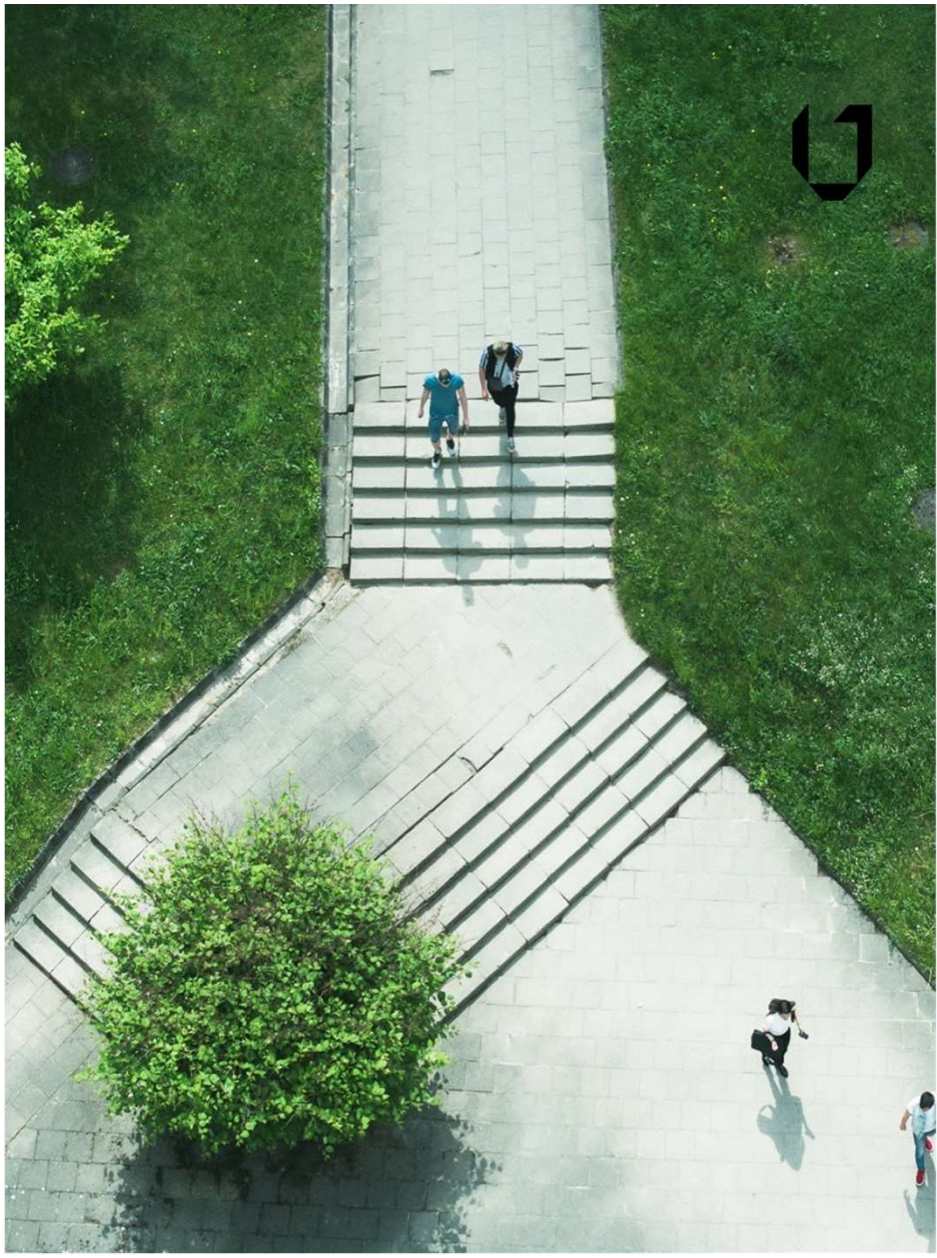
ESN VILNIUS TECH

- **Mentors are ready to help international students with the integration into the university and daily life in Lithuania.**
- **Every local and international student can become a Mentor.**
- **You may apply for a Mentor online after receiving your Letter of Acceptance.**

ESTIMATED COST OF LIVING (MONTHLY)

- Student dormitory 140 – 180 EUR (3464420-4454254 VND)
- Private apartment 200 – 400 EUR (4949172-9898344 VND)
- Food ~200 EUR (5000000 VND)

- City transport 6 EUR (148475 VND) with ISIC
- Leisure time 50 – 100 EUR (1237293-2474586 VND)
- Total ~ 500 EUR (12372930 VND)



ELECTRONIC RESOURCES FOR STUDIES

- **SUBSCRIBED DATABASES**

VILNIUS TECH community has access to **34** databases of e-books, e-journals images. More than **603 000** titles of printed and electronic information resources

- **VILNIUS TECH E-JOURNALS journals.vilniustech.lt**

16 peer-review VILNIUS TECH research journals

- **VILNIUS TECH E-BOOKS ebooks.vilniustech.lt**

More than **650 free** e-books published by VILNIUS TECH in one platform

- **VILNIUS TECH Printed Books eshop.vilniustech.lt**

- **Library E-service Platform Information Bridge (Library-University-Student) bus.vilniustech.lt**

- **Possibilities to search and order publications via one box VILNIUS TECH Virtual library vb.vilniustech.lt**

LIBRARY AND ART GALLERY A

Library spaces

- Team Space
- Active Learning Space
- Reading Room Gallery
- Reading Room 24/7
- Workrooms

Possibility to reserve spaces for individual and group work 24/7

Art exhibitions in Gallery A

- Personal and group exhibitions of Lithuanian and foreign artists

Faculty of Mechanics

DEPARTMENTS:

- Department of Biomechanical Engineering
- Department of Mechanical and Materials Engineering
- Department of Mechatronics Robotics and Digital Manufacturing

OTHER:

- Institute of Mechanical Science
- Technical Creativity and Innovation Center


28 Jono Basanavičiaus g.
Vilnius, Vilniaus apskr.
Google, Inc.
„Street View" – liep. 2012
Basanavičiaus g.
Google

BACHELOR‘S PROGRAMMES IN ENGLISH

- Automotive Engineering
- Building Energetics
- Business Management
- Civil Engineering
- Computer Engineering
- Creative Industries
- **Digital Manufacturing**
- Economics Engineering
- Financial Engineering
- Information Systems Engineering
- Information Technologies
- **Mechanical Engineering**
- **Mechatronics and Robotics**

MASTER‘S PROGRAMMES IN ENGLISH

- Aeronautical Engineering
- Automotive Engineering
- **Biomedical Engineering**
- Computer Engineering
- Electrical Energetics Systems Engineering
- Electronics Engineering
- Environmental Protection Technology and Management
- **Industrial Engineering and Innovation Management** (DDP with University of Palermo, Tallinn University of Technology)
- Information and Information Technologies Security
- **Mechanical Engineering**
- **Mechatronic Systems**
- Nanobiotechnology
- Structural Engineering

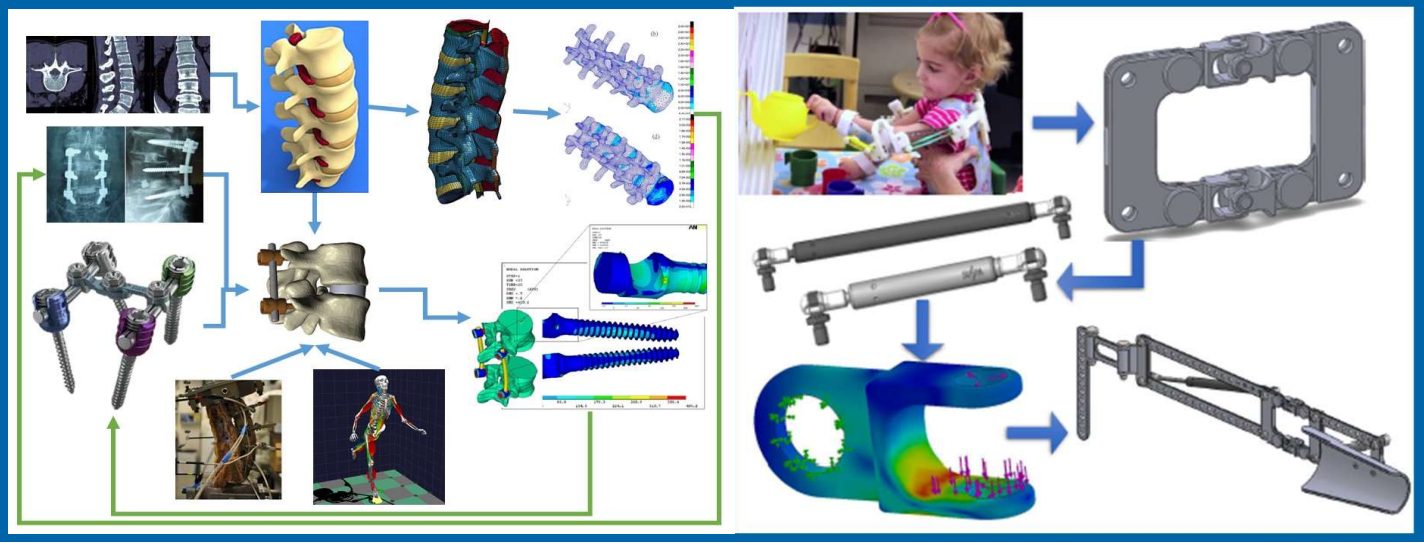
Department of Biomechanical Engineering

Department of Biomechanical Engineering – Study Programs

Established in 1996 and is specializing in the application area of Biomedical Engineering by integrating the tools and methods of the engineering sciences and interdisciplinary research through design and development of various biomedical and rehabilitation equipment, medical devices and assistive technologies that support daily life of people in need and improve the quality of health services

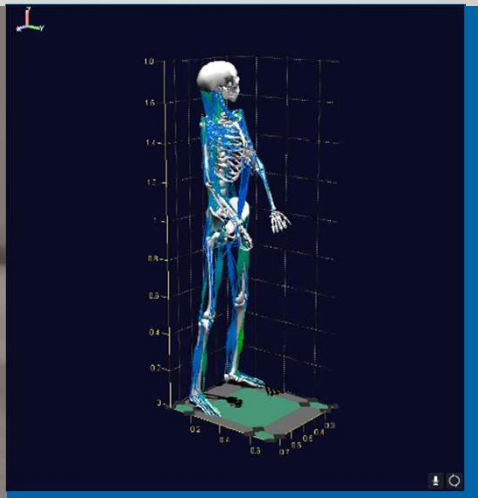
Department offers study programs providing degree in Bioengineering:

- **Biomechanics** (BSc) – 4 years
- **Biomedical Engineering** (MSc) – 2 years



Department of Biomechanical Engineering – Infrastructure

- 16 channels wireless Electromygraphy measurement system – **Delsys Trigno**
- Integrated biolabs – **Biopac MP36**
- Shimmer Research 9DoF IMU
- **Perception Neuron** Full Body Motion Capture System
- Microsoft **Kinect**
- **Instek** GFG-3015 & GDS-806C
- **Nicolet Viking Quest** 2CH NCS/EMG



Department of Biomechanical Engineering – Research Profile

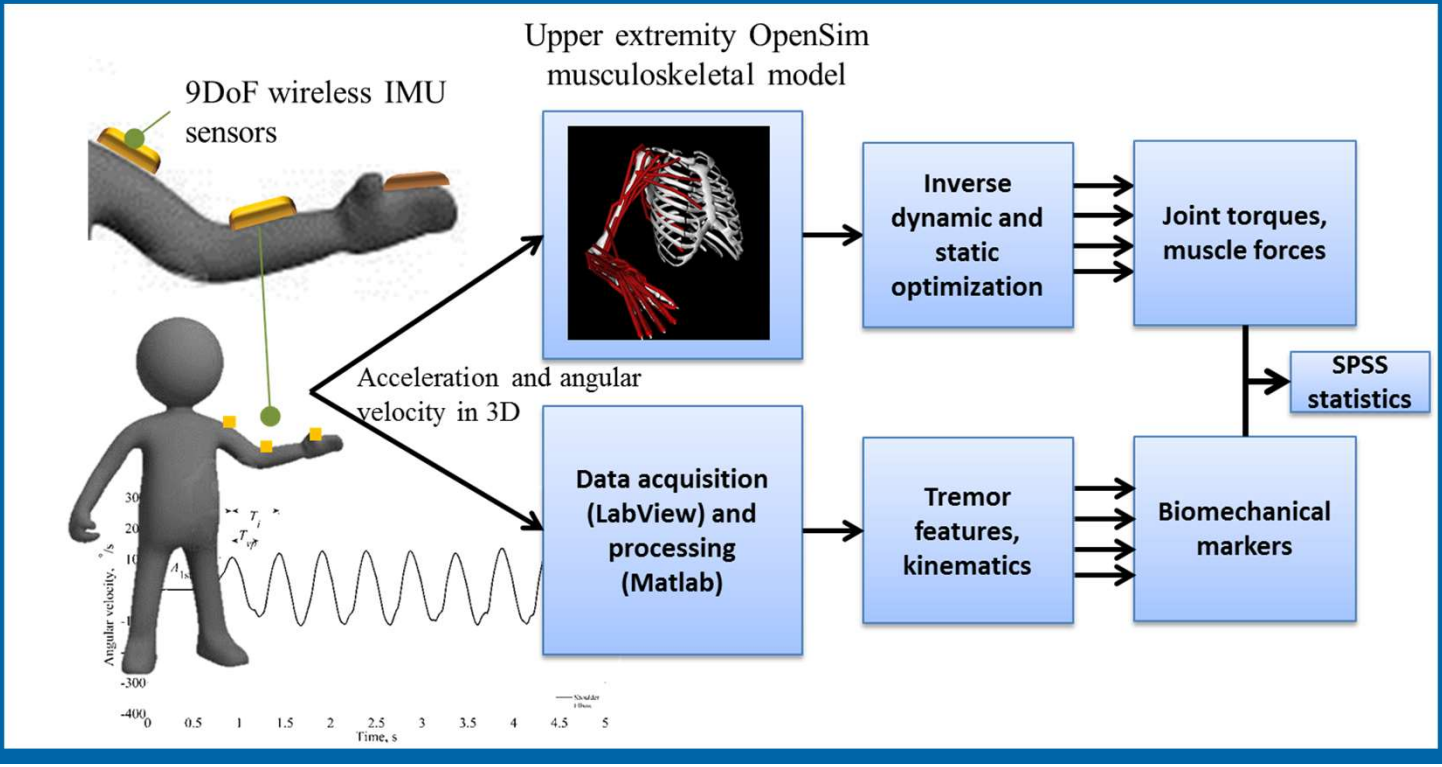
Most recent research topics:

- Development of KIN-NEURAL – system for diagnostics and monitoring of Parkinson‘s disease
- Application of kinetic principle for stroke rehabilitation, model-based rehabilitation and rehabilitation process monitoring
- 3D printed scaffolds for bone tissue engineering
- Development of MS-ATAX – system for quantified evaluation of ataxia
- Human postural balance research
- Research of mechanical characteristics of loaded muscle via EMG and mathematical modeling
- FEA of chordae tendinae rupture mechanisms and reconstruction

Department of Biomechanical Engineering – Research Profile

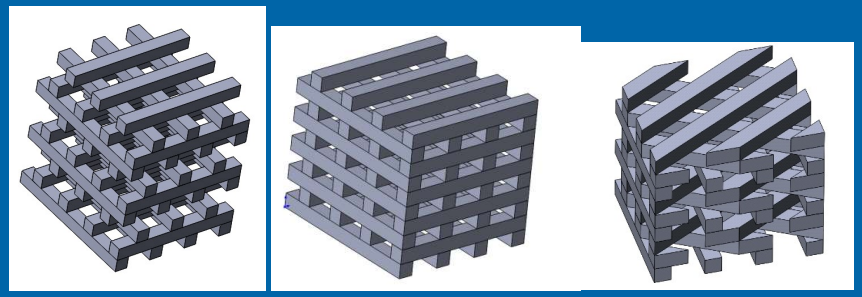
- Development of systems for diagnostics and monitoring of neuromotor disorders (Parkinson‘s Disease, Essential Tremor, Multiple Sclerosis)

- Development of patient-specific biomechanical model-based rehabilitation system



Bone tissue engineering – research on biodegradable 3D printed scaffolds with varying micro-architecture

3D printing based on fused filament fabrication enable straightforward patterning of objects having internal micro-architecture out of biodegradable polylactic acid (PLA). It opens wide prospects for the creation of custom made biodegradable templates which are of great interest for cell growth and bone tissue engineering applications.



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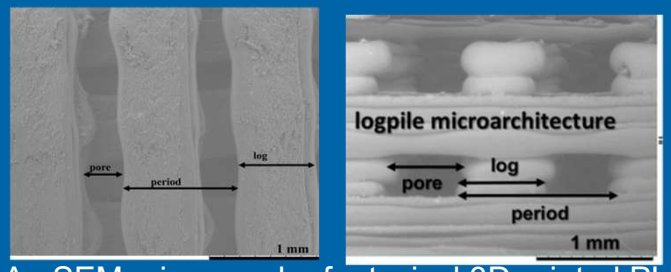
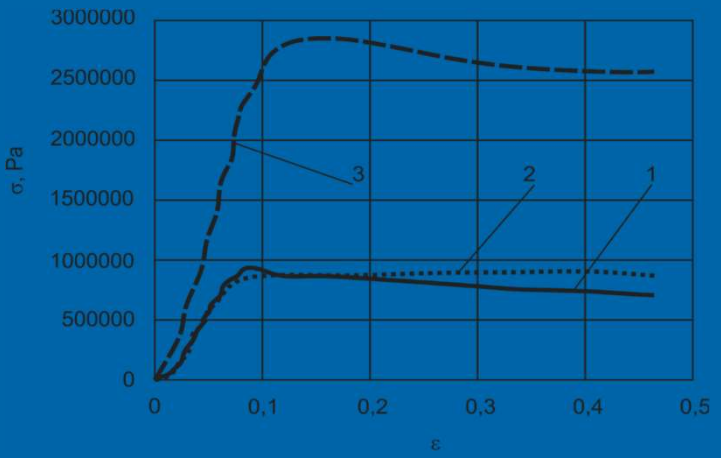
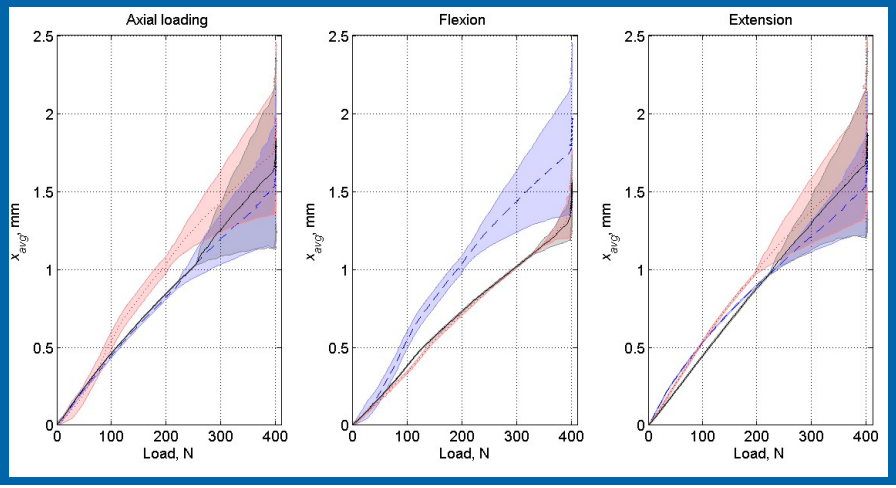


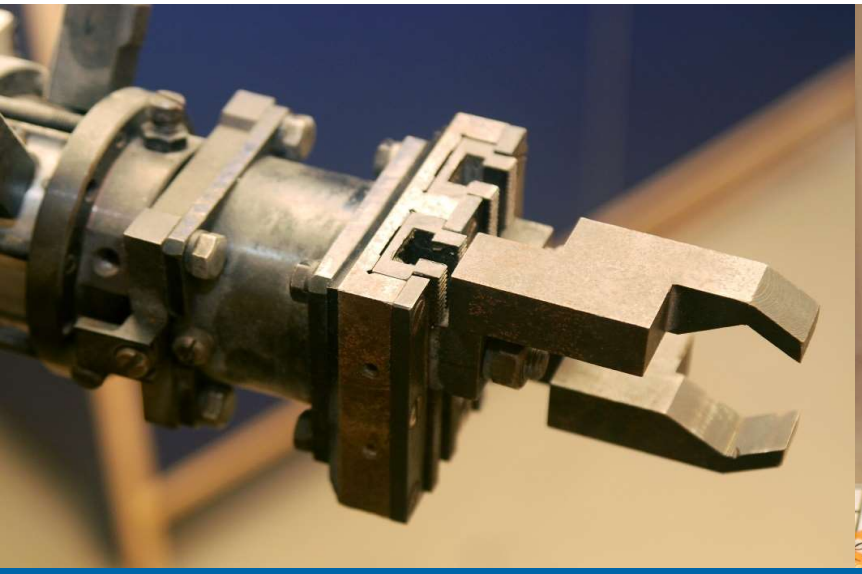
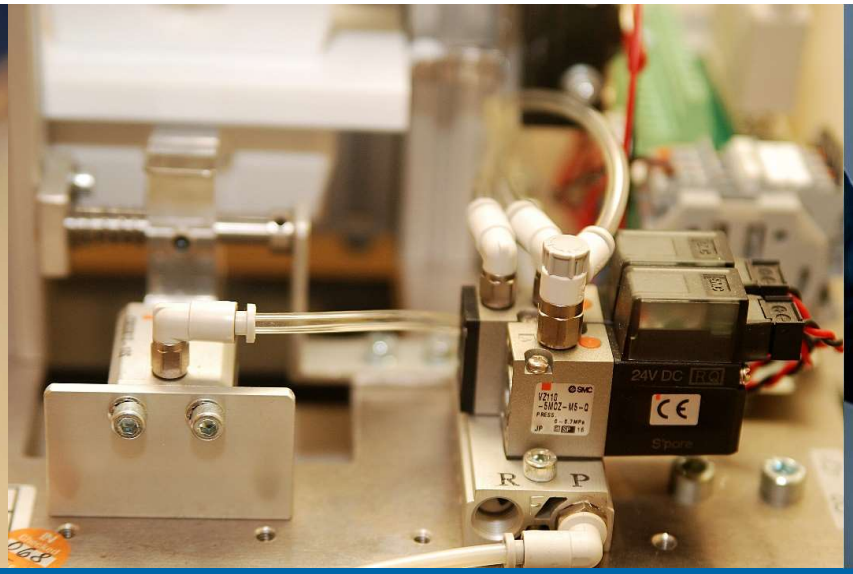
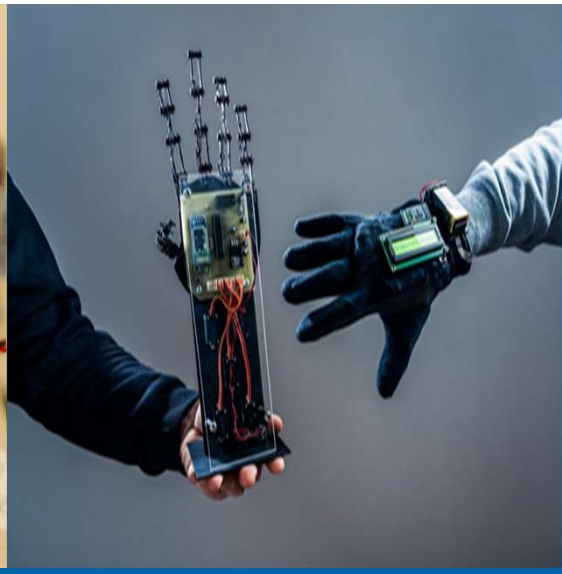
An SEM micrograph of a typical 3D printed PLA specimen having log-pile micro-architecture.



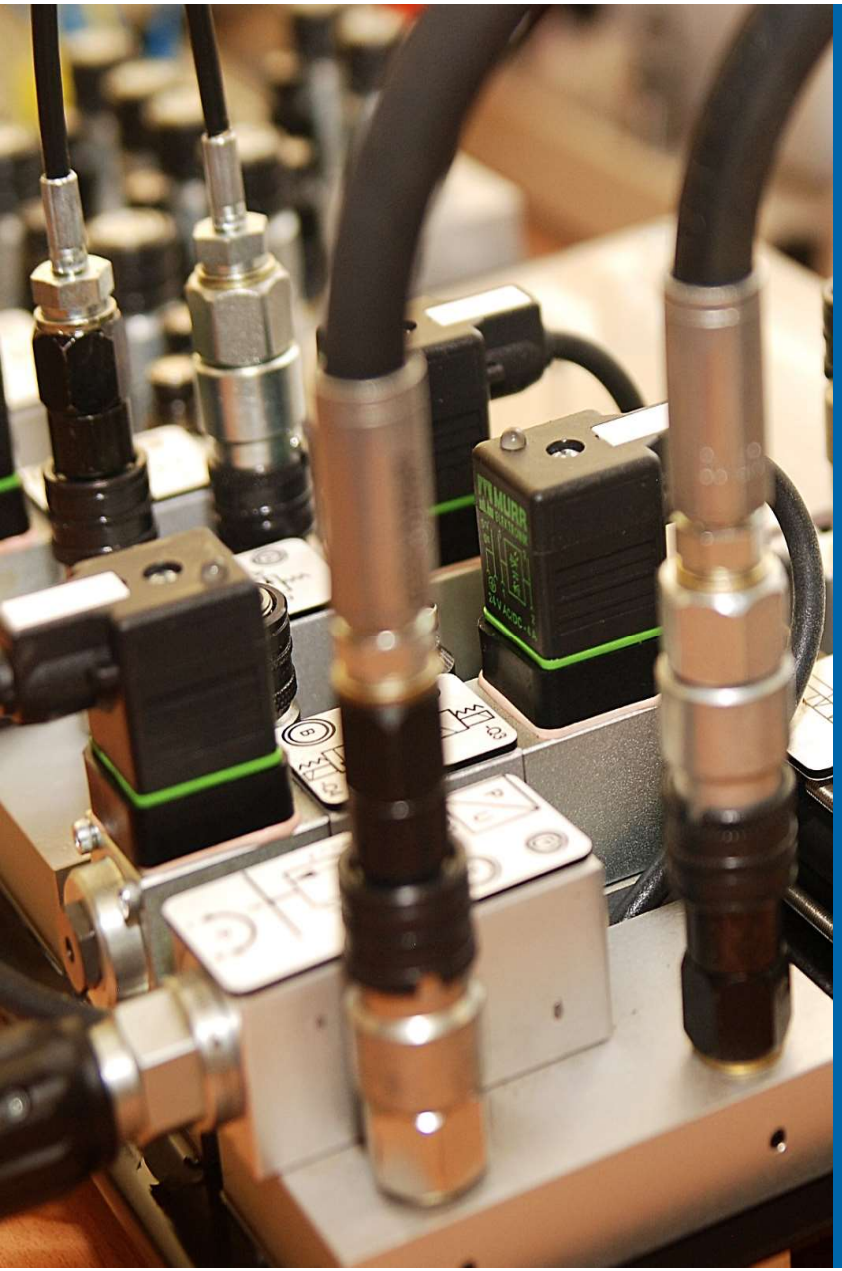
Micro-architecture (variation of log orientation in respect to each other) can significantly modify the mechanical properties. By means of additive manufacturing one can produce objects with specific micro-architectures which allows exploitation the structural advantages of stretching and compression constructions as well as size dependent strengthening effects.

Experimental study on spine segment fixation technique



Department of Mechatronics, Robotics and Digital Manufacturing



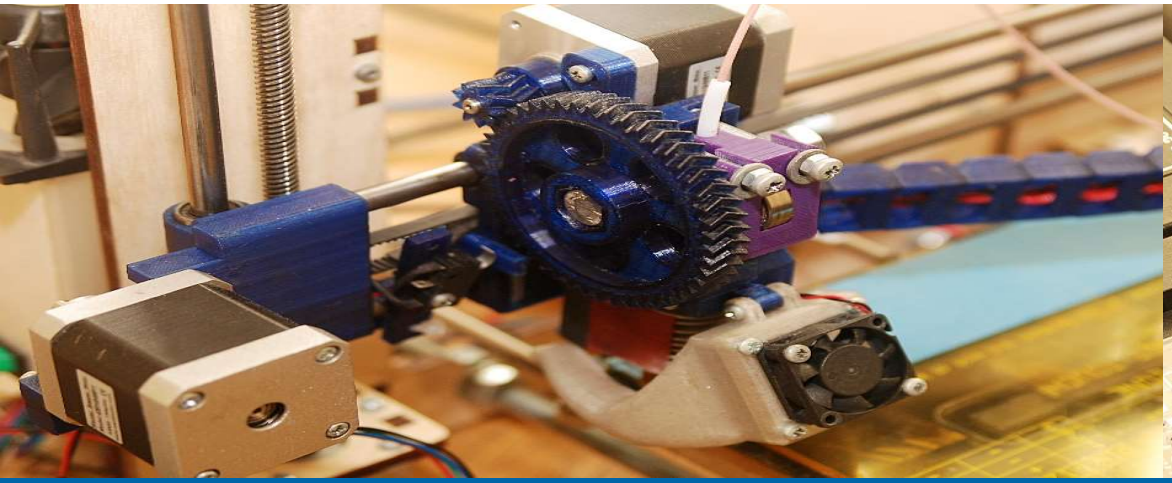
The main mission of department is to prepare engineering specialists with high qualification level which are able independently carry out research, lead projects of mechatronics development, maintenance and process improvement, apply their knowledge's in different areas of application, make decisions on the basic of available information and provide logical, unambiguous clear arguments and solutions both for specialists and non-specialists.

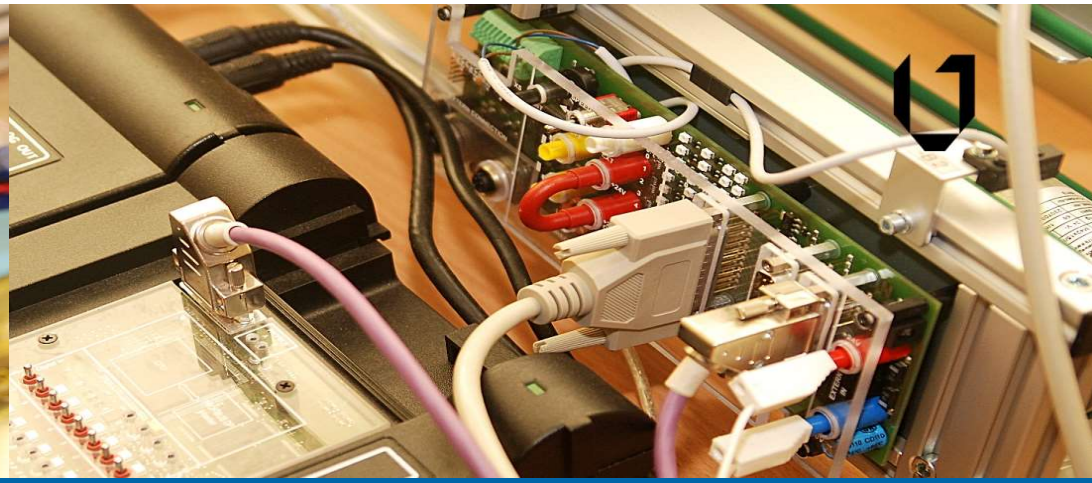
MECHATRONICS AND ROBOTICS

The aim of this study program is to prepare versatile specialists, who are able to do technological, organizational, construction and mechatronic as well as robotic systems exploitation, digital production supervision engineering and expertise-advisory work. In the course of studies students acquire knowledge of IT and programming.

UNDEGRADUATE STUDIES

- Mechatronics and robotics;
- Digital manufacturing;
- Graphics and media.



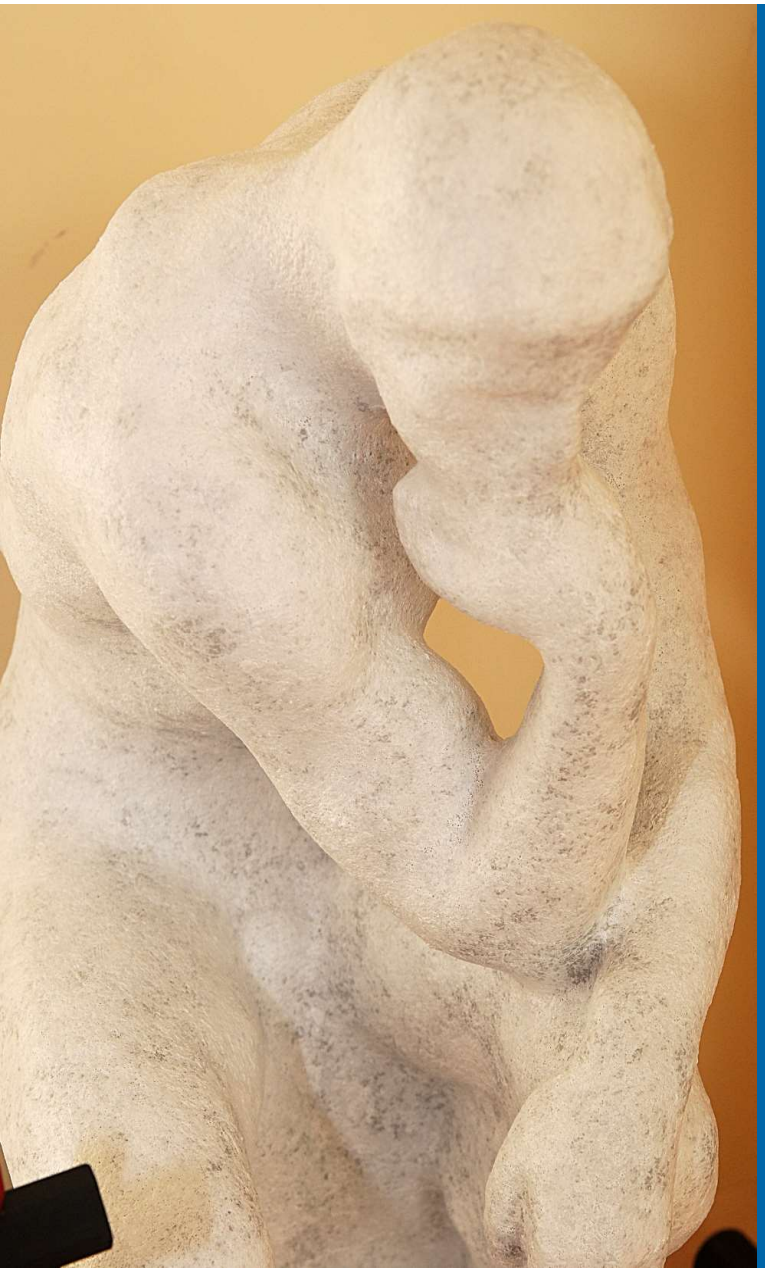


DIGITAL MANUFACTURING

Prepare specialists of digital manufacturing, by supplying knowledge of fundamental sciences, fundaments of production and digital engineering, design of industrial digitalization, management and administration, develop skills of design and manage of digitalization of enterprises; solve problems of digital engineering and create as well as implement new digital manufacturing technologies; develop critical thinking and ability to adopt himself in the global labour market; continue life-long learning with acceptance of Industry 4.0 and global market challenges.

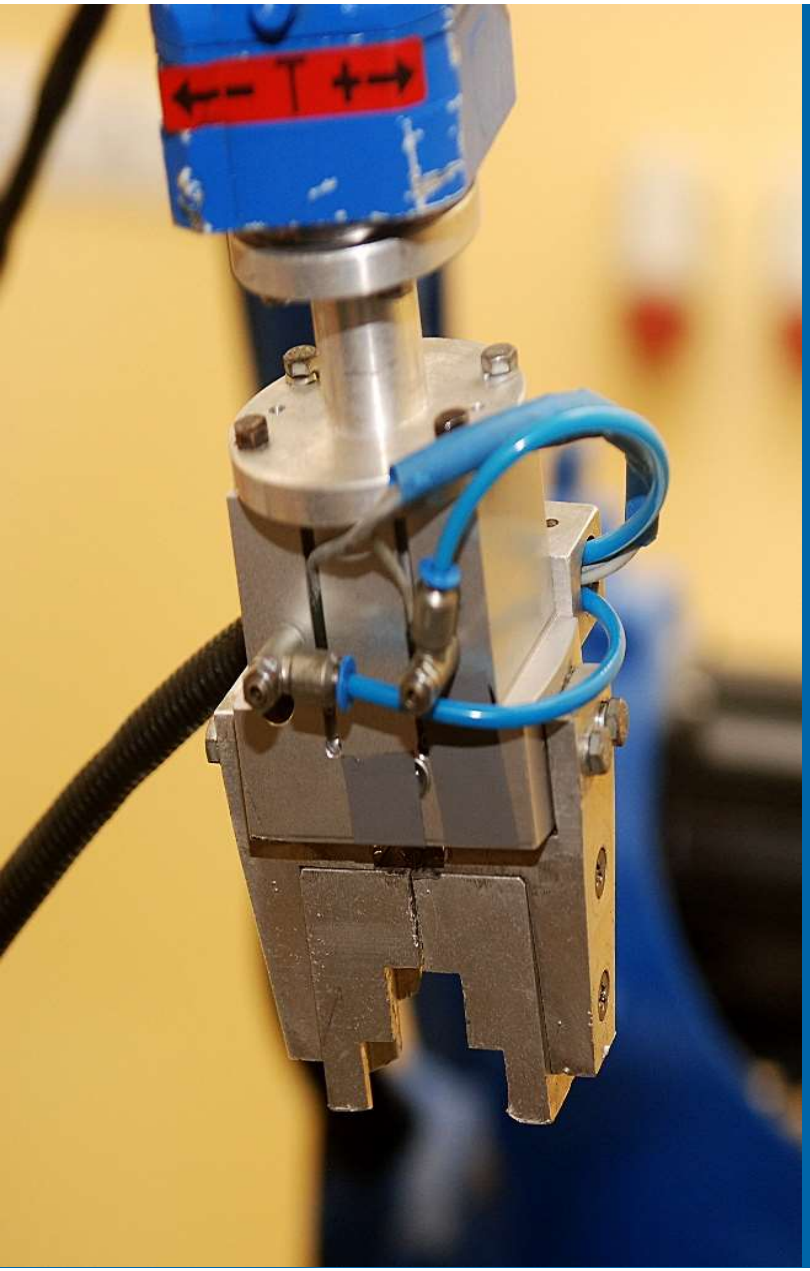
GRAPHICS AND MEDIA

This study program provides knowledge of design, publishing, advertising business, communication, and IT. Technologies of this field change with the speed of light, thus, the processes are being constantly updated, while innovations are being instantly implemented in the market.



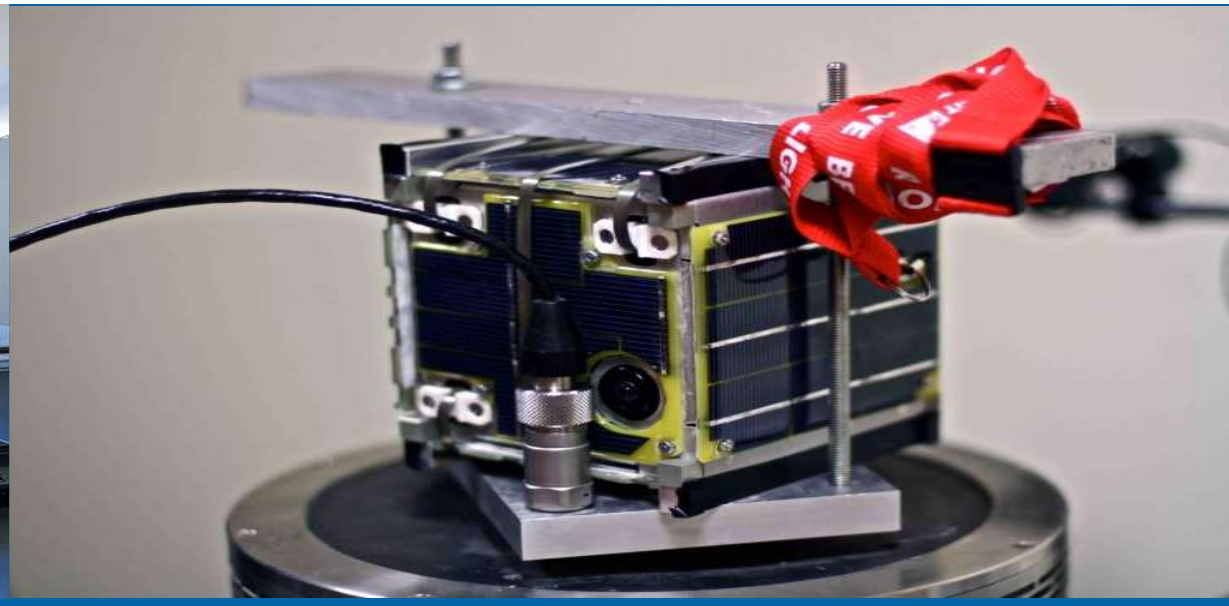
GRADUATE STUDIES

- Mechatronics systems;
- Mechatronics;
- Printing engineering.



Laboratory of Department

- Laboratory of Mechatronics and Robotics
- Laboratory of Mechanisms and Machine theory
- Laboratory of 3D technology and Printing
- Laboratory of Polytrophic Machine Training



Department of Mechanical and Materials Engineering

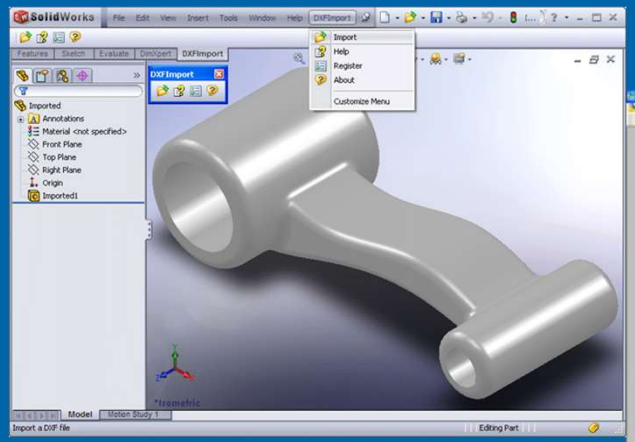
Department of Mechanical and Materials Engineering – Study Programs (bachelor)

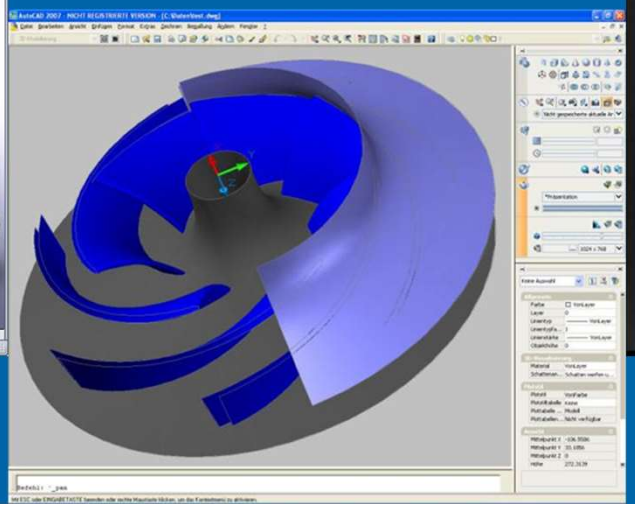
Department offers study programs providing degree in Mechanical engineering:

- Equipments and systems of alternative energetics;
- *Design of energy accounting and environment protection devices;*
- Metrology and measurements;
- Mechanical design**.

Department offers study programs providing degree in Production Engineering and Management:

- Industrial Enterprises Management;
- Industrial Management.

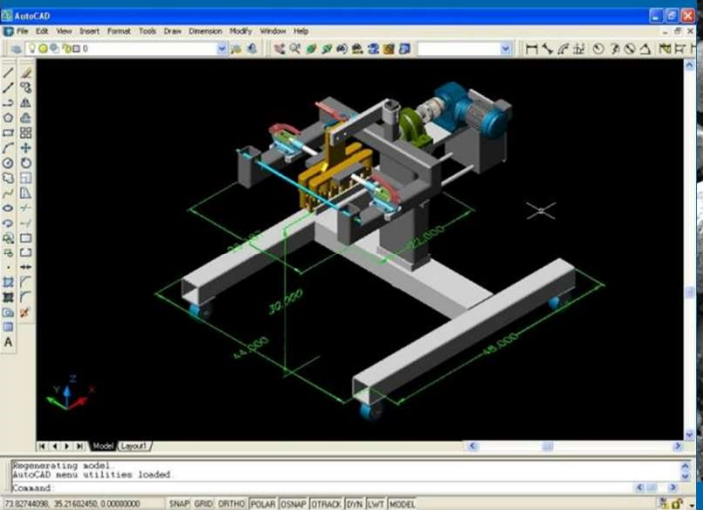


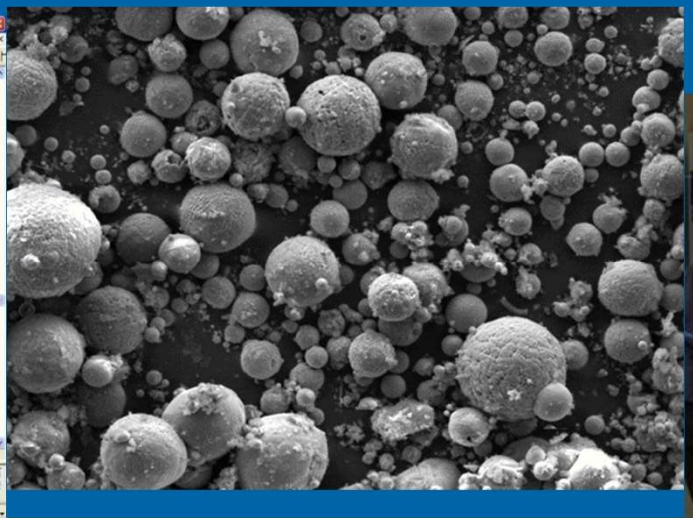


Department of Mechanical and Materials Engineering – Study Programs (master)

Department offers study programs providing degree in Mechanical engineering:

- Design and Production of Mechanical Systems
- Design and Production of Environment Protection Devices
- Industrial Technologies
- Material science and welding engineering
- Industrial Engineering and Innovation Management**
- Mechanical engineering:
- Environmental protection equipment design and manufacturing
- Mechanical Systems Design and Manufacturing **





Department of Mechanical and Materials Engineering

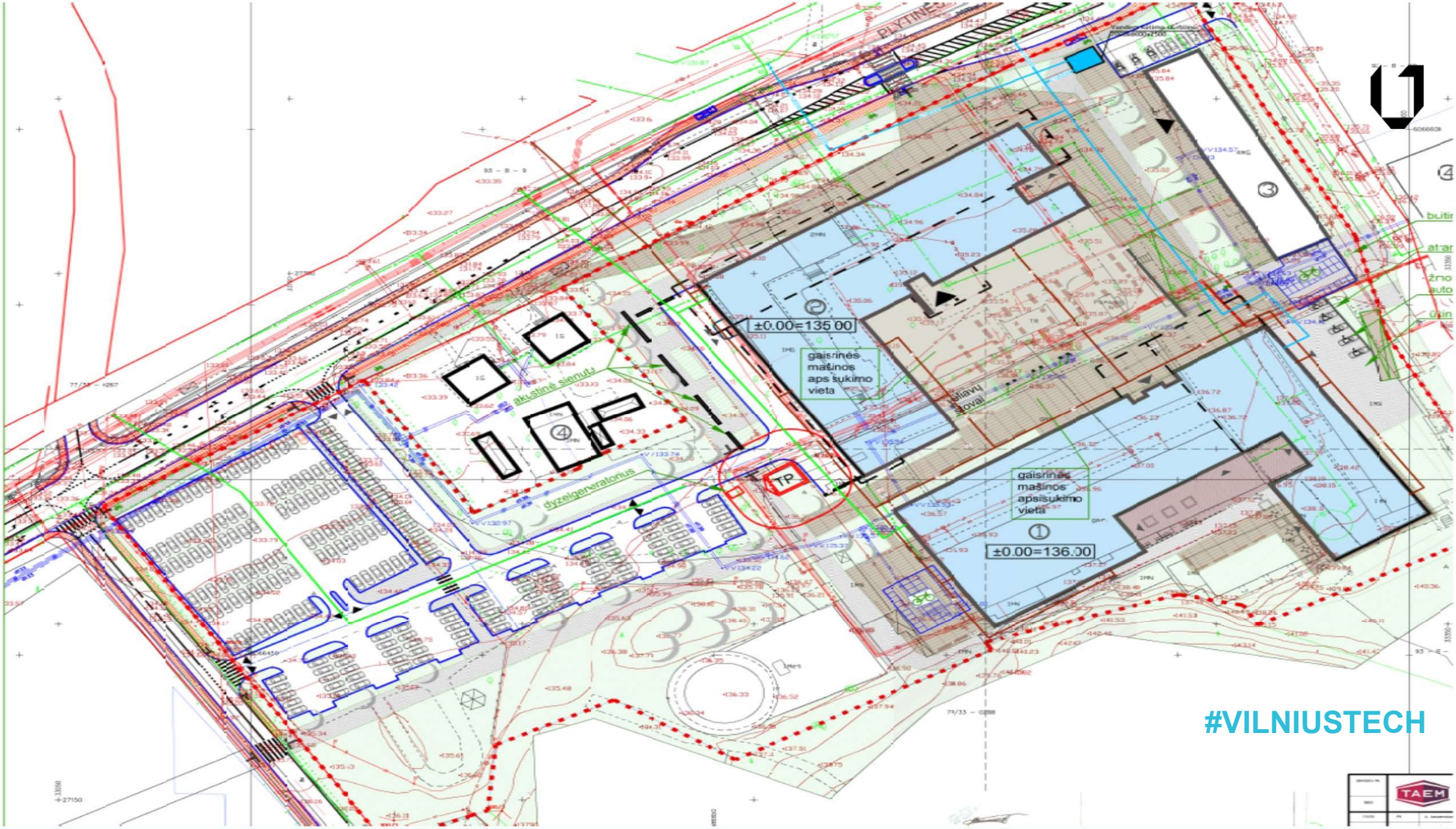
Infrastructure

- CNC turning center SL-20 HAAS
- CNC vertical milling center MINIMILL HAAS
- 5 axis machining center ULTRASONIC-10
- Diamond wire cutting machine RTS 440
- Coordinate measuring machine Micro-hite DCC
- Tribometer Microtest „Pin on discs“ „Ball on discs“
- Technological laser BMM CNC
- Graving and marking equipment
- Arc Welding robot MOTOMAN MH6
- 3D Systems equipment
- Chemical analyser PMI MASTER PRO OXFORD instruments
- Microhardness tester Zwick/Roel ZH

Research fields

- Mechanical eguipment and processes;
- Modeling, design and technology selection for sandwich covers with different mechanical and chemical properties;
- Innovation management and development at industrial enterprises;
- Development of creativity stimulation tools;
- Dynamic and metrological research and diagnostics of mechatronized systems;
- Investigation of advanced welding technologies, equipment and materials;
- Computer-aided modeling of welding stress and strain;
- Creation of oxy-acetylene and arc sprayed coatings;
- Investigations of Process and Machine Dynamics;
- Investigation of the micro and macro systems using optical methods;
- Dangerous welding design reliability, durability and ageing.

Lithuania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