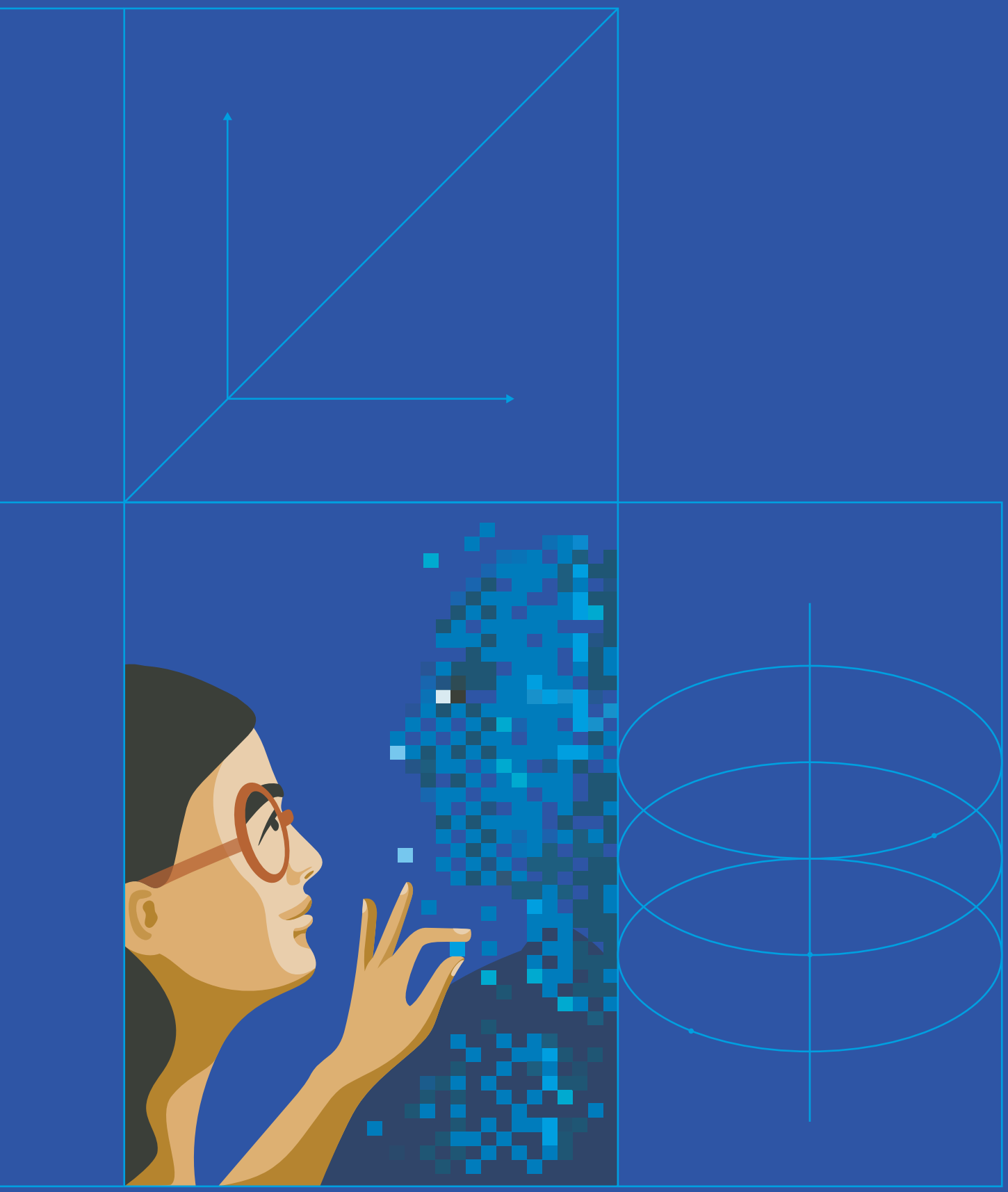
#TECHCULTURE

VILNIUS TECH



Discover VILNIUS TECH

Photography: Simas Bernotas

What kind of engineering do we create for a world that is constantly reinventing itself? How do we equip ourselves for the unknown unknowns of the future?

At VILNIUS TECH, we don't wait for inspiration – we create algorithms, narratives, and models that solve tomorrow's challenges today. In our laboratories, competence centres, auditoriums, and with imagination, we engage in responsible, impactful engineering across aviation, space robotics, transport, construction, energy, AI, and maritime technologies.

We educate system architects – globally minded specialists, inventors, and problem-solvers. We attract curious scientists, ambitious social partners, and innovative businesses who choose VILNIUS TECH for its worldview and TECH CULTURE.

Our greatest assets are intellectual power, innovation, and creativity. Our core values are sustainability, openness, and connectivity. We welcome humble inventors, ambitious startups, and dreamers who believe they will one day change the world.

A suitable environment and modern equipment are essential for creativity. This is why we focuse our talents on ten competence centres – from SmartEco Tech to Digi-Defense – as well as advanced science centres, applied science institutes, and laboratories. Together with business partners and public institutions, we model problems, design systems, and create solutions that can be implemented in reality. This is engineering that begins with an idea and ends with the ethics of action.

Technology is a vital tool for shaping tomorrow. As Lithuania's most prestigious and international technical university, VILNIUS TECH drives progress in breakthrough areas such as digital transformation, sustainable development, defence and security, crisis resilience, AI, climate change, and the built environment. These fields guide our research, define our expertise, and demonstrate our leadership.

Creating technology for a complex world is not about having all the answers – it is about making one idea at a time a reality. We invite you to explore, experiment, and find solutions together, because this is a choice about how deeply you want to understand the world – and how you want to change it.

Let the success stories of our alumni and scientists worldwide speak for us – their journeys are the continuation of our story.

A warm welcome to VILNIUS TECH!

Professor Dr Romualdas Kliukas
Rector of VILNIUS TECH

Where innovation meets impact

We are VILNIUS TECH

Founded in 1956, VILNIUS TECH stands today as one of Lithuania's leading research universities, located in the heart of Vilnius, a dynamic European capital of ideas and innovation.

With a strong focus on technology, engineering, and collaboration with industry, we empower the next generation of creators, problem solvers, and leaders who shape the future.

Every year, more than 10,000 students choose VILNIUS TECH to shape their future. Among them, 25% come from over 90 countries, creating a dynamic and truly international learning community. With more than 1,100 academic staff members and an impressive student-to-staff ratio of 10:1, we ensure every student receives world-class expertise and personalized mentorship. VILNIUS TECH proudly stands as Lithuania's No. 1 international university.

Our global network is extensive and ever-growing:

- Partnerships with 470+ universities across 60+ countries
- Collaboration with 300+ business partners worldwide
- Proud member of the ATHENA European University Alliance

Our academic and research ecosystem includes:

- 11 Faculties
- 7 Research Centres
- 12 Research Institutes
- 22 Research Laboratories
- 100+ Study Programmes

Our vision:

VILNIUS TECH is a prestigious and international European technical university, recognized for the excellence of its studies and research, and for its positive impact on individuals, communities, and society.

Our mission:

We inspire and nurture talent — fostering civic-minded, creative, and responsible individuals who can transform their environments and lead change.
We unite our community to advance society, the economy, culture, social welfare, and technology, building a smarter and more sustainable world.

Our values:

- Sustainability – creating long-term solutions for a better future
- Connection – uniting people, ideas, and disciplines
- Creativity – driving innovation through imagination and insight
- Openness – embracing diversity and new perspectives
- Innovativeness – turning ideas into real-world impact

#TechCulture

The Manifesto of TECH CULTURE

We see TECH CULTURE as a worldview – one where technological thinking is not merely the ability to use tools, but a comprehensive mindset. It is a way of seeing, structuring, and transforming the world through knowledge, creativity, and systematic action.

This is not a culture about technology – but a culture that behaves like technology: logical, adaptable, and constantly evolving through iteration.

TECH CULTURE creates structures, systems, and platforms. It values modelling and system design, prioritises digital, algorithmic, and interdisciplinary creation, and views creation itself as a form of academic maturity.

The principles:

- We see the world as a system – every problem has a structure. Our task is to understand, model, and transform it.
- Technology is not neutral – it shapes behaviour, rewrites processes, and influences worldviews. Therefore, we create it responsibly.
- Creativity is a method – we do not wait for inspiration – we design algorithms, narratives, and models that solve problems.
- Engineering is a form of culture – every project is a perspective on the world – technical logic grounded in values.
- Our community is a functioning system – we do not work alone. TECH CULTURE is a distributed, living, and evolving collective mind.
- We do not believe in stagnation – every system can be rewritten. Our work is always a permanent version 2.0.

TECH CULTURE decoded:

Intellectual Engineering

- TECH CULTURE begins with thinking, not things.
- It is the ability to model problems, design systems, and create solutions that are both logically structured and ethically grounded.
- Engineering here that starts with an idea – and culminates in responsible action.

Technological Responsibility

- TECH CULTURE cultivates not only skill but conscience.
- We create technology for a world that is vulnerable, complex, and interdependent.
- Artificial intelligence, security, and sustainability are not trends – they are the ethical frontiers of design.

Creativity as a System

- In TECH CULTURE, creativity is not a flash of inspiration but a methodology.
- Ideas are not made to impress but to convert problems into processes.
- To create means to think differently – not just more beautifully, but smarter, more meaningful, and more sustainable.

Community as a Laboratory

- The university is no longer just an institution – it's a dynamic system.
- Every student, teacher, and partner is a participant, not an observer.
- TECH CULTURE thrives in environments that are open, experimental, and collaborative – where a productive chaos of discussion and discovery fuels innovation.

The home of future technology leaders

Studies at VILNIUS TECH

At VILNIUS TECH, the future of engineering and technology isn't something we simply prepare for – it's something we create together. Every new study programme we design opens the door to innovations that will shape the world for generations to come.

With that vision comes responsibility. Each year, we reimagine and refine our programmes, ensuring they evolve with the changing world. By aligning knowledge with real industry demands, we guarantee both academic excellence and practical relevance.

In collaboration with our global partners, we give students opportunities to explore emerging fields – from Sustainability Technologies to Artificial Intelligence Engineering and Digital Creativity. These programmes go beyond traditional study; they are bridges to international cooperation, co-created with the ATHENA European University Alliance and other leading universities.

Our outlook is global. Over 50% of our study programmes are offered in English, and our vibrant academic community brings together students from all over the world – individuals united by curiosity, creativity, and a drive to make an impact.

As Lithuania's leading technical university, we take pride in preparing professionals in engineering and computer science – disciplines at the heart of innovation. Remarkably, one in four Lithuanian graduates chooses to continue their journey at VILNIUS TECH, deepening their expertise and tackling new challenges at the next level.

Our mission is clear: to create study experiences that empower students not only to find a career – but to lead in it.

Because at VILNIUS TECH, innovation begins with knowledge, grows through collaboration, and changes the world through action.

FACTS AND FIGURES:

10,000 students

Study cycles:
Bachelor's studies
Master's qstudies
Integrated studies
Doctoral studies

Form of studies:
Full-time
Part-time (distance learning)
Microcredits

7 Study fields:
Mathematics 1%
Information Sciences 24%
Engineering sciences 43%
Technological Sciences 2%
Social Sciences 14%
Business and Public Administration 11%
Arts 5%

12 PhD study fields:

Technological sciences:
Civil Engineering
Electrical and Electronic Engineering
Environmental Engineering
Informatics Engineering
Materials Engineering
Mechanical Engineering
Transport Engineering

Social sciences:
Communication and Information
Economics
Management

Natural sciences:
Informatics

Humanities:
History and Theory of Arts

11 faculties
Architecture
Business Management
Civil Engineering
Creative Industries
Electronics
Environmental Engineering
Fundamental Sciences
Mechanics
Transport Engineering
Antanas Gustaitis' Aviation Institute
Lithuanian Maritime Academy

100+ study programmes:

- 80% in the field of Engineering, Information, and Technological Sciences:
- undergraduate (professional BSc, BSc)
- graduate (MSc)
- integrated

Over 50% of study programmes are interdisciplinary

Study programmes in English at VILNIUS TECH

Bachelor's (undergraduate) degree programmes in English (240 ECTS):

Computer Sciences
- Applied Artificial Intelligence
- Artificial Intelligence Systems
- Cyber Security and Communication Technologies

Communication Technologies
- Information Technologies
- Multimedia Design (DDP* with Goldsmiths, University of London)

Social Sciences
- Creative Industries (DDP* with Kiel University of Applied Sciences)
- Entertainment Producing (DDP* with Kiel University of Applied Sciences)

Engineering Sciences
- Automotive Engineering
- Aviation Mechanics Engineering
- Civil Engineering
- Computer Engineering
- Environmental Technology
- Mechanical Engineering
- Mechatronics and Robotics
- Medical Engineering
- Construction and Real Estate Management

Technological Sciences
- Bioengineering
- Mathematics of Modern Technologies

Business and Public Management
- Business Management
- Financial Engineering
- Logistics and Transport Management (DDP* with Windesheim University of Applied Sciences)

Master's (graduate) degree programmes in English (120 ECTS):

Engineering Sciences
- Aerospace Engineering
- Automotive Engineering with specialisation in Automotive Engineering and Management
- Biomedical Engineering
- Computer Engineering
- Electrical Power and Renewable Energy Engineering (DDP* with National Sun Yat-sen University)
- Environmental Engineering and Management (DDP* with Riga Technical University)
- Industrial Engineering and Innovation Management (DDP* with University of Palermo; DDP* with TalTech)
- Mechanical Engineering (DDP* with University of Palermo; P.Porto)
- Mechatronics Systems
- Structural Engineering
- Sustainability Management

Computer Sciences
- Information Electronics Systems with specialisation in Digital Twin Technology / Artificial Inteligence Systems
- Engineering of Artificial Intelligence
- Information and Information Technologies Security (DDP* with National Sun Yat-sen University)
- Information Systems Software Engineering
- Management of Artificial Intelligence Solutions
- Data Science and Statistics

Technological Sciences
- Nanobiotechnology

Master's (graduate) degree programmes in English (90 ECTS):

Engineering Sciences
- Inovative Solutions in Geomatics

Business and Public Management
- Engineering Economics and Management with specialisation in Business Leadership
- Financial Engineering (FinTech)
- Economics Engineering with specialisation in Global Economics
- Business Management with specialisation in International Business
- Logistics and transport management with specialisation in Transport Logistics

Social Sciences
- Communication in the Creative Society

Integrated degree programme in English (300 ECT):

- Architecture

* Double Degree Programme
** Joint Degree Programme

European Joint Master's degree programme in English (120 ECTS):

- Embedded Intelligence Nanosystems Engineering (** JDP with EMINENT)

Professional Bachelor's (undergraduate) degree programmes in English (120-240 ECTS):

Maritime Technology
- Marine Navigation

Maritime Engineering:
- Marine Engineering
- Offshore Wind Power Engineering
- Port and Shipping Engineering Management
- Marine Electrical and Electronic Engineering

Intellectual engineering

Civil Engineering: where precision meets creativity

As a teenager, Tomas Strazdauskas sketched imaginary cities, already dreaming of shaping the built environment. By the end of high school, he knew civil engineering was his calling. Today, as Head of Structural Engineering at CSD Engineers Belgium and founder of TST Engineers, Tomas has contributed to landmark projects across Europe – from the Paris Metro and Lausanne railway station to the CERN laboratory expansion and innovative neighbourhood developments in Belgium. The story of this VILNIUS TECH alumnus illustrates how dedication and personal values can open doors one could only dream of.

The influence of academia

"I think constructing is in my genes – almost everyone in my family was a math whizz, engineer, or construction worker," says Tomas. Following this inherited passion, he pursued Civil Engineering at VILNIUS TECH, earning a master's degree with the prestigious *Best Graduate* distinction.

Tomas took more than just practical knowledge of constructing large-scale structures from his years of study. The people he met shaped his vision and gave him a broader perspective on his chosen path: "The greatest influence was Professor Algirdas Juozapaitis. His guidance stayed with me, even if I only truly understood his lessons years later. I always felt his support, which helped me develop a global outlook. It made me realize that our limits are often self-imposed."

As strong as the people around you

In fact, Tomas's own story is the best proof of that. His career spans Lithuania, Switzerland, and Belgium. The Vilnius University Library at the Sunrise Valley Science and Technology Park stands as his legacy to his home country. From there, his global journey took off.

Tomas joined the CSD Engineers in Vilnius in 2015. At that time, a small team of engineers was working on sporadic projects in Switzerland. The competencies and ambition Tomas brought created a breakthrough, opening doors for what he now calls the Belgian chapter. New challenges and projects soon followed, including the IBM skyscraper, entire residential and office blocks, hospitals, and schools in Brussels.

Throughout his exciting professional journey, T. Strazdauskas has never lost sight of the principle connecting all the dots: "I am only as strong as the people around me." After founding TST Engineers in 2024, he prioritises hiring colleagues who share his values. "I choose my team based on their values, because everything else is just the little things that can be learned. I am convinced that technical challenges are meant to be solved, but it is most important to talk to young people about their moral standards," he says.

Photography: VLR Films

"I am only as strong as the people around me."

A combination of skills

When it comes to defining what makes a successful civil engineer in today's world, Tomas challenges the standard perception that engineering is only about mathematics and physics. Being multilingual, he emphasises, is a game-changing factor – especially for those pursuing an international career in leading civil engineering countries like Germany or France.

"Equally important is developing IT skills and knowing how to apply them," he adds. "Many new programmes are being introduced, and mastering them is becoming essential for success in civil engineering. Leading design companies integrate programming in their daily processes because building structures are becoming more complex – it's simply too complicated to calculate everything without the help of the computer."

What Tomas loves most about engineering is the perfect combination of precision and creativity. Modern architecture often steps beyond classical engineering boundaries, and this is where creativity comes in. "First, we have to develop a construction concept that ensures the strength, rigidity, and stability of the building. Only then does the practical part of detailed engineering calculations begin," he explains.

Learning never stops. Tomas's journey illustrates that patience and consistent improvement are key to success. If he were supposed to give one piece of advice to future engineers, he would share a proverb that reflects his own path: "Don't forsake the main road for a shortcut".

Bridging ideas and impact

VILNIUS TECH competence centres are vital bridges between academia, industry, and the public sector. They are not just knowledge hubs – they are dynamic environments where cutting-edge technologies are developed, tested, and brought to life.

Equipped with modern laboratories and advanced research infrastructure, these centres foster innovation, collaboration, and real-world application. Their engineering and scientific expertise support national industries, government institutions, and the Lithuanian Armed Forces, delivering practical, future-ready solutions to today's evolving security and sustainability challenges.

Through interdisciplinary cooperation, VILNIUS TECH is positioning Lithuania as a source of world-class innovation – while maintaining a strong commitment to creating value for society, the state, and the planet.

Looking ahead, the university continues to deepen its global integration, expanding collaboration with leading international universities, research institutes, and industry partners.

SmartEco Tech

SmartEco Tech leads the development of intelligent and climate-neutral production technologies and materials, uniting the R&D ecosystems of universities and companies. This centre provides access to state-of-the-art equipment that supports advanced research, innovation testing, and the development of sustainable industrial solutions.

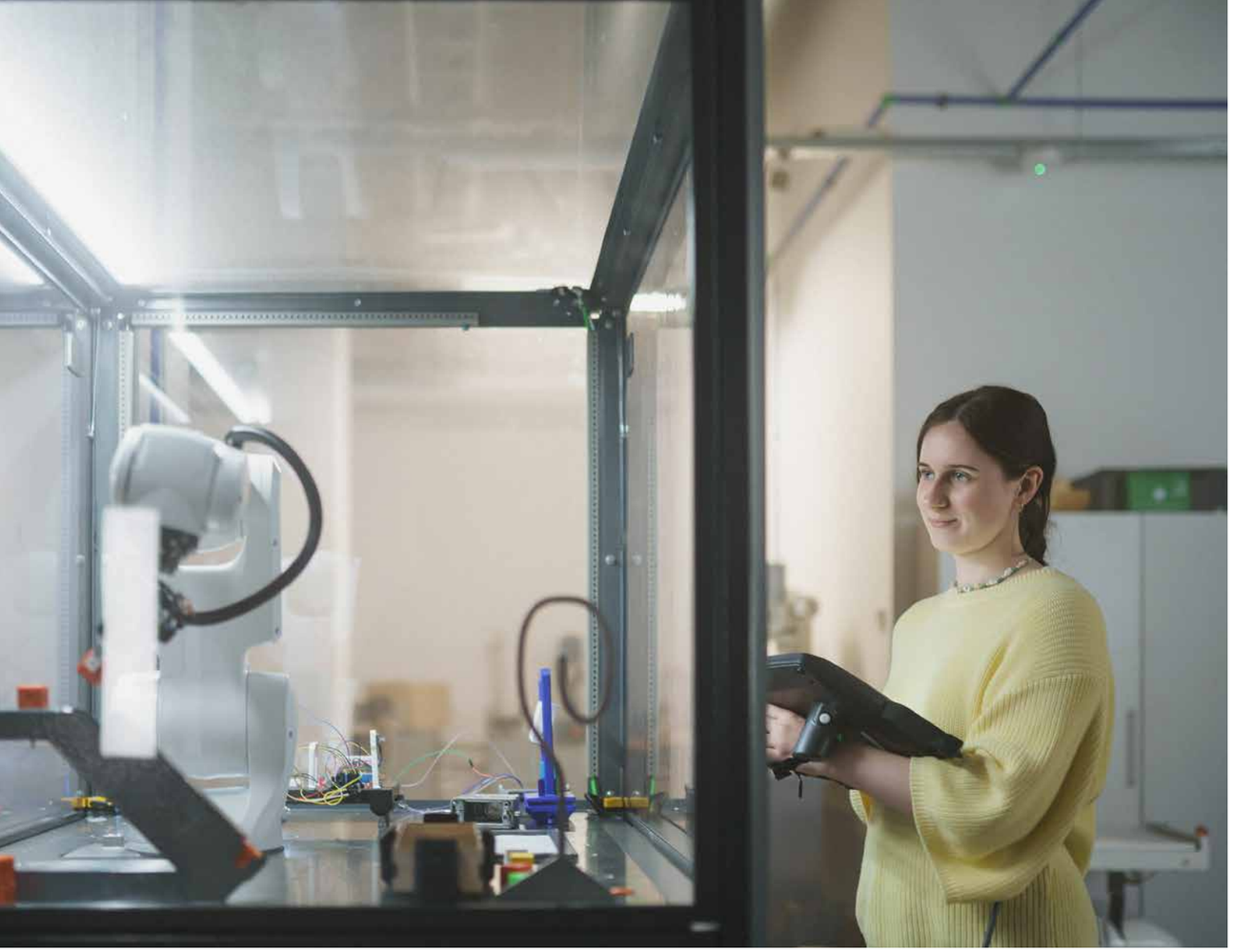
Key R&D projects:

- Implementation of green hydrogen in the transport sector
- Noise barriers made from recycled plastic and rubber
- Optimisation of wastewater and sludge treatment processes
- Climate-neutral pavements for urban infrastructure
- Sustainable materials for the construction industry

Research areas:

- Additive manufacturing
- Digital Twins (energy efficiency)
- Energy (biomass & hydrogen)
- Advanced materials

€16M investment in equipment
€3M investment in joint industry projects



Digi-Defense

The Digi-Defense Centre of Excellence integrates AI, cybersecurity, and defence technologies to strengthen digital resilience and drive innovation. It unites academia, government, and industry experts to address critical cybersecurity challenges and enhance defence capabilities.

Research areas:

- Cyber-physical systems security
- AI-driven threat hunting
- Continuous authentication (keystroke dynamics)
- Cyber threat intelligence
- Zero-trust security implementation
- Privacy-preserving technologies

Strategic objectives:

- Lead R&D projects
- Pursue patents and international funding
- Provide expert cybersecurity consulting
- Develop and commercialise tailored security solutions

€6M investment in equipment
€0.5M investment in joint industry projects

Intermodal Transport and Logistics competence centre

The competence centre focuses on strengthening the intermodality of Lithuania's transport system. Intermodality – the integration of different transport models – is vital for building competitiveness in international transport markets. The centre's goal is to develop research-based recommendations to support the integration of transport modes into a single, efficient logistics chain.

Research areas:

- Transport policy and strategy
- Development of intermodal transport networks and technologies
- Intermodal transport modelling
- Local and regional freight transport

Strategic objectives:

- Conduct applied research in intermodal transport
- Support the Baltic Sea Region transport network
- Promote cooperation between science, business, and institutions
- Provide expertise to state institutions on policy and implementation
- Foster intermodal transport growth in cities and regions

Civil Engineering Research Centre (CERC)

Established in 2011, the CERC is an integrated hub connecting science, education, and business to advance Lithuania's civil engineering sector. Acting as the university's "Business Gate", the centre identifies industry needs, drives joint research, and supports innovation across construction and infrastructure fields.

Main Research areas:

- Composite and climate-neutral materials
- Smart cities and sustainable development
- Intelligent decision-support systems for construction and real estate
- Soil-strengthening additives and green pavement technologies
- Materials for "green" façades and cycling infrastructure
- Bloomberg Initiative for Cycling Infrastructure (BICI)

Future international competence centres:

- Dual-use autonomous transport
- Applied chip engineering
- AI competence and technology centre
- Offshore wind engineering competence centre

AI competence and technology centre
Offshore wind engineering competence centre

The “heartbeat” of next-generation communication

Researchers from the Faculty of Electronics at VILNIUS TECH, together with colleagues from the National Taipei University of Technology (Taipei Tech), have achieved a breakthrough in microelectronics – developing and manufacturing an advanced chip that could transform the future of communication systems.

The team behind the new chip set out not only to achieve excellent performance but also to prove that competitive, high-quality products can be developed using well-established and affordable technologies. This approach opens new opportunities for both scientific progress and industrial innovation.

Chips are the core of all electronic devices – from smartphones and computers to household appliances. These semiconductors integrate circuits that make data processing and signal transmission possible. Without them, the modern technological world simply wouldn’t exist.

This chip’s generator can be seen as the heart of communication equipment – it signals, like a heartbeat, sets the rhythm for the entire system. Its key distinction lies in the ability to tune frequencies across an exceptionally wide range, a crucial feature for next-generation communication systems.

Breakthrough research earns Lithuanian Science Award

A 15-year research cycle led by VILNIUS TECH and Vilnius University scientists has been recognised with the prestigious Lithuanian Science Award. Among the laureates are Professor Dr Dalius Navakauskas, Vice-Rector for Science and Innovation, and Professor Dr Dalius Matuzevičius from the Department of Electronic Systems.

Their long-term project, *“Epigenetic and genetic biomarkers for disease diagnostics and personalised therapy: investigation of mechanisms, development of methods and applications (2009-2023)”*, marks a major step forward in disease diagnostics and personalised medicine.

The interdisciplinary team united researchers from different scientific fields to explore molecular mechanisms by combining computational informatics with experimental biology – a first-of-its-kind initiative in Lithuania.

VILNIUS TECH researchers developed innovative computational models and algorithms enabling automated analysis of cancer and stem cell biomarkers. The technology has proven effective in accelerating biomarker detection and cell research processes.

“We have established interdisciplinary schools that shape the future of scientific research, nurture new talent, and inspire innovative studies in regenerative medicine and computational informatics,” said Professor Dr Dalius Navakauskas.

United in support: modular furniture for a shelter in Ukraine

To stand in solidarity with Ukraine in its fight against the aggressor, the VILNIUS TECH community joined forces with business partners to create a 100-square-metre shelter at Kherson National Technical University (KNTU), fully furnished with modular furniture.

Before the war, KNTU was a thriving hub of innovation, equipped with modern laboratories, collaborative workspaces, and computer classrooms. The invasion destroyed much of this infrastructure, and the university, located near the front line, continues to face attacks.

Driven by a mission to provide safety and a sense of normality, VILNIUS TECH staff, students, alumni, and partners raised €25,000 for the project. The modular furniture, designed by Dr. Linas Kūgelis, Associate Professor and Vice-Dean for Studies at the Faculty of Architecture, was custom-made for the Kherson space. Lightweight plywood chairs, tables, cabinets, and bunk beds brought warmth and comfort to the underground shelter, helping to restore a sense of academic life and, most importantly, giving students a safer environment to continue learning together.

One lucky student’s mission to NASA

Paulina Draugelytė, a student of Aerocosmos Engineering at the Antanas Gustaitis Aviation Institute (AGAI) of VILNIUS TECH, has completed a prestigious internship at the United States’ National Aeronautics and Space Administration (NASA).

She undertook the placement at NASA’s Ames Research Centre in the Aviation Operations Management Division, the department responsible for analysis, planning, and optimising aviation operations while developing advanced air traffic management (ATM) solutions.

During her internship, Paulina’s main focus was on supporting the transformation of existing NASA infrastructure into modern research and flight training facilities for Unmanned Aircraft Systems (UAS). She also participated in the planning and observation of scientific missions, gaining first-hand insight into the full life cycle of advanced UAS projects, including initiatives such as Smart Mobility, Fire Sense, ACERO, UTM, ATM-X, and PAAV.

The experience gave the VILNIUS TECH student valuable insight into the practical application of aviation engineering in a world-leading research environment.

Scientists solve the mystery of the lost Nida lighthouse

After eight years of research, VILNIUS TECH scientists have solved an 80-year-old mystery by pinpointing the exact location of the original Nida lighthouse, which was built in 1874 and destroyed in 1944.

Combining historical records from German archives, archaeological investigations, and advanced geodetic analysis, Professor Dr Eimuntas Paršeliūnas and his team determined the exact coordinates of the lighthouse with an accuracy of just one metre. Their findings also revealed that the current Nida lighthouse stands in a different location from the original.

This breakthrough not only enables the marking of the historic site on modern maps but also paves the way for further archaeological research and the recovery of remaining fragments for future exhibition. The discovery is a meaningful tribute to the 150th anniversary of the lighthouse's first illumination and the *Year of Lighthouses* celebrated in Neringa and Klaipėda.

Record-breaking pasta bridge holds 326 kilograms

Every year, students from schools across Lithuania take part in the Pasta Bridge competition final, where teams design and build bridges made entirely from pasta and glue. The record-breaking structure withstood an impressive 326 kilograms.

The winning bridge was constructed over the course using spaghetti and large pasta tubes bonded with specially prepared glue.

Now in its twelfth year, the competition is not only a fun test of engineering skill and creativity but also a valuable opportunity for students to apply theoretical knowledge in practice, experiment with real designs, and gain hands-on experience.

What began as a small experiment in a university laboratory has grown into a national tradition attracting dozens of teams and more than a thousand participants from across Lithuania each year.

Under the competition rules, each bridge must be built solely from pasta and glue, weigh no more than one kilogram, and span a one-metre gap. Competitors must therefore rely on smart engineering and teamwork to create durable designs.

Lithuania to cultivate a new generation of space talents

VILNIUS TECH has joined the Lithuanian Space Technology Cluster as a new partner. This collaboration will strengthen scientific research and attract more young people to study fields related to space innovation and technology development.

In 2025, the Antanas Gustaitis Aviation Institute (AGAI) at VILNIUS TECH – Lithuania's leading institution for training high-level aeronautics and aerospace specialists – acquired space mission simulation software worth more than €114,000. The advanced system enables students to design, simulate, and analyse satellite missions from the earliest concept stages to launch preparation.

The institute also operates a satellite systems workshop, where researchers not only conduct scientific studies but also test small satellites and their systems under real low-Earth orbit environmental conditions. Through cooperation with the Cluster, AGAI aims to initiate and jointly implement projects, attract support from space sector companies for university initiatives, and strengthen the overall competitiveness of Lithuania's space industry.

Global spotlight on Vilnius' Baroque masterpiece

Professors from VILNIUS TECH continue to raise Lithuania's international profile. A recent study by Professor Dr Almantas L. Samanavičius on St Peter and St Paul Church in Vilnius, examined within the wider context of European Baroque architecture, has been published in a prestigious US academic journal.

The biannual anthology ANTA (Archives of Modern Traditional Architecture) is produced by the internationally renowned School of Architecture at the University of Notre Dame, home to one of the world's leading programmes in traditional architecture and urbanism.

The latest issue presents a collection of scholarly articles analysing examples of traditional architectural heritage from across the globe. Among them is Professor Samanavičius' paper, *"The Gem of Eastern European Baroque: St Peter and St Paul Church in Vilnius"*, which explores the architectural and artistic features of this exceptional monument within the broader European Baroque tradition.

Contributors to the issue include internationally recognised architects and scholars such as Leon Krier, Fabio Grementieri, Scotto Merillo, Branko Mitrović, and Samir Younes. In addition, shorter annotations highlight completed and ongoing projects in classical and traditional architecture worldwide, along with reviews of key publications in the field. The edition also features a lecture by the Prince of Wales (now King Charles III) on the enduring significance of traditional architecture.

Protecting the world, one cyber threat at a time

Once a Informatics Sciences student at VILNIUS TECH, today Saraj Pant from Nepal leads complex cyber threat investigations as Vice President of Operations at Resecurity. The intense and dynamic industry requires constant learning and adaptation. Yet for Saraj, it offers something rare – a profound sense of purpose, knowing his work contributes to global security.

Paving the way for future challenges

Exploring Europe had long been Saraj's dream. Drawn to the Baltic region's blend of culture, history, and innovation, he found the perfect match at VILNIUS TECH, where academic excellence met cultural discovery.
"The Informatics Sciences study programme matched my long-term goals in technology and cybersecurity, while life in Lithuania created opportunities for personal growth," Saraj says. "Studying at VILNIUS TECH was not just about completing a degree; it was about gaining global exposure, developing resilience, and preparing for a career where adaptability, critical thinking, and collaboration across cultures are essential for success."

Learning how to learn

Arriving in a new environment was initially a challenge. The diversity of people and perspectives pushed Saraj beyond his comfort zone. But with time, he adapted, built friendships, and grew confident in navigating new cultures. The challenges he faced during those early study days helped him develop confidence, patience, and resilience. Now, looking back, those initial struggles became valuable lessons that shaped Saraj into a global professional able to adjust to new environments and thrive even in uncertain circumstances.

"VILNIUS TECH offered me much more than just technical knowledge. It taught me how to think, adapt, and innovate," Saraj recalls. "Assignments were designed to simulate real challenges, helping me practice structured analysis and creative solutions. I learned how to optimise my work process to achieve maximum results with efficient effort. The professors provided guidance, but the most important skill I developed was learning how to learn."

Protecting governments, businesses, and individuals

Saraj agrees that the ability to self-learn and adapt has become a cornerstone of his career, where rapid change demands constant updating of knowledge and skills.

As Vice President at Resecurity, his career is intense and dynamic. A typical day at work starts with reviewing active investigations, analysing fresh intelligence, prioritising the most urgent cases, and instructing and motivating his team to maintain efficiency.

The most fulfilling part of his work is investigating complex cyber threats, especially those linked to the deep and dark web, where actionable intelligence requires focus on root cause and evidence collection. The work of Saraj and his colleagues helps organisations defend themselves from cyber threats before an attack can cause damage.

"The greatest reward is seeing the direct impact of my work in protecting governments, businesses, and individuals. Knowing that my efforts contribute to global security gives me a strong sense of purpose. Each day provides me with an opportunity to grow as a professional and as a leader," says cybersecurity analyst.

Among the most impactful projects Saraj has had the opportunity to lead was the mission to gather intelligence on threats that targeted critical national infrastructure in Southeast Asia. His team analysed malicious networks, tracked criminal activity on the dark web, and collected actionable evidence. The intelligence provided helped strengthen the country's ability to defend itself against cyberattacks. The project had a lasting impact on national security and highlighted the meaning of cybersecurity work. "It reaffirmed that this career is not only technical but also deeply purposeful," Saraj reflects.

> "Knowing that my efforts contribute to global security gives me a strong sense of purpose."

"Engage in industry discussions, follow news on emerging threats, and experiment with tools to gain hands-on experience. Mistakes are part of learning, and each one brings valuable lessons," shares Vice President at Resecurity and graduate of VILNIUS TECH. "Focus on strong fundamentals, but also explore the areas that inspire you. Remember, cybersecurity is not only about technology; it is about protecting people and creating meaningful impact."

Theory is just the beginning

With cybersecurity evolving at light speed, this industry requires lifelong learning, which includes studying threat intelligence reports, monitoring new attack methods, exploring emerging tools, sharing experiences with peers worldwide, and focusing on professional certifications and simulations to keep skills sharp.

Saraj points out the importance of cultivating adaptability, knowing that solutions that work today may become outdated tomorrow. "Curiosity and discipline guide my approach to staying relevant and ensure that I am always ready to respond to evolving threats," he notes. "Cybersecurity is both exciting and rewarding, but it requires dedication and passion."

His advice to someone considering the future in this industry would be to remain curious and proactive, to start building practical skills early through labs, simulations, and open-source tools – theory alone is just the beginning.

Photography: Saraj Pant's personal album

TECH CULTURE: How do you create something you can't touch?

Creativity as a system

TECH CULTURE beyond borders

VILNIUS TECH has earned its reputation as Lithuania's most international university for a reason. Openness, innovation, and creativity are not just words here – they shape the way we teach, research, and connect with the world every day. Students and lecturers from across the globe bring diverse perspectives to our community, sparking intercultural dialogue and helping nurture the leaders of tomorrow.

Our alumni are a living part of this global story. Many return as mentors, business partners, or supporters of research and education, opening doors to internships, collaborative projects, and new opportunities. Their success stories, shared on these pages, inspire the university and strengthen the connections between study, science, and society.

Partnerships are at the heart of everything we do. We work with universities, research centres, businesses, and public institutions in Lithuania and around the world, including some of the world's top 100 universities. We launched the Strategic Partnership Centre to deepen these connections, support student careers, and attract talented professionals to our most important fields.

As a proud member of the ATHENA European University Alliance, we collaborate on joint research, study projects, and initiatives in creative industries, learning from and contributing to the best international practices. Through these global networks and local collaborations, VILNIUS TECH builds sustainable partnerships that enrich our students, empower our alumni, and make a meaningful impact on society worldwide.

VILNIUS TECH partnership network:

470+ partner universities worldwide

60+ countries

Member of many prominent networks, including:

- ATHENA European University Alliance
- ENIHEI (European Network of Innovative Higher Education Institutions)
- EUA (European University Association)
- NORDTEK (A network of rectors and deans of technical universities in the Nordic and Baltic countries)
- BALTECH (Baltic Sea Region Universities Consortium for Science and Technology)
- And many more

Every 7th VILNIUS TECH student goes abroad for long-term study or internship mobility.

International studies:

- Near 50% Bachelor's and Master's programmes are taught in English
- 16 joint or double degree programmes with universities abroad
- 90+ international research and study projects yearly

Welcoming university:

The highest number of international degree-seeking students among Lithuanian universities:

- 25% of students are international
- 90+ countries

Most exchange students come from partner universities in:

- Spain
- France
- Germany

Most degree-seeking students come from:

- India
- Ukraine
- Azerbaijan

Strengthening global connections through networks

VILNIUS TECH continues to build strong international partnerships through its active participation in prominent international networks that promote innovation, sustainability, and collaboration in higher education.

As a member of the ATHENA European University Alliance, VILNIUS TECH carries on its action in the Executive Board, coordination groups, ATHENA clusters, and campus initiatives to leverage connectivity of the 10 alliance partners. The university's recent contribution was hosting a gathering of ATHENA student board members and student representatives for a *Blended Intensive Programme (BIP)* on the *Sustainability of Student Organisations* in 2025. The initiative brought together students from across ATHENA partner universities to explore how student representation, volunteering, and leadership can evolve sustainably. Participants exchanged best practices, learned from experts in organisational management, and developed ideas to strengthen student communities within the alliance.

The university is also part of the European Network of Innovative Higher Education Institutions (ENIHEI), a forum of 38 forward-thinking universities that share ideas on how higher education can drive Europe's next wave of innovation. Through this network, VILNIUS TECH contributes to shaping policies and initiatives that nurture creativity, entrepreneurship, and talent across Europe's academic landscape.

Since 2019, VILNIUS TECH has been a proud member of NORDTEK, the network uniting rectors and deans of technical universities across the Nordic and Baltic countries. In 2025, the university hosted the prestigious NORDTEK Conference in Vilnius, welcoming sustainability experts from 28 universities, as well as representatives from business, politics and municipalities. Under the theme "Green and Digital University Transformations", the event became a dynamic space for sharing ideas that will help shape the universities of the future.

VILNIUS TECH actively participates in numerous associations spanning aviation, management, and civil engineering, including EUA, BALTECH, CIB, ESEIA, CEEMAN, EFMD, AACSB IEEE, PEGASUS, Hyperledger Foundation, UiPath Academic Alliance, Crowdhelix, Design Factory Global Network (DFGN), EUCEET, FIG, IABSE, IAG, FEHRL, RILEM, PRAXIS, EAAE, NBAA, ECLAS, ALPSP, AECEF, and UNEECC.

Lithuania partners with MIT to advance research

A consortium of Lithuanian universities, research centres, and public and private sector companies has signed a landmark cooperation agreement with the Massachusetts Institute of Technology (MIT) at the Presidential Palace in Vilnius.

"VILNIUS TECH is proud to be part of this consortium, which has formalised a collaboration with MIT's International Science and Technology Initiatives (MISTI). Tonight, we discussed preparations for this top-tier partnership. We see immense potential in working with the core of the US innovation ecosystem to explore and research fields such as artificial intelligence, sustainability, cybersecurity, energy, and robotics. This collaboration will also support joint research publications, talent exchange, and the sharing of best practices in entrepreneurship promotion. Our goal is to build a realistic, long-term strategic partnership, and we are eager to connect with MIT's leading researchers as soon as possible", said Dr Romualdas Kliukas, Rector of VILNIUS TECH.

Lithuanian President Gitanas Nausėda, speaking at the signing ceremony, emphasized that the partnership with MIT highlights Lithuania's commitment to attracting world-class talent, fostering excellence, and investing in innovation.

"Participation in the MIT International Science and Technology Initiatives programme has the power to transform not only Lithuania's academic and scientific landscape but also the foundations of our economy," the President said. "It positions our country as a centre of innovation – increasingly recognised for its contributions to high-tech industries, cutting-edge research, and groundbreaking solutions to global challenges."

MIT consistently ranks among the world's top universities, often securing the top position in global rankings.

VILNIUS TECH and Goldsmiths, University of London, unite forces

The double-degree programme *Multimedia Design* (Interactive Digital Media and Networked Arts) by VILNIUS TECH and Goldsmiths, University of London presents an excellent opportunity for creative individuals interested in computer science and multimedia technologies.

During the first two years, students study at VILNIUS TECH, where they acquire a solid foundation of knowledge and skills essential for their subsequent years at Goldsmiths. While living and studying in the UK, they will deepen their understanding of contemporary digital art, learn to apply multimedia technologies to realise creative projects, and develop their final assignments. Upon returning to Vilnius and completing the fourth year, students will graduate with diplomas from both universities.

Graduates of the *Multimedia Design* Bachelor's programme, will be well-prepared for careers in virtual and augmented reality solutions, computer games, interactive digital products, mobile app development, UI/UX design, front-end and back-end programming, web design, and digital art applications.

Young filmmakers take the stage

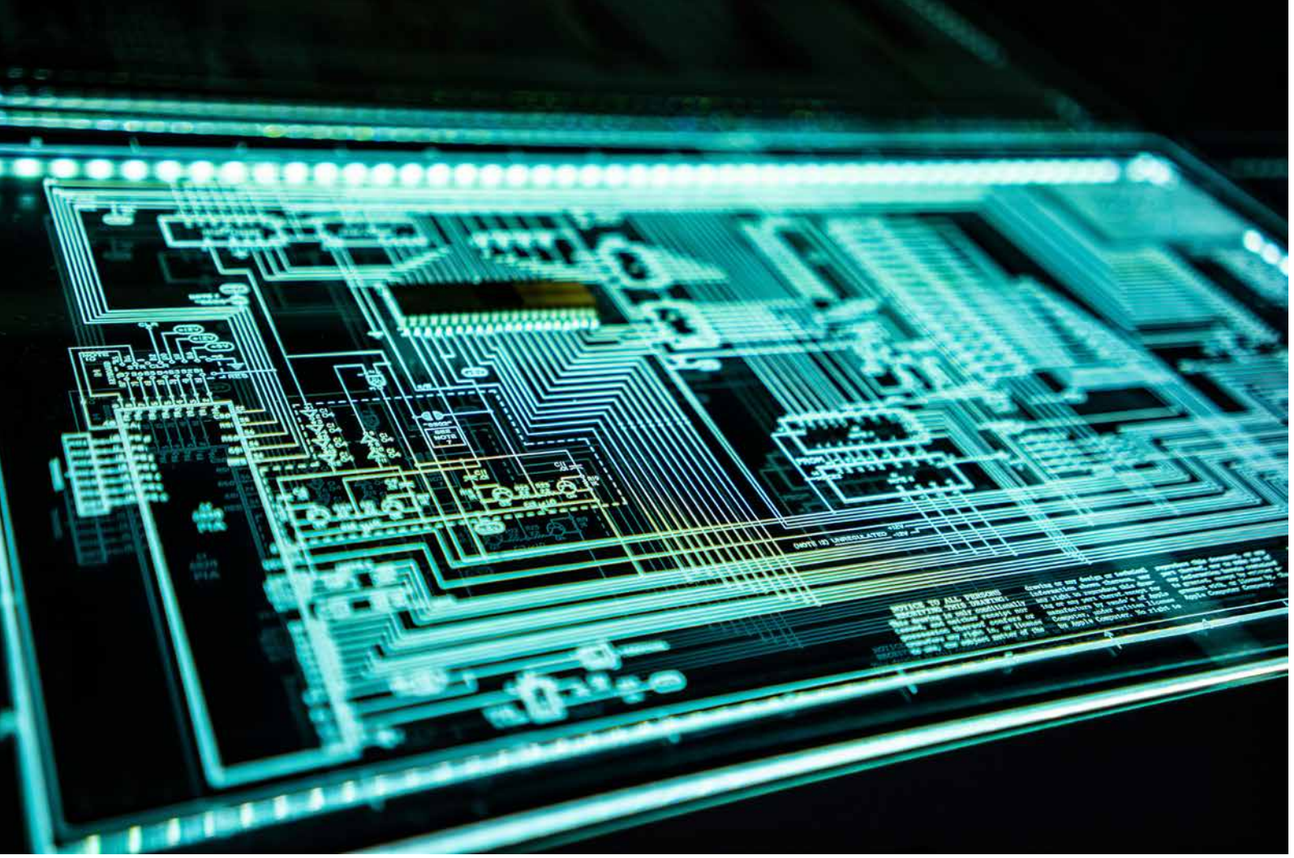
The annual international creative film workshop *Summer Media Studio* brings together students and young professionals for two intensive weeks of creativity, collaboration, and cinematic exploration. Guided by internationally recognised mentors, participants attend lectures and practical workshops on performance, emotional expression, character development, and working with the camera.

The Erasmus+ BIP project serves as a platform for building international connections, honing professional skills, and sparking new artistic initiatives in the audiovisual arts.

The long-standing partnership between VILNIUS TECH and the Audiovisual Arts Industry Incubator offers students from the Entertainment Production and Creative Industries programmes invaluable hands-on experience in film production, communication, and project management.

In 2025, the workshop culminated in a grand premiere at one of Lithuania's largest cinemas, where eight short films and a behind-the-scenes documentary were screened. Created by participants from Lithuania, Canada, Ukraine, and Germany, these films reflected the creativity, professionalism, and teamwork of emerging filmmakers.

Opening the event, long-time project leader, film director Inesa Kurklietytė, highlighted the importance of *Summer Media Studio* in shaping the future careers of young creators.



VILNIUS TECH partners with ACCENTURE to promote IT literacy

VILNIUS TECH has signed a strategic cooperation agreement with global technology leader Accenture Lithuania, becoming its partner from the very beginning of the company's operations in the Lithuanian IT market.

The partnership encompasses research and education, alongside a new outreach initiative aimed at strengthening IT education and enhancing digital literacy in society.

Accenture Lithuania will deliver open lectures for university students, share access to its knowledge base and training resources, and facilitate internships and study visits. Together, the partners will nurture future IT talent both within the university and across schools and communities.

The collaboration also opens doors to joint international research projects, specialised training, and professional development programmes – enriching both academic studies and industry practice.

Accenture is one of the world's leading professional services companies, offering advanced solutions in strategy, consulting, digital technology, and operations.

Lithuania launches first space-related doctoral studies

Lithuania is taking a bold step into the future of space research. VILNIUS TECH, in partnership with the innovative company Uvireso, has secured funding from the Research Council of Lithuania (LMT) to launch the nation's first industrial doctoral studies in space technology.

The project, *"Cathode of a Bismuth-Fueled Hall Electric Motor for Space Satellites"*, marks a new era for Lithuanian science, technology, and business.

According to Dr Jonas Klimantas, Director of Uvireso, the cooperation creates strong opportunities to unite science, practice, and enterprise.

"When developing electric thrusters for space satellites, highly qualified engineers and technological solutions based on scientific research are particularly important to us," says Dr Klimantas.

This doctoral project is highly relevant to the European Space Agency (ESA) and the global space market. As an active member of Lithuania's Space Technology Cluster, VILNIUS TECH continues to strengthen collaboration between academia and business, develop advanced study programmes, and attract new talent to the rapidly growing space sector.

VILNIUS TECH signs strategic agreement with Embraer

VILNIUS TECH has taken another significant step forward by signing Memorandums of Understanding (MoU) with Embraer, one of the world's leading companies in aviation and defence.
These agreements pave the way for industrial cooperation, joint innovation, and mutual contribution to Lithuania's economy and defence ecosystem.

The partnership covers a wide range of high-value areas, including maintenance, repair, and overhaul (MRO) services, engineering and technology development, innovation and supply chain management.

New cybersecurity initiative receives support from Google.org

VILNIUS TECH has received €0.7 million in funding from Google.org, the philanthropic arm of Google, to develop an interdisciplinary cybersecurity seminar programme.

The project will give 200 students from diverse academic backgrounds the opportunity to strengthen their expertise in one of today's most critical fields.

VILNIUS TECH was selected for this partnership by Virtual Routes, a technology-focused NGO that will contribute educational materials and expert consultations.

Through this initiative, the University will train multiple groups of cybersecurity specialists to address key digital challenges and enhance societal resilience. Students will also apply their skills in local organisations, contributing to stronger digital security within the community.

The Cybersecurity Seminars will introduce essential topics such as data and device protection, minor incident response, malware prevention, and the development of advanced cybersecurity skills for tackling modern threats.

Digital Badge System: from soft skills to real-world impact

According to the World Economic Forum's Future of Jobs 2025 Report, success in the era of Artificial Intelligence (AI) depends not only on technical knowledge but also on enduring soft skills such as creativity, critical thinking, teamwork, leadership, and sustainability.

Responding to these evolving needs, VILNIUS TECH has introduced the Digital Badge System – an internationally recognised platform that acknowledges labour market-relevant skills gained through non-formal learning in volunteering, science, art, sports, internationalisation, and technical creativity.

Each digital badge functions as a micro-certificate, detailing the achievement, date, and key durable skills developed. Beyond recognising engagement, the system provides graduates with a university-endorsed competency portfolio highlighting their broader contributions to university life.

For businesses, the VILNIUS TECH Digital Badges offer:

- A reliable, evidence-based method to verify candidates' soft skills
- A transparent record of short- and long-term participation in diverse activities
- An innovative tool to identify emerging leaders and future managers

VILNIUS TECH is the first university in Lithuania to receive the international Quality Label for Badge Recognition issued by the global Cities of Learning network. To date, more than 5,500 students have earned digital badges, with over 400 actively building and validating their skills portfolios.

The intersection of technology and design

Photography: Agnė Papievytė

Tomas Markevičius, former Creative Director at COLLINS, a world-leading brand transformation agency, recently joined the Motion Design team at OpenAI. He interprets #TechCulture as a reflection of the seamless integration between technology and creativity: *tech is creativity, and creativity is tech*. In today's world, that connection has never been more evident.

Exploring possibilities

The intersection of technology and design has always fascinated Tomas. From a young age, he was drawn to creativity but was uncertain how to turn it into a career. The Creative Industries programme at VILNIUS TECH provided the answer. "It felt like a perfect fit," he recalls. "The studies showed me how creativity could lead to countless paths and helped me figure out where I wanted to go next."

During his studies, Tomas loved experimenting – testing tools, exploring approaches, and tackling challenges with curiosity and self-drive.

"Those years really helped me build the foundation for my career in design," he notes. "I was surrounded by motivated, creative people, and that environment pushed me to grow and stay inspired. I genuinely believe the standard of education at VILNIUS TECH is high."

A result of hard work

While still a student, Tomas joined a small design agency in Vilnius. After a few years, and with some practical experience under his belt, he continued freelancing as a multidisciplinary designer. His portfolio of local and international clients grew steadily.

In 2015, Tomas relocated to New York, a city that continues to inspire him to this day. There, he spent several years working at design studio 2x4 and creative agency Hugo & Marie. Among the many engaging projects was a long-term collaboration with Prada, where Tomas created visuals for their store window displays around the world, fashion shows, social media, and advertising campaigns.

Then one day, he was invited to join COLLINS, one of the most prominent design agencies in the world.

"It's been the result of consistent hard work over the years. When I joined COLLINS in 2019, one of the co-founders, Brian Collins, recognised that my background in motion design could play a key role in where branding was heading – beyond static logos and traditional guidelines towards something more dynamic, fluid, and interactive," Tomas recalls. "That perspective allowed me to shape how motion could become a core part of brand identity at the studio. Eventually, I was promoted to Motion Design Director, and later to Creative Director, which expanded my responsibilities to leading projects, managing teams, and collaborating directly with clients."

The human touch in a technological age

During his years at COLLINS, Tomas had worked on a number of what some might call dream projects. For the San Francisco Symphony, the team designed a typeface that literally *dances* along with the music – movement became the core expression of the brand.

While working on the Bose project, he drew inspiration from a thought by philosopher Alan Watts – that when we listen to music, we're not hearing the past or the future; we're experiencing an expanded present. This concept shaped the visual side of the project – from stretching the edges of the Bose logo to creating a unique, dynamic graphic language for the brand.

As the work of a Creative Director requires maintaining a sharp and imaginative mind, Tomas draws inspiration from the rhythm of New York. "Living in this city definitely helps!" he laughs. "Honestly, I think it's one of the best cities to live in for any creative who wants to operate at a high level. It's not just about the jobs or even the creative community – it's the city itself. There's inspiration everywhere: in museums, shows, and bookstores and in the little surprises you stumble upon on the street – whether it's stylish people, unique architecture, or an old hand-painted shop sign. That constant stimulation keeps my creative pulse alive and pushes me to stay curious every day."

Films and music are another constant source of inspiration for Tomas. They open new perspectives and ways of seeing the world. He has a particular interest in the intersection of technology and design, which, in his opinion, is becoming increasingly important in how we create experiences.

In the age of AI, he sees creativity evolving in a way that encourages us to focus on what only humans can bring to the table. When so much of what we do today can be automated or streamlined, the human touch becomes more valuable than ever.

"At the same time, keeping up with the rapidly emerging tools is challenging – but also more important than ever," says Tomas. "Between the time I type this sentence and when it's published, I'm sure dozens of new AI tools will have been released that will further impact the creative field. It's a strange and fast-moving moment, but I believe that truly talented and creative people will always find ways to harness these tools to make their work even better."

Between the time I type this sentence and when it's published, I'm sure dozens of new AI tools will have been released that will further impact the creative field.

Photography: Eglė Každailytė's personal album

Alumni: The next chapter

The ripple effects

From a small Lithuanian town to shaping how millions see the world – Eglė Každailytė's journey is a story of courage, creativity, and reinvention. A graduate of VILNIUS TECH, she is now an acclaimed visual designer, illustrator, and painter whose work has appeared in The Economist, The Guardian, The Washington Post, and Monocle. Her foundation in visual design, illustration, and painting was built at VILNIUS TECH, and her career reflects both serendipity and determination. We are proud to feature her cover illustration in this journal.

The longing for bright horizons

At sixteen, Eglė was thinking about the future that awaited her in a remote hometown in northern Lithuania. The town was lovely, but she felt confined – eager to discover something new, something that would allow her to contribute meaningfully to the world. She loved drawing, but she never wanted to study at an art academy. She was searching for a field that blended creativity with purpose.

Then one day, her mother mentioned a friend's daughter studying at the School of Young Architects and Designers at VILNIUS TECH. Architecture? Eglė knew little about it, but the idea sparked something powerful. That single word opened a door to an entirely new future.

Where dreams take shape

Over the next few years, she worked hard to get ready for the entrance exams. Her effort paid off: out of 80 students, Eglė placed second. But her biggest changes were still ahead.

"Architecture studies at VILNIUS TECH changed my life forever," she reflects. "I learnt how to create, but also how to start and finish complex projects. I learnt conceptual thinking, drawing, understanding composition, and how shapes and spaces relate to each other and people."

Careers often take unexpected turns. In her last year at VILNIUS TECH, a professor invited Egl to work at the city's urban planning department. She found it interesting, but soon realised urbanism wasn't what she wanted to do.

This opportunity took her to the Amsterdam School of the Arts, where she balanced evening classes with demanding daytime roles in Rotterdam architecture offices. She worked at three different firms during her three-year programme, gaining valuable practical experience.

After her daughter's birth and her father's passing, Eglė reached a turning point. Although she valued her architectural education, she realised the profession did not bring her fulfilment. During this challenging period, she returned to her enduring passion: drawing.

A global canvas

What followed was an extraordinary international journey that showcased the adaptability and global mindset that VILNIUS TECH had helped cultivate. Eglė lived in the Netherlands for three years, then moved to London for four transformative years, where she truly became an illustrator and graphic designer.

"London has a very special place in my heart to this day," she says. "I learnt there what illustration actually is. In Lithuania, we tend to think that it's all about aesthetics and pretty pictures, but the Brits taught me that it's all about ideas and concepts. Illustrating is very much like writing." This conceptual approach became Eglė's signature.

Whilst working as a freelance illustrator for The Guardian and other prestigious publications and businesses, Eglė was travelling with her family around the world. They lived in Singapore, India, New York, and Denmark before settling in rural Spain.

From a sailboat to the pages of The Economist

The pinnacle moment came when Eglė saw an advertisement: The Economist was seeking a visual designer for their Snapchat content. Conducting her interview from a sailboat where her family was living, she impressed the team not just with her skills but with her unique perspective and honesty about wanting to work from Spain.

> Illustrating is very much like writing.

"When I got the job at The Economist, I literally said to myself – ok, you're done, my biggest professional dream came true," she recalls. Seven years later, she continues to work for The Economist, managing all their social media whilst living in Spain, visiting the London office just once a month.

Her work now reaches global audiences and influences international discourse. She's contributed to crucial journalism, including coverage of the war in Ukraine, working alongside colleagues who understand that their work "does make a difference and influence the world." She's also had the honour of collaborating with renowned artist Petra Braisse in Amsterdam and creating content for The Washington Post, Monocle, and other world-class publications.

Listen to your heart, but watch your hands

If the illustrator could turn a few pages back to her 18-year-old self, she would remind that young idealist that the only constant thing in life is change, and we shouldn't be afraid of it: "Don't force yourself to do anything you don't feel like doing anymore, only because 'you put so much work and time in it.' Listen to your heart, but watch your hands. They know way better what to do than your head."

Eglė also notes the importance of self-compassion and rest: "All my best ideas came whilst resting, not whilst working."

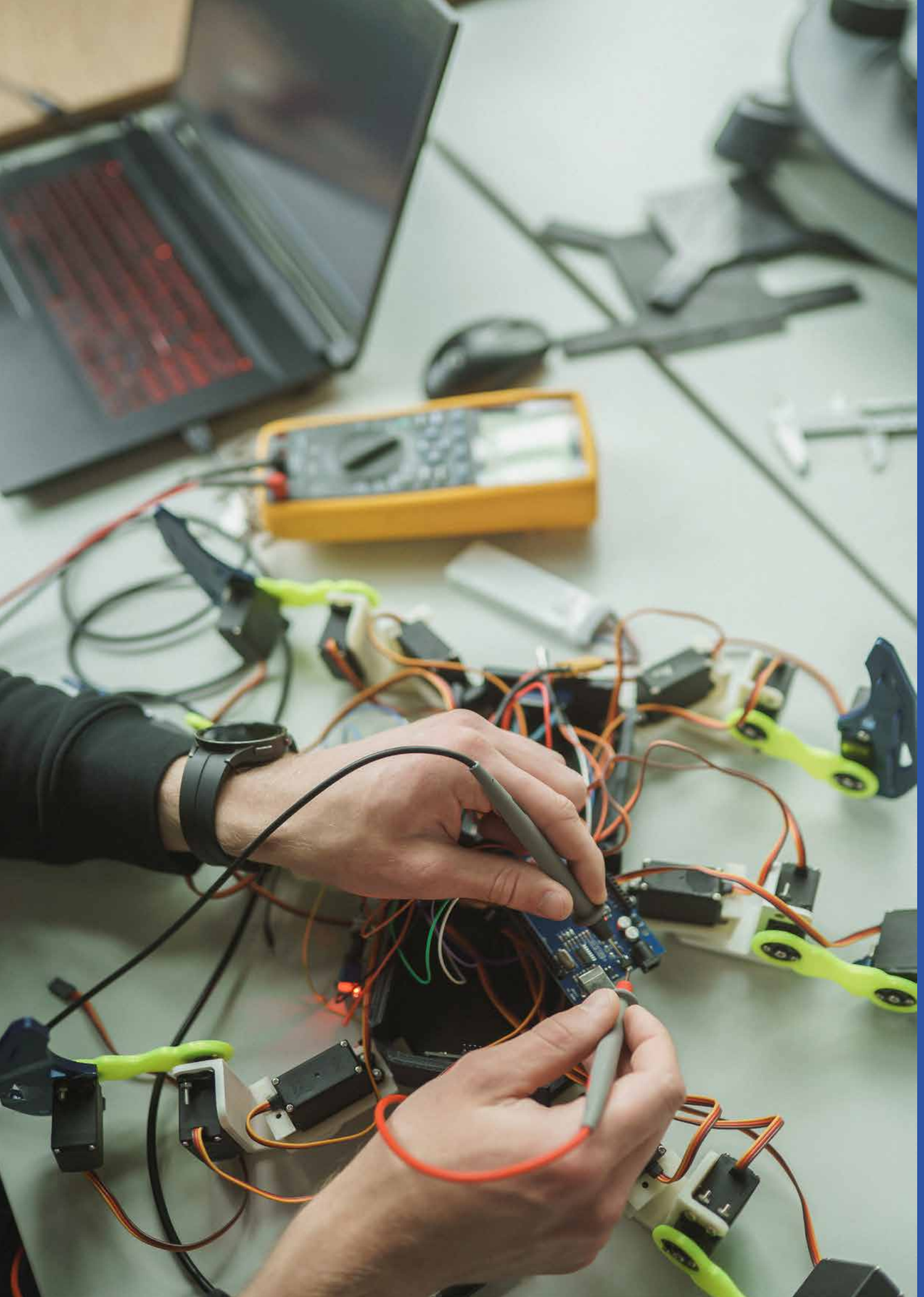
Technological responsibility

Research and innovation

Innovating for a better and safer tomorrow

At VILNIUS TECH, our mission is clear: to generate new knowledge and apply it where it makes the greatest impact. We bring together ambitious researchers, visionary thinkers, and industry innovators to tackle real-world challenges using cutting-edge technologies. With a strong focus on both fundamental research and practical application, we ensure that discoveries don't just stay in the lab – they transform industries and improve lives.

We believe that science-driven innovation and sustainable technologies are the key to progress – fostering competitiveness while protecting our shared future. That's why we work closely with businesses and communities, inspiring new ideas and nurturing a culture of innovation that creates lasting value for society.



FACTS AND FIGURES:

7 key research areas:

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

40 research divisions:

- **7 research centers:**

  Aerospace Data Centre

  Civil Engineering Research Centre

  Creativity and Innovation Centre *Linkmenų fabrikas*

  Digital Defense Competence Centre

  Smart and Climate-Neutral Production Processes, Materials and Technologies Competence Centre

  Technology Centre for Building Information and Digital Modelling

  Transport and Logistics Competence Centre

- **12 research institutes**

- **22 research laboratories**

Funding sources of research activities:

- State budget for research activities 43%
- Contract-based research and services 27%
- International research projects 13%
- National research projects 6%
- EU Structural funds for research and experimental development 11%

Doctoral studies:

VILNIUS TECH is accredited to organize PhD studies in 12 scientific fields.

- Technological sciences 75%
- Social sciences 17%
- Humanities 5%
- Natural sciences 3%

Research infrastructure and output:

8.525 sq. m of new R&D and study space in the *Sunrise Valley Science and Technology Park*.

Over 20 scientific conferences held annually, half of them international.

16 scientific research journals published by VILNIUS TECH:

- 10 listed in the *Clarivate Analytics Web of Science* databases (5 in Q1 or Q2)
- 13 listed on the *Scopus* (10 in Q1 or Q2)
- 7 included in *COPE* (Committee on Publication Ethics)

Research excellence:

- 25 publications among the top 1% most cited in their field and year (*Web of Science Highly Cited Papers*)
- Over 500 scientific articles annually published in *Web of Science* (SCIE, SSCI, AHCI, and ESCI) journals
- More than 15 research projects annually under *Horizon Europe* and *Horizon 2020*, with about **five coordinated by VILNIUS TECH*
- Leader in Lithuania by the number of patent applications: over 50 valid patents, including around 10 international patents

Research areas at VILNIUS TECH

Sustainable building

Research topics:

- Smart building structures
- Low emissions building materials and technologies
- Architecture and urban environment
- BIM (building information modelling) and sustainable lifecycle of structures
- Geodetic technologies

Environmental and energy technologies

Research topics:

- Efficient use of resources and energy
- Environmental protection technologies
- Building energetics
- Renewable energy
- Change of anthropogenic environment

Sustainable transport

Research topics:

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

Mechatronics

Research topics:

- Smart embedded systems
- Mechatronic for Industry 4.0 production systems
- Metamaterials and nano-structures
- Bionics and biomedical engineering systems
- Innovative electronic systems.

Information and communication technologies

Research topics:

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

Fundamental research on materials and processes

Research topics:

- Mathematical models of physical, technological and economic processes
- Investigations on cells and their biologically active components

Economics engineering, management and communication

Research topics:

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

TECH CULTURE: When decisions are born from understanding, not from instructions.

Community as a laboratory

From dreamers to makers

At VILNIUS TECH, university life goes far beyond lectures and textbooks.

At the heart of our campus is *LinkMenų Fabrikas* – the Creativity and Innovation Centre, a vibrant hub where imagination meets technology. It's a space where engineers, designers, filmmakers, sound and VR specialists, artists, and inventors come together to experiment, collaborate, and bring bold ideas to life.

With access to state-of-the-art tools and technologies, our prototype and media workshops are open to everyone – from curious inventors and ambitious start-ups to dreamers determined to make an impact. Here, the synergy between business and science sparks innovation and gives every idea the power to grow.

Creativity at VILNIUS TECH extends beyond the lab. Our students express their talents in the university orchestra, *Gabija* choir, *Vingis* folk dance ensemble, and *Palėpė* theatre studio – or find inspiration through sport, from basketball and volleyball to football, wrestling, and more.

Through creativity, collaboration, and community, VILNIUS TECH empowers students to become confident innovators and inspired leaders ready to shape the future.

Faux Real Studio: redefining creative production

VILNIUS TECH's *Faux Real Studio* is revolutionizing the way stories are told on screen. This 650-square-metre virtual production space features a modular 7.0 x 3.0-metre LED volume that seamlessly merges real and digital worlds. Designed for film, advertising, and media projects, the studio also serves as a hands-on learning hub, where students, international participants, and professionals explore the latest virtual production technologies.

One standout project produced at Faux Real Studio is the music video *Raudona šviesa* for the song *Einu miegoti*. Shot entirely indoors, it combines physical 3D-printed cityscapes, live projections, and a digitally rendered sunrise created in Unreal Engine. By integrating LED wall technology, camera tracking, and in-camera effects, the team delivered a visually poetic experience that fuses traditional craftsmanship with next-generation techniques.

The studio's collaboration with Kongsberg NanoAvionics further highlights its technical and creative prowess. For a product launch, Faux Real Studio produced a keynote video and two virtual trailers – *Water* and *Earth* – blending live-action footage with dynamic virtual environments. From realistic water effects to photogrammetry-based 3D satellite models, these projects demonstrate the studio's precision, artistry, and innovation, showcasing how VILNIUS TECH is shaping the future of virtual production.

LinkMenų Fabrikas: creating for tomorrow

The Portal: connecting humanity through technology

The Portal project began with a simple yet profound idea: to remind us that we share more in common than divides us. Conceived by Lithuanian artist and entrepreneur Benediktas Gylys, Portal symbolizes unity and shared humanity across both physical and digital realms.

Since 2016, the project has grown into a global phenomenon. The first Portal, linking Vilnius and Lublin, was unveiled in May 2021, allowing real-time video connections between the two cities. Within months, it captured international attention, reaching hundreds of millions online. In 2025, the Vilnius Portal was relocated to the iconic Vilnius City Hall.

Portal not only conveys a powerful message but also showcases exceptional engineering and design. A smaller prototype of the sculpture represented Lithuania at EXPO 2020 Dubai, built from lightweight materials including extruded polystyrene foam, epoxy resin, and woven glass fabric – a testament to the creative and technical excellence of VILNIUS TECH *LinkMenų Fabrikas*.

Students develop autonomous mine-detection drone

VILNIUS TECH students participated in the international Product Development Project (PdP), led by Finland's Aalto University, contributing to the creation of an autonomous mine-detection drone. This initiative combined technological innovation with a vital humanitarian goal: saving lives.

Collaborating with experts from Saab, the Finnish Defence Forces, and the Demine Foundation, students conducted research, tested technologies such as artificial intelligence and ground-penetrating radar, and integrated these solutions into a functional design.

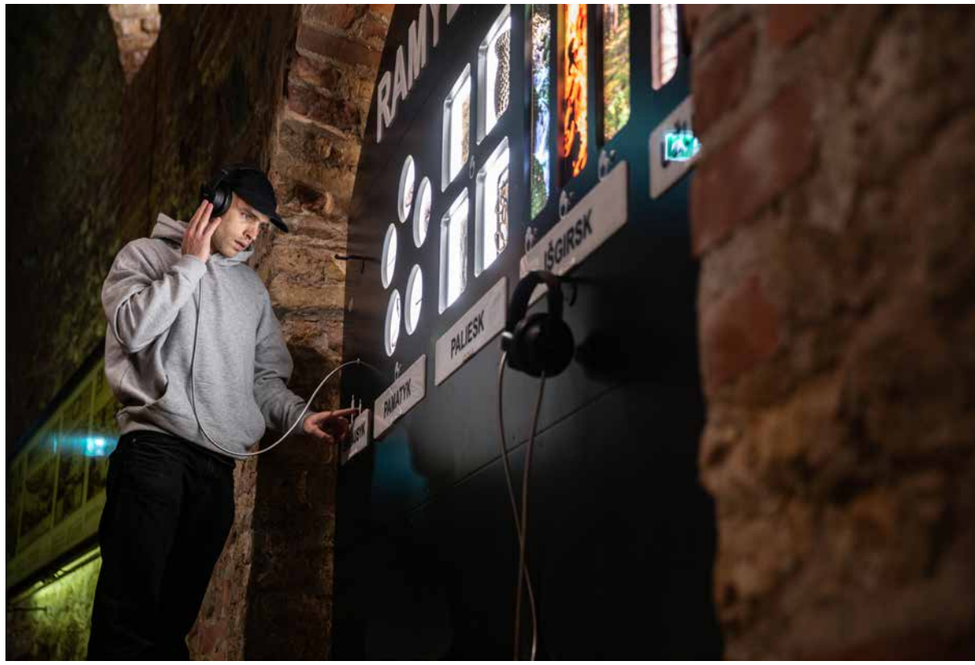
The PdP programme embraces "passion-based learning," encouraging creativity and hands-on problem solving. VILNIUS TECH's LinkMenų Fabrikas Creativity and Innovation Centre supported the project by coordinating student work and providing both technical and creative guidance. Students prototyped and tested their designs in advanced workshops equipped with state-of-the-art manufacturing technologies.

Experiencing history through the senses

In the enigmatic dungeons of the Vilnius Defensive Wall Bastion, history is now experienced in entirely new ways – through touch, sound, and emotion. VILNIUS TECH LinkMenų Fabrikas played a key role in developing two unique installations that merge heritage with modern technology: *Sensory History* and *Peace Niche*.

Sensory History includes five talking exhibits designed to make the Bastion's history accessible to blind and visually impaired visitors. Using 3D scanning, modelling, and printing, the team recreated significant artefacts in precise tactile detail, each accompanied by an audio story guiding visitors through centuries of Vilnius history. This project was implemented in collaboration with the Lithuanian National Museum

Peace Niche transforms one of the Bastion's alcoves into a space for mindfulness and reflection. This sensory refuge invites visitors to engage in the 5-4-3-2 grounding method – observing, touching, listening, and smelling their surroundings to connect with the present moment. By blending historical context with emotional awareness, VILNIUS TECH LinkMenų Fabrikas demonstrates how innovative design can deepen our connection to history – and to ourselves.



Beyond studies

Students' gift to the Centenary Lithuanian Song Celebration

In 2024, Lithuania marked the 100th anniversary of the Lithuanian Song Celebration, a cherished tradition that unites hundreds of choirs and ensembles from Lithuania and around the world. Recognised by UNESCO as part of the world's intangible cultural heritage, the festival celebrates national identity, cultural continuity, and creative spirit – drawing more than 200,000 spectators to its centenary edition.

The VILNIUS TECH community proudly joined the celebration – not only through song and dance but by contributing a unique creative project: seven audiovisual interpretations of Lithuanian folk songs, combining artificial intelligence and animation technologies. Performed by the university's Gabija choir and created in collaboration with international partners, the project showcased how technology and tradition can inspire one another.

VILNIUS TECH's artistic collectives – the university orchestra, *Gabija* choir, and *Vingis* folk dance ensemble – also participated in the festival's main programmes, highlighting the university's commitment to creativity and cultural heritage.

Gabija choir performs at the Berlin Philharmonic

The VILNIUS TECH academic choir *Gabija* took to one of the world's most iconic stages – the Berlin Philharmonic – during the Choralspace International Choral Festival, which gathered singers from fourteen countries to celebrate the power of music.

Performing under the legendary hall's extraordinary acoustics, *Gabija* captivated audiences with three acclaimed works: Stars by Ēriks Ešenvalds, Five Mystical Songs by Ralph Vaughan Williams, and Lobgesang by Felix Mendelssohn.

During their visit, the choir also forged new international friendships, performing a joint concert with the Berlin University of Applied Sciences (HTW) choir – a testament to music's universal language and its power to connect cultures.

Music that connects nations

Strengthening its artistic ties within the Baltic region, the VILNIUS TECH orchestra travelled to Riga to perform alongside the University of Latvia Wind Orchestra in a joint concert titled Elpojam kopā ("Let's Breathe Together").

The performance, held in honour of Lithuania's Independence Day on 16 February, symbolised the enduring friendship between Lithuania and Latvia.

According to the orchestra's director, "Music has a unique power to unite. Both Latvian and Lithuanian students felt the joy of creating and performing together – an experience that will inspire future collaborations."

Palėpė unites Europe's theatre performers

For more than 25 years, the VILNIUS TECH theatre studio *Palėpė* has been inviting students to experience the magic of acting and discover the power of creative expression. With more than 40 performances and over 200 alumni, *Palėpė* continues to provide a space for artistic freedom, experimentation, and collaboration.

Each year, in collaboration with its partners, *Palėpė* organises the International University Theatre Forum in Vilnius. The event brings together students passionate about theatre to take part in interactive performances that shine a light on social and cultural heritage themes.

Beyond the stage, the Forum offers participants the opportunity to connect, share experiences, and build lasting friendships through creativity. Over the years, theatre troupes from Spain, Finland, Poland, France, Latvia, Sweden, and Italy have taken part, contributing to an ever-growing network of young artists and theatre enthusiasts.

VILNIUS TECH judokas crowned national champions

At the Lithuanian Student Judo Championship held at Vytautas Magnus University's President Valdas Adamkus Sports Centre, VILNIUS TECH athletes once again demonstrated their strength and determination.

Ernestas Grakavinas and Martynas Paškevičius claimed gold medals in their respective categories, leading the men's team to an overall championship title, while the women's team secured a strong second place.

Coach Algirdas Šulinskas praised his team's resilience:

"We were both physically and mentally prepared — there was simply no way we could come home without medals."

Sandra Jablonskytė, President of the Lithuanian Judo Federation, commended the athletes' performance and highlighted the emergence of a new generation of judokas ready to represent Lithuania on the international stage.

Medal success at the SELL student games

VILNIUS TECH athletes achieved outstanding results at the SELL Student Games in Finland – one of Europe's oldest and most respected student sporting events – winning a total of ten medals. The men's volleyball team triumphed with gold, remaining undefeated throughout the tournament.

Silver medals were earned by:

- Deimantė Miliauskaitė, Martynas Paškevičius, and Ernestas Grakavinas (Judo)
- Meda Gasičkaitė (5 km running)
- Nikita Posaškov (Chess – individual and team events)

Bronze medals went to:

- Ireneuš Bezručkin-Nadtočij and Dominykas Dulskas (Judo)
- Vilius Pešinas and Nikita Posaškov (Team chess event)

Founded in 1923, the SELL Games bring together students from Lithuania, Latvia, Estonia, and Finland, promoting both competition and friendship across nations.

Life at sea: there's always more to discover

If you're searching for Dominykas Kneižys, chances are he's somewhere out at sea. Between the seven continents, countless countries, and remote islands he has visited, almost every destination has been reached by ship. Today, the VILNIUS TECH Lithuanian Maritime Academy alumnus serves as Staff Captain at National Geographic–Lindblad Expeditions, continuing a lifelong journey inspired by his love of the ocean.

The long road to pursuing a dream

Dominykas began sailing at the age of ten. What started as a casual after-school activity soon became his passion, his dream and ultimately his goal. His whole life began to revolve around sailing and water sports such as surfing and kitesurfing. Sometimes he would even skip school classes just to spend more time on the water or travel south to start the sailing season a little earlier.

After finishing school, he faced a difficult choice: to pursue professional sailing with hopes of reaching the Olympics, or to study Marine Navigation, shifting from competitive sport to education and commercial shipping. Dominykas chose the latter – a decision that felt bittersweet at the time.

During his studies at VILNIUS TECH, he took part in the Erasmus+ programme and spent a semester in Tenerife, Spain. "I managed to learn some basic Spanish and fell even more in love with open waters – I was surrounded by the vast Atlantic Ocean and spent most of my time close to the coast," Dominykas recalls. "The following year, I applied for the Workaway programme and spent the summer season in Hawaii, working as a kitesurfing instructor on Maui."

As part of his studies, he also had to complete an onboard cadetship – a six-month journey on a tanker vessel. The experience, far from family, friends, and hobbies, made him realise that cargo shipping wasn't for him. Dominykas knew he wanted to work on passenger ships or yachts. When an opportunity to work on a passenger vessel arose, he seized it – and that's where his career as a Navigation Officer began. Yet it didn't take long for him to understand that his true passion lay in exploring wild places and being surrounded by nature.

Photography: Dominykas Kneižys' personal album

A passion for nature and exploration pays off

He quit his job and began looking for new opportunities. "I had a one-way ticket to Mallorca just as the COVID pandemic hit, and I got stranded on the island without any source of income – and without a home," Dominykas recalls. "I found a farm to live on and went from yachting to farming! Feeding animals and cutting trees while searching for work. Luckily, I had some connections in the yachting industry, which helped me get back into it – and later into the sailing expeditions field."

Around that time, National Geographic-Lindblad Expeditions was building two new vessels and looking for experienced crew to deliver the highest standards of service. For over 50 years, this pioneering concept has defined expedition cruising.

When Lars-Eric Lindblad led expeditions to Antarctica in 1966 and the Galápagos in 1967, he made history as the first explorer to bring private citizens to these extraordinary wildernesses. The launch of Lindblad Expeditions' collaboration with National Geographic marked a new era in exploration.

Today, the travellers can choose from more than 100 itineraries across all seven continents. The company operates an extraordinary fleet of expedition ships – among them the most advanced in the industry.

“I had no experience in ice navigation or expeditions, but what got me onto the candidates’ list was my passion for watersports, extensive sailing and boat-handling skills, yachting experience with Power Boat certificates, and all the unlimited certificates required for a Navigation Officer on large passenger ships,” Dominykas explains. “It turned out they were looking for people passionate about nature and exploration – and I ticked those boxes.”

Sailing with the wind – not against it

Dominykas began as First Officer Navigation on the new National Geographic Resolution, which was then still under construction at a shipyard in Norway. Six months later, he transferred to another ship, National Geographic Orion, where he was promoted to First Officer Safety. A year later, he was promoted again to Staff Captain, continuing his journey of global exploration.

“The ship I work on is a boutique-style, small expedition cruise vessel with all the amenities – luxury suites, libraries, a wellness centre, gym, bar, restaurant, diving equipment, military-grade inflatable boats (Zodiacs), kayaks, stand-up paddleboards, hiking gear, and more,” Dominykas explains. “The destinations we visit make this concept special. These vessels are highly manoeuvrable, built with strong hulls and a high ice class, capable of covering long distances in remote areas. The experienced crew make these expeditions even more exceptional – National Geographic photographers, expedition leaders, and divers from around the world join us on our journeys.”

Among countless unforgettable experiences, Dominykas vividly recalls his first astonishing visit to Antarctica, sailing through the South Pacific from New Zealand all the way to Easter Island, visiting the world’s most remote places – French Polynesia, the Marquesas, and beyond.

One of his most shocking memories comes from Papua New Guinea and West Papua: “Once, our ship was struck by lightning twice, the other time, we were stranded ashore with all the passengers in Australia surrounded by crocodiles and snakes,” the Staff Captain recalls.

From all his years at sea, one key lesson stands out: never underestimate nature, and always sail with the wind – not against it. “The sea is my greatest passion – my provider, my profession, my hobby, and my love,” says Dominykas. “I wish everyone could find such a passion in life.”

“National Geographic photographers, expedition leaders, and divers from around the world join us on our journeys.”

VILNIUS TECH

Saulėtekio al. 11
LT-10223, Vilnius,
Lithuania

+370 5 274 5030
vilniustech@vilniustech.lt

www.vilniustech.lt

Facebook /vilniustech
Instagram /vilniustech
YouTube /vilniustech
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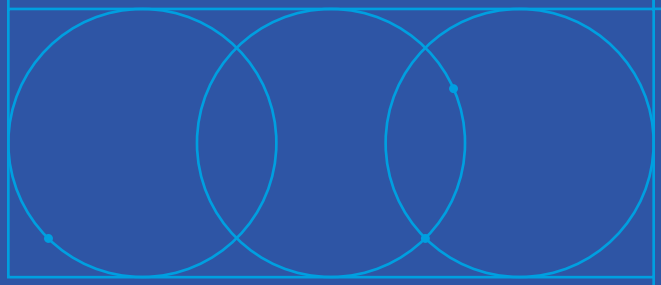

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