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FACTS AND NUMBERS

Strategic indicators

	2020	2021	2022
Revenue for R&D&I works and services, thousand EUR	3454,91	4356,75	4442,98
Revenue for R&D&I works, thousand EUR	1745,57	2561,54	2804,60
Rrevenue for R&D&I services, thousand EUR	1709,34	1795,20	1638,39
Revenue for research projects, thousand EUR	11825,16	14355,98	15536,30
Rrevenue for international research projects, thousand EUR	2091,23	2459,47	3076,52
Rrevenue for national research projects, thousand EUR	9733,92	10024,96	9311,54
Revenue for research infrastructure projects, thousand EUR	N. d.*	1871,54	3148,24
Number of academic employees	1142	1103	1067
FTE of academic employees	914,41	936,37	908,75
Ratio of foreign and all academic employees, %	5,6	5,7	6,2
Ratio of the FTE of foreign and all academic employees, %	3,31	3,7	4,93
Number of students (total)	8060	7654	7298
First cycle studies	5583	5208	4948
Second cycle studies	2089	2087	2011
Third cycle studies	332	328	339
Number of foreign students (total)	901	1031	1141
First cycle studies	368	419	476
Second cycle studies	221	210	246
Third cycle studies	79	85	90
Partial studies	233	317	329

^{*}N. d. – no data recorded in the specified period.

KTU

FACTS AND NUMBERS

Study programmes*

2020	2021	2022	
128	128	128	Number of study programmes
53	51	50	of which of the first cycle studies
54	56	56	of which of the second cycle studies
			of which integrated studies
4			of which professional studies
19	19	20	of which of the third cycle studies
66	68	68	of which taught in the English language
18	49	72	of which joint and double- degree study programmes

*Provided study programmes with at least 1 student.

2022

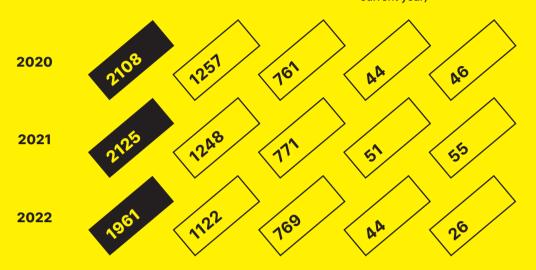
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of them of the first cycle studies of them of the second cycle studies

of them of the third cycle studies (defended dissertations in the studies current year)

of them graduates of professional

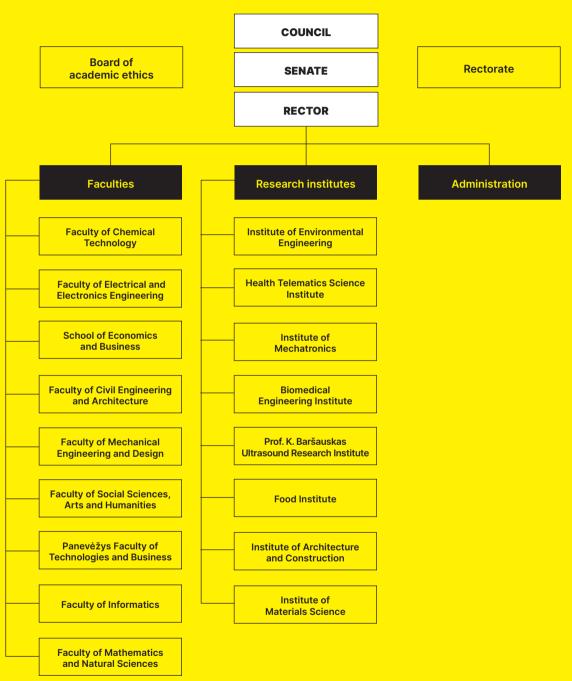


Employ	/ees	Number of employees (occupied FTEs)*	of them lecturers	of them researchers	of them project staff
	2020	1923,8	590,A	1,12,2	2401
	2021	1840,9	61 ⁸ ,3	1,12,5	239,5
	2022	1785,85	596,12	119,48	181,89

^{*}Data of 31 December.

STRUCTURE OF THE UNIVERSITY

academic departments

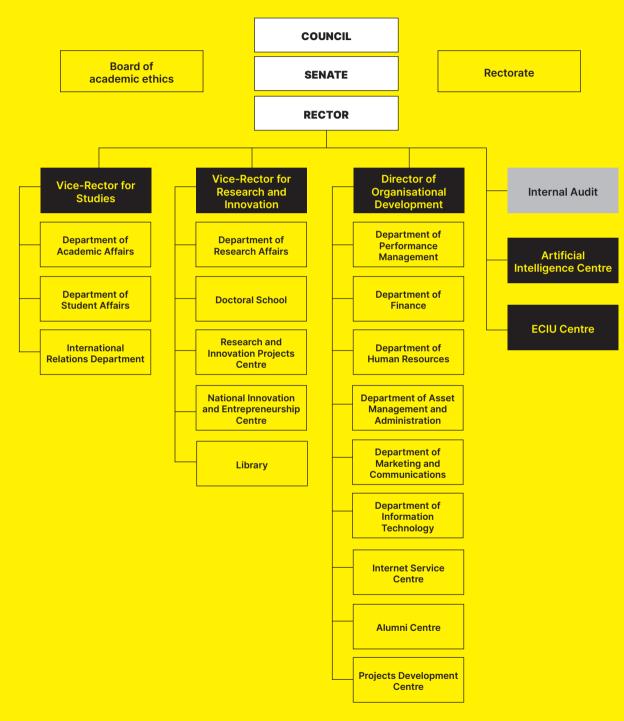


The structure of the faculties is prepared according to Decree No. V7-T-26 of the Council of Kaunas University of Technology of 26 October 2017.

The structure of the Research institutes is prepared according to Decree No. V7-T-249 of the Council of Kaunas University of Technology of 31 December 2014.

STRUCTURE OF THE UNIVERSITY

non-academic departments



2022

STRATEGIC ACTIVITIES OF KAUNAS UNIVERSITY OF TECHNOLOGY

The year 2022 was dedicated to the 100th anniversary of the University of Lithuania, the history of which includes Kaunas University of Technology (KTU or the University). In 2022, KTU initiated implementing 100 different activities to celebrate the 100th anniversary of the University of Lithuania and actively invited the representatives of the University's academic community as well as the residents of the entire Kaunas City and the Kaunas Region to get involved in them. The diversity of activities included many different events, artistic initiatives of various genres, exhibitions, excursions, artistic performances and educational projects.

This year was also particularly successful for the University in terms of the development and implementation of projects with a significant impact on the development of the city and the country. At the end of 2022, the European Consortium of Innovative Universities (ECIU), which is implementing the initiative of creating a joined European University (ECIU University) together with the ECIU members – the ECIU Alliance Partners, has completed the first phase of the initiative and has immediately launched the activities of the second phase of the ECIU University with the approval of the support of the European Union's (hereinafter – EU) Erasmus+ programme which amounts to more than 14 million EUR. The second phase of ECIU University will focus on three innovative areas of higher education – the development of flexible learning pathways, the development of the use of micro-credentials in studies, and the development of challenge-based learning methods. KTU and other



ECIU Alliance Members have prepared and submitted proposals for two very important projects: the *European Status for ECIU Universities (ESEU)* and the *Future-proof Criteria for Innovative European Education (FOCI)*. These project initiatives aim to strengthen cooperation between European universities and develop possible criteria for a European degree.

In 2022, the University, together with three other partner universities from Lithuania (Vilnius Gediminas Technical University (VGTU), Vytautas Magnus University (VMU) and Lithuanian University of Health Sciences (LSMU)) and two foreign partner universities (Tampere University (Finland) and Hamburg University of Technology (Germany)) prepared an application for the project "Centre of Excellence of AI for Sustainable Living and Working (SustAlnLivWork)", for the funding instrument "Teaming for Excellence" under the European Horizon Programme. At the end of 2022, the European Commission approved the implementation of this project with a funding of almost 15 million EUR. The expected outcome of the project coordinated by KTU is establishing and operating the Artificial Intelligence Centre of Excellence. The strategic activities of the developed Centre will include a circular economy, digitalisation of industry, healthy lifestyles, smart mobility, Al ethics and other related themes identified in the Lithuanian AI, the European Union's Digital Strategy and the European Green Deal. This is a unique project in the activities of the University and its partners which will provide an opportunity to significantly develop research capabilities, strengthen Lithuania's research and innovation ecosystem at both national and international levels, and increase the country's competitiveness.

VALUE CHAIN IN STUDIES

Table 1. Strategic indicators of the value chain in studies.

	2020	2021	2022
International trips of students	223	185	232
of which internship/fellowship trips	106	110	112
of which trips for part-time studies	117	75	120
Number of KTU lecturers who have taught at foreign universities	19	32	107
Number of the study programmes provided in the English language***	47	49	48
Student satisfaction in terms of the quality of the educational and recreational environment	3,8	3,76	3,76
Ratio of the students who graduate on time and the admitted students, %	55	55	57
Employability of graduates within 12 months after graduation, %	79	N. d.*	N. d.*
Revenue of non-formal education, thousand EUR	389	427	563
Revenue of study projects, thousand EUR	887	2506,34**	2991,34
of which revenue from international study projects, thousand EUR	N. d.*	1266,15	1986,45
of which revenue from national study projects, thousand EUR	N. d.*	1240,2	1004,89

^{*}N. d. – no data recorded in the specified period..

^{**}The calculation methodology for the revenue of study projects is amended since 2021: the full volume of the revenue of study projects is included in the revenue of study projects (including the scholarships).

^{***} The third cycle study programmes are not included in the indicator.



Development of the internal quality assurance system in studies

The Description of the Internal Study Quality Assurance System at Kaunas University of Technology was updated in 2022, detailing the processes, procedures, measures and activities of the internal study quality assurance system.

10 study fields with 26 study programmes were evaluated by international expert groups in 2022. All the evaluated study fields were accredited for a maximum period of 7 years. The University's material resources for studies (average score 4 out of 5), the objectives, outcomes and content of the study programmes (average score 3.9 out of 5), the management and publicity of the study quality, and the links between research/arts and studies (average score 3.8 out of 5) received the highest evaluations. The international experts most frequently cited the management structure of studies, the student-centred studies and environment, the system for the development of didactic competencies, the close cooperation with social partners, interdisciplinarity and the publicity of study programmes as good examples.

12 investments were made in strengthening the quality of study programmes in two funding areas: strengthening the quality of study programmes and integrating challenge-based learning methodologies into study modules. In the first funding area, the Faculty of Chemical Technology upgraded its first and second cycle study programmes of Industrial Biotechnology, and the Faculty of Civil Engineering and Architecture introduced the case study method into the engineering and art study programmes. The challenge-based learning method has been integrated into 10 study modules.

On 2 December 2022, the Study Quality Day "Study Perspectives: How to Promote Innovation in the Study Process?" was held to discuss innovation in the study process and share good practices in the application of innovations. More than 100 representatives of Lithuanian higher education institutions attended the event.

5 lecturers and 2 teams of lecturers were awarded for innovation and quality in their studies. V. Malinauskienė, A. Daunorienė, T. Blažauskas, T. Moskaliovienė, M. Rimašauskas, T. Kuncius, L. Stasiulienė, E. Butkevičienė, J. Barynienė, E. Vaidelytė.

A 36-academic hours training programme for the development of the competencies of the heads of study programmes "Training for the Heads of Study Programmes" was developed and implemented.

The study analytics tool and data visualisation in Microsoft Power BI is being further developed: in addition to the analytics dashboards for admitted and studying students, a dashboard for graduates and study programmes was developed.

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Introduction of challenged-based learning in the study process

The challenge-based learning method continues to be introduced into the University's study programmes. 50 thousand EUR have been invested for this purpose. In 2022, 60% of first cycle study programmes and 61% of second cycle study programmes applied challenge-based learning methodology in at least one study module.

In 2022, 37 lecturers completed the challenge-based learning training, 11 of them attended the additional programme "Challenge-Based Learning Follow up". During this programme, lecturers integrated the didactic method of challenge-based learning into the study modules they teach.

In 2022, 10 students and 3 lecturers from the University travelled to the world's largest particle physics laboratory, the European Organization for Nuclear Research (CERN) in Geneva, to participate in the "Developing Challenge-Based Innovation" programme.

The team of co-authors (J. Barynienė, V. Sukackė, K. Ukvalbergienė, A. Daunorienė, D. Gudonienė) prepared an educational book "Challenge-Based Learning" which presents the challenge-based learning method in detail and provides practical recommendations for lecturers on how to apply this method in their teaching activities.



Digitisation of the study documents of students

Signing of students' tripartite and bilateral practical training contracts has been digitised. All contracts are stored electronically in the University's information system. The digitisation of trilateral learning agreements continues.

Student accommodation services were digitised and the dormitory reservation system was updated.



Putting the renovated and modernised individual and group study spaces of the multifunctional centre with the integrated library into use

The University's new 2200 m² multifunctional centre with an integrated library was opened in 2022. While installing the multifunctional centre, priority was given to collaborative and communal spaces that foster creativity and the implementation of advanced didactic methods at the University. The project was selected by "Structum" magazine, together with a commission of architects, as one of the most impressive 2022 projects created by Lithuanian architects.

The new spaces include 442 workstations, 120 for individual work, 165 for group work, 32 computer workstations, 60 presentation workstations, 64 recreation and leisure spaces, and an event space – the Amphitheatre – it also has an installed reservation system for the new library spaces to meet both the University's internal and external needs. Since its opening in March 2022, the new library has welcomed 93 035 visitors, hosted 127 events, 19 exhibitions and 46 guided tours in Lithuanian and English languages.

The renovated Virtual Reality (VR) Lab (Studentų St. 50, Kaunas) is a space that invites students to deepen their knowledge of the use of this technology in various scientific fields, improve their practical skills and engage in additional creative activities.



Coordination of the study activities with the activities of the ECIU university

The initiative "ECIU University" of the European University Alliance is approved for the second phase of EU Erasmus+ funding. 14.4 million EUR is allocated for this initiative, of which the University's share is 1.3 million EUR. In addition, 2.1 million EUR was approved for the University under the EU Funds Investment Programme 2021-2027 and the Economic Recovery and Resilience Plan "Next Generation Lithuania" which is intended for the implementation of the ECIU Alliance initiative and strengthening of international relations at the University.

It has been decided to establish the ECIU Centre at the University. It will be responsible for the implementation of ECIU University activities at the University, and the quality and timely management of ECIU University activities and processes.

As part of the ECIU University activities, an innovative and unique concept of flexible learning pathways was developed and presented in the University's publication "Moving Forward and Beyond in Education: Concept of Flexible Learning Pathways" (R. Nausėdaitė, V. Juška, A. Daunorienė and K. Ukvalbergienė).

In 2022, the study module Creating Challenge-Based Innovations is further being implemented. In this module, 15 students from KTU and ECIU partner universities completed the ECIU University Challenges coordinated by the University. Working in international and interdisciplinary teams together with lecturermentors and company representatives, the students came up with solutions to 4 challenges presented by Kaunas Regional Waste Management Centre, Ignitis Group AB, SCANIA LIETUVA UAB, and Mars Lietuva UAB.



Preparation and enabling of the guidelines for emotional and social welfare and disability policy

The Social and Emotional Well-Being Policy and its implementation guidelines were approved and presented to the community.

In 2022, 12 articles and guidelines on mental health for students were published, 240 people applied for initial psychological counselling and 693 counselling sessions were provided.

A canitherapy session was organised, a series of stress management group sessions, a series of psychological resilience-building group sessions, 3 lectures for students on stress management and one lecture for staff on 'Communication in the Work Environment', a presentation for doctoral students on 'How to Accept and Cope with Challenges', and a discussion on the impact of the war in Ukraine on our well-being were carried out.



Implementation of the initiatives for the commemoration of the 100th anniversary of the University of Lithuania

In 2022, there were 6 art societies with 224 active members. More than 120 different activities were implemented during the year. Highlights:

- The ceremony-concert of the "Golden Bird" award ceremony initiated by the Lithuanian National Culture Centre, during which the ensemble "Nemunas" was awarded the highest Lithuanian award for an amateur art society.
- Active involvement in the activities and events organised by Kaunas European Capital of Culture 2022, e.g., the performance of KTU Academic Choir "Jaunystė" at the grand closing event of "Kaunas 2022" ("Contract", Act 3 of the trilogy), Šilainiai "Urban Eco" festival, the project "Dainava in Progress. Midsummer Spells", etc.
- Three premieres were presented: the performance "Boring Evenings" by KTU theatre studio "44", the dance performance "I'm Still Here" by KTU dance studio "MoDance" and the dance performance on ice "Your Planet".

The University has 20 student organisations with 936 active members, 793 of whom are KTU students. 191 events were organised, including 1 international, 18 commercial, 30 inter-agency, 68 internal and 74 open events. The event "13.7 Festival of Lights" was organised at KTU Student Campus.

Celebrating the 100th anniversary of the University of Lithuania, the alumni of KTU, LSMU, and VMU united for a common goal – to do more. On 28-30 November 2022, they organised a blood donation campaign "We Are All of One Blood".

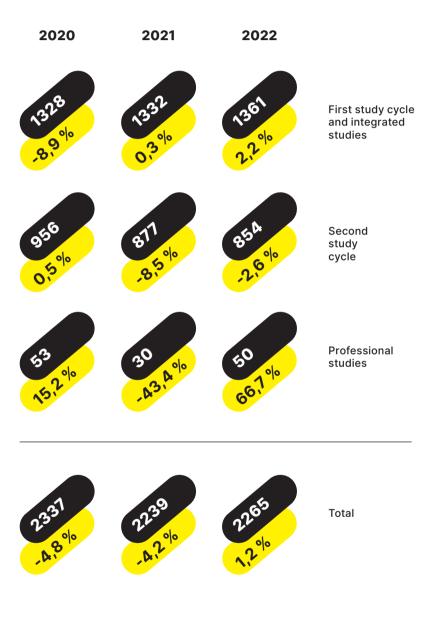


activity report KTU

Student admission

In comparison to 2021, the total number of students admitted to KTU has increased by 1.2 % (see Table 2).

Table 2. Changes in the numbers of admitted students in 2020-2022



Number of admitted students Change of number of admitted students

1361 students were admitted to first cycle and integrated studies: 1099 were admitted to state-funded positions and 262 were admitted to state non-funded positions. The number of admissions was 2.2% higher than in 2021. KTU remained in second place among Lithuanian universities in terms of admissions to statefunded positions (14.1% of the university study market, 1099 admitted students); the number of admitted graduates with at least one 100-point grade in the state maturity examinations (117 students) – in KTU, such students account for 8.6% of the total number of admitted students. KTU remained in first place among Lithuanian universities (excluding specialised academies) in terms of the percentage of the invited applicants who have signed the learning agreements (94.3%), and concluded learning agreements under the study programme listed as the first priority (about 85%). Admissions took place in 36 study programmes, the same as in 2021, the highest number of students were admitted to Software Systems (229; among the largest programmes in Lithuania), Civil Engineering (83), Communication and Information Management Technologies (79), Informatics Engineering (77), and Electronics Engineering (74).

854 students were admitted to second cycle studies: 698 to state-funded positions and 156 to state non-funded positions. The number of admitted students was 2.6% lower than in 2021. The number of allocated state-funded positions increased – 831 positions (803 in 2021). KTU remained in the second position in Lithuania in terms of admissions to state-funded positions (17.5% of the study market, 698 admitted students). Admission to 49 study programmes took place, with the largest number of students admitted to Distance Learning Information Technologies (72), Artificial Intelligence Informatics (37) and Public Administration (36).

50 students were admitted to professional studies in Pedagogy: 48 to state-funded positions and 2 to state non-funded positions, an increase of 66.7% since 2021 (30).





Study programme portfolio

In 2022, 108 study programmes were provided at the University: 50 programmes of the first study cycle, 56 programmes of the second study cycle, 1 study programme of integrated studies and 1 study programme of professional studies. In the groups of study fields of engineering, technologies, physical sciences, informatics, mathematics, social sciences, education, humanities, health sciences, business and public management, and arts. The University provided 20 third cycle study programmes. 21 first cycle, 1 integrated, 26 second cycle and 20 third cycle study programmes were provided in the English language.

In 2022, there were 8 two-field and interdisciplinary study programmes designed to achieve the results of two or three study fields. A total of 12 MA+ interdisciplinary expert competencies (10 competencies are provided) and 22 BA+ interdisciplinary expert competencies (18 competencies are provided) were offered. 400 students studied the BA+ competencies and 412 students studied the MA+ competencies.

In 2022, 3 new study programmes were developed: the first cycle study programme Politics, Philosophy and Society, and the second cycle study programmes Strategic Communication and Business Administration KTU MBA.

89 e-modules were approved as methodological tools in the virtual learning environment Moodle in 2022.

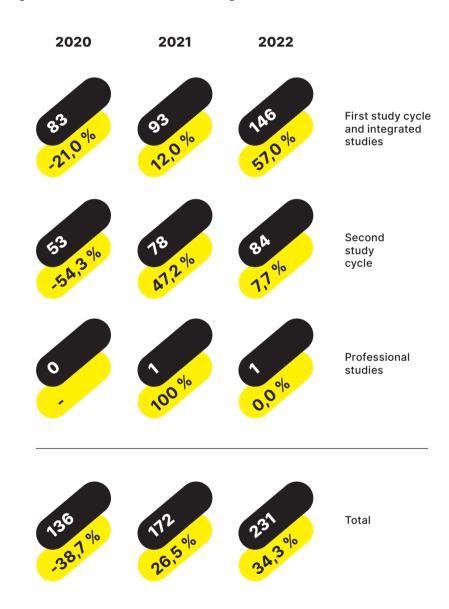
The first cycle study module Product Development Project (12 credits) was provided for the first time. It is designed to develop the skills to develop products that meet the needs of society, businesses and public sector institutions, from the concept to implementation, working in interdisciplinary teams. In the spring semester of the academic year 2021-2022, 511 students were studying the module and were offered 58 product development project topics. Most of the topics (76%) were proposed by organisations (e.g., UAB Devbridge LT, UAB Indeform, UAB Festo, UAB Peikko Lietuva, VšĮ Kauno mokslo ir technologijų parkas, etc.). 61 mentors worked with students.



Admission of foreign students

Total number of foreign citizens admitted to KTU in 2022 is 34.3 % higher than in 2021 (see Table 3).

Table 3. Changes in the numbers of admitted foreign students in 2020–2022





Numbers of admitted foreign students



Change of numbers of admitted foreign students

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In 2022, the number of international students invited to study has increased (447 in 2020, 427 in 2021 and 577 in 2022), while more international students have accepted the invitation to come and study. The largest number of international students was accepted to the Faculties of Informatics, Mechanical Engineering and Design and Social Sciences, Arts and Humanities.

Since February 2022, the University has joined the support for Ukrainian citizens fleeing the war with Russia. One of the most significant support initiatives is the admission of young people who have studied in Ukraine to free studies at KTU. In total, over 100 Ukrainian citizens have been admitted to study at KTU.

The activities of the University's investment project "Enhancing Internationalisation of Studies" continue to attract talented international students with high academic results. By the end of 2022, the University has funded the tuition fees of more than 40 international students.

International student exchange

Every year since 2019, the University organises "Global Faculty Week", an international teaching week that brings together lecturers from all over the world to give lectures to students. The event, which took place on 25-29 April 2022, was attended by 50 quest lecturers from 22 countries. The Faculty of Electrical and Electronics Engineering and the School of Economics and Business invited the largest number of lecturers from foreign universities, with more than 10 quest lecturers each giving on-campus or remote lectures. In addition to the academic activities, the week also included a social and cultural programme and opportunities to meet and interact with the University community.

The first stage of the "European Student Card" initiative was implemented – a modern electronic system for the administration of academic mobility processes was implemented at the University, with which KTU joined the "Erasmus Without Paper" platform.





Implementation of the student development programme DISCOVERed



In 2022, the COVID-19 pandemic continued to dampen student interest in exchange opportunities abroad. 232 students and graduates went abroad for studies and internships. Compared to the pre-pandemic year 2019, the number of students going on exchange fell by 38%.

In 2022, the 10th "GO Abroad Fair", an information fair for students wishing to go on student exchange, was held. The fair was organised remotely on the Zoom platform and attended by 37 universities and 7 companies from 26 countries.

In 2022, 4 remote and 2 face-to-face "Café Erasmus" meetings with students were organised to address myths and fears about student exchange.

The Exchange Counsellors programme was launched in 2022. It involves KTU students returning from student exchange who share their experiences at DISCOVERed events and give consultations to students preparing to go on exchange.

In 2022, 5 remote seminars were organised: "How to Find A Fellowship Place Abroad?", "Fellowship Offers", "Adapting for a Multicultural Work Environment", "Visa Requirements in Different Countries", "Studies, Training and Research Opportunities Abroad to Master and PhD Students", one seminar "How to Find a Fellowship Place Abroad?", 2 remote and 1 face-to-face exchange preparation sessions.



Other activities

The first textbook on artificial intelligence in Lithuanian "Foundations of Intellectics", authored by Prof. A. Paulauskaitė-Tarasevičienė and Assoc. Prof. K. Šutienė, is published.

The digital twin of Kaunas City and KTU Student Campus, created by KTU Centre of Smart Cities and Infrastructure, was awarded at the conference "Digital Construction 2022" as the best city model of the year. The KTU project was also nominated for the international Bentley Systems annual awards event "Going Digital 2022" in London, where it was ranked among the top 3 projects in the world in the category of Digital Cities and Campuses, recognising the Smart Campus ecosystem being developed by KTU.

In 2022, KTU's second cycle study programme Public Administration was awarded the Quality Certificate 2022-2028 by the *International Commission on Accreditation of Public Administration (ICAPA)* which is awarded based on the study programme's compliance with the *United Nations/International Association of Schools and Institutes of Administration (IASIA)* standards of excellence for education and training in public administration.

M. Pumputytė, G. Ramonaitė, U. Samajauskaitė, U. Grigaitytė and R. Markinaitė, students of the bachelor's study programme Marketing, became the winners of the European region in the marketing competition "GOMAC 2022" (lecturers: E. Vitkauskaitė, I. Petrikė).

U. Orinaitė, a third-year student of the bachelor's study programme Applied Mathematics, was awarded the nominal scholarship of President Aleksandras Stulginskis (group of study fields of mathematics, informatics and physical sciences). G. Viliūnas, a fifth-year student of the integrated study programme of Architecture, was awarded the scholarship of Antanas Smetona (group of study fields of humanities and arts).

The bachelor's thesis by student K. Bagdonaitė was recognised as the best thesis of the first cycle in the competition of students' theses on transport topics organised by the Ministry of Transport and Communication of the Republic of Lithuania (supervisor: Assoc. Prof. L. Jakevičius).

The University alumna Ž. Sederavičiūtė won 2nd place in the competition "The Best Master's Theses on EU Policy Formation and Implementation" (project supervisor Assoc. Prof. L. Sinevičienė).

3 students of the University were declared laureates in the competition "The Best Master's Theses" of the Lithuanian Society of Young Researchers (LSYR): the student of the study programme Physics of Materials, J. Mykolaitis for his thesis entitled "The Formation of Colloidal Solutions of Precious Metals by Ultrashort Laser Pulses from Metal Targets in Aqueous Solutions" (supervisor, Assoc. Prof. A. Tamulevičienė), the student of the study programme Medicinal Chemistry, L. Kapočius for his thesis "Comparative Research of the Pharmacological Efficacy of Newly Synthesized Sphingosine-1-Phosphate Receptor 1 Antagonist and Temozolomide on Human Glioblastoma Tumour in silico, in vitro and in vivo" (supervisor prof. I. Balnytė), I. Jurevičiūtė, a student of the study programme Food Science and Safety, for the work "Comparison of Hypoglycemic Properties and Binding Capacity of Four Dietary Fibre Rich Berry Pomace Using in vitro Models" (supervisor: Assoc. Prof. M. Keršienė).

Doctoral student M. Lukauskas received an award from the Lithuanian Mathematical Society for the best 2022 paper by a doctoral student in the field of mathematical applications (co-author Assoc. Prof. T. Ruzgas).

D. Petkevičiūtė-Gerlach, Associate Professor at the Department of Applied Mathematics, was awarded the Medal of Prof. Sigmas Žemaitis for her contribution to Lithuanian science, education and national culture.

The Faculty of Mathematics and Natural Sciences has become the first educational centre of the European Consortium for Industrial Mathematics (ECMI) in the Baltic States.

The platform for recording students' competencies acquired via non-formal learning was reorganised and preparations were made for the enabling of the system of the competence development plan.

The National Young Mathematicians Competition of Prof. Jonas Matulionis was held in January with 436 registered pupils. The 26th National Physics Competition of Prof. K. Baršauskas for pupils of 9-12 grades was held in March with 218 participants. The 27th National Chemistry Competition of Academic Jonas Janickis for pupils of 8-12 grades was organised for the 27th time with 694 participants.



The 18th KTU WANTed Career Days returned to Žalgiris Arena. 145 Lithuanian and foreign capital companies took part in the event which attracted more than 10 thousand visitors. Besides the main contact exchange fair "WANTed meets WANTed", there were also inspiration and rest areas, and a CV checkpoint and a Speed networking session was organised. The WANTed Talks conference was broadcasted on Irt.It with 13 speakers sharing their experiences, 3 guest speakers giving presentations and the main discussion of the event.

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The GIFTed Talent Academy received 112 applications and admitted 23 students. In 2022, a total of 82 students (from 8 faculties) participated in the programme, including 5 international students. The GIFTed Masters Talent Development Programme received 27 applications and admitted 14 students.

GIFTed students participated in the National Project Management Championship and won 1st, 2nd and 3rd prizes with their teams. In the team competition "Solar Robot Battle 2022", they won 1st place in the LEGO sumo competition. GIFTed Talent Academy member Meda Surdokaitė also won 1st place and an honorary prize at the EU Competition for Young Scientists (EUCYS), was awarded the best oral presentation at the conference "Modern Pharmacy: Problems, Challenges, and Expectations 2022", and was awarded the Lithuanian National Radio and Television (LRT) award in the category of the "Future of the Year".



12 students have been admitted to the SKILLed FinTech specialised additional education programme for students of three faculties (School of Economics and Business, Faculties of Informatics, and Mathematics and Natural Sciences). A new SKILLed AI specialised additional education programme has also been developed and is ready to be launched for students from all faculties and study programmes, where students will be able to develop AI competencies.

The University had actively involved mentors: 95 peer mentors, 21 GUIDed junior pupil mentors, 331 academic mentors (296 students received the assistance of academic mentors) and 133 career mentors (110 students received the assistance of career mentors).

760 job and 816 internship ads were uploaded to the work and internship platform and 163 new companies joined the platform. The total number of views on the platform was 193 150.





In 2022, 10 sports teams were active and the University was represented in an additional 4 sports (rowing, table tennis, tennis, chess). 181 students represented the teams in competitions, including 73 new members. In 2022, sports teams participated in 90 championships and tournaments, a total of 519 competitions. KTU sports team represented the University at the International SELL Games which took place on 19-22 May 2022. The team competed in the SELL competition in Riga, Latvia, on 22 and 22 May 2018. KTU delegation won 13 medals, including 3 gold, 3 silver and 7 bronze medals in this competition.

8 sports events were organised with a total of 559 participants (330 students, 33 employees). During the running event "Come and Overcome", 5 different types of running routes were organised, including one walking route organised in cooperation with Kaunas City universities to celebrate the 100th anniversary of the University of Lithuania.

2022 study project activities

In 2022, 141 projects of study activities were implemented, 68 of them were international (60 under the EU Erasmus+ programme, 6 under the NORDPLUS programme, and 2 under other international programmes) and 73 were national (of which 72 projects were implemented by the University's students during their semesters or summer internships).

Funding has been approved for the project "Digital Transformation of Education ("EdTech")", which will be implemented with EU funds, the Recovery and Resilience Facility and the State Budget of the Republic of Lithuania for 2021-2027. The University's share in the project is 880 760.92 EUR. The project stipulated the training of informatics educators, training in digital competencies for lecturers, the digitisation of modules and the acquisition of equipment for hybrid teaching.

Students involved in academic mentorship submitted 67 applications for funding for research activities, of which 21 applications were funded.

63 student organisation project proposals were submitted. A total of 49 projects were funded, attracting more than 32 thousand EUR in funding for their implementation.





Strengthening of student-centred studies

The development of students' information literacy skills continues at the University. In 2022, 2230 first-and fourth-year bachelor's students and 433 master's students participated in 4-6 hour training sessions.

In 2022, 450 academic hours of integrated and optional training were provided at the University Library. The optional training was attended by 519 students, 148 lecturers and other members of the University community.

An assessment system for students' written works "Turnitin" is integrated into the Moodle virtual learning environment, allowing interactive comments on works by lecturers, the use of evaluation rubrics and evaluation of the work according to predefined criteria.

The Guidelines for Plagiarism Prevention in the Written Works of Students of Kaunas University of Technology has been updated. According to the Guidelines, since September 2022, all written works based on information from other sources are subject to the similarity check in the module course "Moodle" using "Turnitin".

The conditions for the award of Cum Laude and Magna Cum Laude diplomas have been established for students admitted to the study programme from 2022.

On 24 May 2022, a cooperation agreement was signed between KTU, LSMU, LSU and VMU, agreeing to cooperate in the implementation of study programmes, offering relevant study modules to students of Kaunas universities.



Development of quality culture in studies and strengthening of didactic competencies of lecturers

121 lecturers from the University and 26 lecturers from other higher education institutions improved their didactic competencies in training courses organised by the EDU_Lab Centre for Excellence in Learning and Teaching (hereinafter – EDU_Lab), as well as a seminar for the academic community to prepare for the academic year and 8 teachers cafés, where the University's academic community discussed relevant issues related to higher education didactics, were organised.

The University organised a networking meeting of the higher education didactic competence centres "Directions for the Development of Digital Competencies of Lecturers: Where Are We Today and Where Will We Be Tomorrow?", where representatives of higher education institutions discussed digital competencies of lecturers and the use of digital technology for the improvement of the didactic and teaching process and the introduction of innovations.



In 2022, the EDU_Lab continued the "Teamwork Follow-up" programme. 57 lecturers of the University participated in the programme. The teamwork method was implemented in 31 study modules.

In 2022, the Faculty of Civil Engineering and Architecture, in cooperation with the EDU_Lab experts, developed a development methodology for study programmes which was used for review and update of all study programmes of the Faculty of Civil Engineering and Architecture.



Developing a lifelong learning system

The University offered 235 non-formal education programmes for adults in informatics, physics, engineering, technology, education, social sciences, humanities, arts, business and public administration.

A survey of lifelong learning needs was carried out to identify needs for competence development and learners' learning characteristics and expectations (667 respondents).

The University offered 34 non-formal education programmes for children (of which 3 were developed in 2022). 336 learners graduated from the Young Computer Users School in 2022 and 363 children started the new academic year.



Highlights of activities for 2023

- Improving digital competencies of lecturers and digitising study processes and module content.
- Enabling the SKILLed AI programme and implementing the programme's publicity activities.
- Enabling the disability policy and universal design principles in the University.
- Updating the visual image of art societies and student organisations, developing a new communication and representation plan for sports teams.
- Encouraging international mobility of students and staff, ensuring equal participation opportunities for the most vulnerable groups in the community.

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VALUE CHAIN IN RESEARCH AND INNOVATION

Table 4. Strategic indicators of the value chain in research and innovation.

	2020	2021	2022
Number of papers in scientific publications with an impact factor by foreign publishers	471	542	606
of which number of papers with co- authors of foreign institutions in the scientific publications with an impact factor by foreign publishers	229	279	274
Number of papers in the scientific journals with an impact factor of at least the second quartile (Q2)	423	483	571
of which in the open-access scientific journals	208	286	364
Number of the students who defended their dissertations on time	39	48	40
Research fellowships of the students of the third cycle studies	20	72	156
Number of foreign scientists participating in the process of doctoral studies	63	66	63
Number of patents (USA, Japanese, European patents)	2	2	4
Number of patent applications (for the USA, Japanese, and European patents)	8	17	18
Revenue from the transfer of licences/rights, thousand EUR	26,95	116,46	240,56





Strengthening of key competencies of doctoral students and their supervisors

In 2022, Kaunas hosted the "6th PhD Summer School", a 5-day international summer school for doctoral students to improve their general skills. 30 doctoral students from 8 different countries participated in the summer school, and 5 lecturers from foreign institutions delivered lectures.

29 doctoral students and 17 supervisors received training in science communication. The training was delivered by well-known communication specialists, science journalist G. Raibytė-Aleksa, Dr. I. Popovaitė and journalist I. Makaraitytė, who taught the participants how to communicate their research to the public.

30 doctoral students improved their competencies by listening to the 1-2 ECTS micro-modules of general competencies for doctoral students delivered by KTU scientists: Principles of Academic and Scientific Writing in the English language, Research Data Management, Research Ethics, Science Communication to the Public, and Digital Tools for Writing and Publishing Scientific Text.



Involvement in the joint research and innovation activities of the ECIU University

The University's scientists and researchers have been actively involved in the initiatives of the EU's Horizon 2020 research and innovation programme project "ECIU University Research Institute for Smart Regions in Europe (SMART-ER)" (hereafter – SMART-ER) for funding of proposals of collaborative research and innovation at ECIU University under the SMART-ER Seed Programme. The University's scientists and researchers have received funding under this programme to implement 5 projects with members of the ECIU University. Also, the University's scientists and researchers participated in 2 pilot citizen science projects developing research and innovation activities with members of the ECIU University in 2022.



Major achievements in research and innovations in 2022

The 2022 Lithuanian Science Prize in Technological Sciences was awarded to Prof. Dr. S. Grigalevičius for his work "New Structured Electroactive Derivatives for Optoelectronics Technologies".

The 2022 premium for Women in Science of the L'Oréal-UNESCO Baltic Young Talent Programme was awarded to Dr. G. Kručaitė.

In 2022, Prof. Dr. R. Maskeliūnas and doctoral student M. Odusami were awarded in the nomination "Discovery of the Year" by TV3 television's National Awards "Honour of Lithuania".

In 2022, student M. Surdokaitė was awarded for her achievements in the EU Contest for Young Scientists (EUCYS) in the nomination "Future of the Year" by LRT television's Awards of the Year.

Both 2022 Kaunas City Science Prizes were awarded to the University's scientists: Prof. Dr. P. R. Venskutonis for his achievements in the field of physical, biomedical, agricultural and technological sciences, and Assoc. Prof. Dr. V. Petrulis for his achievements in the field of the humanities and social sciences.

The winner of the 2022 LJMS competition "Best Dissertation 2021" was Dr. E. Kasparavičius (Chemistry).

The 2022 Young Scientists' and Doctoral Students' Research Competition Prize by the Lithuanian Academy of Sciences was awarded to Dr. L. Jūrienė, while the winners of the 2022 University Students' Research Competition were U. Orinaitė, A. Šermukšnytė, L. Dvylys, M. Dagilis, J. Mykolaitis, and the letter of commendation was awarded to M. Ilickas.

The 2022-2023 Young Scientist Scholarships by the Lithuanian Academy of Sciences were awarded to Dr. K. Rakščius and Dr. D. Tavgenienė.

The 2022 University's Most Innovative Researcher premium was awarded to Prof. Dr. V. Getautis. The winners of the 2022 University's Most Active Young Researcher Award (no more than 7 years after obtaining their doctoral degree) were Dr. D. Čiužas, Dr. V. Samaitis, Dr. K. Rakštys, Dr. T. Dambrauskas and Dr. A. Grybauskas.

The winners of the 2022 Competition of the University's Best Monographs: 1st prize – Habil. Dr. V. Ostaševičius, 2nd prize – Dr. E. Staniškienė, Dr. Ž. Stankevičiūtė, Dr. Asta Daunorienė, Dr. J. Ramanauskaitė, 3rd prize – Dr. A. Veilentienė.



Major achievements in research and innovation project activities in 2022

EU experts have selected for funding the application of the international project "Centre of Excellence of AI for Sustainable Living and Working (SustAInLivWork)" coordinated by the University, under the "Teaming for Excellence" instrument of the EU research and innovation programme "European Horizon". The project, which is of strategic importance for the University and the entire country, will be implemented at the University between 1 September 2023 and 31 August 2029. The total budget of the project is 29.784 million EUR, of which 14.652 million EUR is financed by the "European Horizon" programme, 14.652 million EUR by the European Regional Development Fund, and 480 thousand EUR is the contribution of Lithuanian universities. A total of 12 Centres of Excellence will be established in Europe, including the "SustAInLivWork" project coordinated by the University.

The University participated as a partner in the project application "Creation of the Centre of Excellence in Smart Forestry (Forest 4.0)" under the "Teaming for Excellence" instrument of the EU Research and Innovation Programme "European Horizon". The six-year project was selected for funding. The budget for the University's part of the project, funded by the "European Horizon" programme, amounts to more than 1.5 million EUR. The project will be implemented at the University by a team from the Faculty of Informatics.



In 2022, 6 projects under the EU Research and Innovation Programme "European Horizon" were launched, 1 of which is coordinated by the University:

• The project "Boosting Research for a *Smart and Carbon Neutral Built Environment with Digital Twins* (*SmartWins*)" under the "Twinning" instrument. The project is coordinated by the Faculty of Civil Engineering and Architecture with a Project Manager Paris Fokaides. The 3-year project is implemented with partners – the Centre for Research and Technology Hellas (CERTH) (Greece), Contecht GMBH (CON) (Germany) and Politecnico Di Milano (Italy). The project has a budget of 1.5 million EUR.

In 2022, the University launched 2 projects under the Research and Training Programme EURATOM (2021-2025). This is the first time that University's researchers have participated in projects under this programme. EURATOM projects:

- "Advanced Nuclear Safety Evaluation of Liquid Metal Using Systems
 (ANSELMUS)". The project is implemented at the University by a team from
 the Prof. K. Baršauskas Ultrasound Research Institute, Project Manager
 Prof. L. Mažeika;
- "Intelligent Weld Inspection (iWeld)". The project is implemented at the University by a team from Prof. K. Baršauskas Ultrasound Research Institute, Project Manager V. Samaitis.

4 information and training events on the EU Research and Innovation Programme "European Horizon" were organised for scientists and other researchers in cooperation with the national contact representatives of the Agency for Science, Innovation and Technology (MITA) and international experts.

Competition funding of R&D&I

In 2022, the University's scientists and other researchers have successfully carried out 80 projects of international programmes (Horizon 2020, European Horizon, Digital Europe, EURATOM, EIT, LIFE, EUREKA, ERA-NET, etc.) and 161 national research, experimental development and innovation (R&D&I) projects (see Fig. 1).

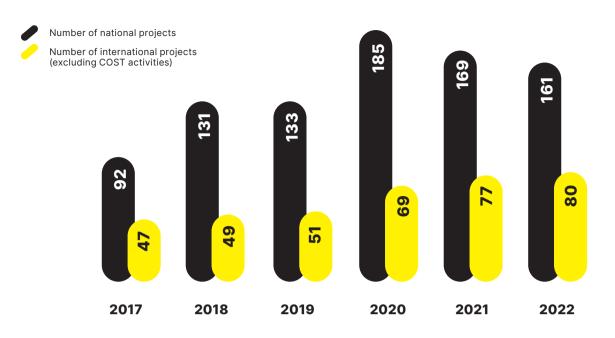


Fig. 1. Number of research and innovation projects that brought revenue in 2017–2022

In 2022, the University carried out 26 projects under the EU Research and Innovation Programme "Horizon 2020"; 6 projects under the EU Research and Innovation Framework Programme "European Horizon", 2 projects under EURATOM and 1 project under the EU "Digital Europe" programme. In 2022, the University's scientists carried out 2 projects of the European Innovation and Technology Institute. The MITA funded 14 projects carried out by the University's researchers: 6 technological development projects, 1 biotechnology industrial development project in Lithuania, 4 projects under the 2014-2020 EU Funds Investment Operational Programme's instrument "Promoting the Commercialisation and Internationalisation of R&D Results", 3 of which are carried out under the EUREKA international cooperation scheme.

In 2022, the Research Council of Lithuania (hereinafter – LMT) funded 43 projects of Researcher Groups, 11 postdoctoral fellowship projects, 1 project under the State Programme for Lithuanian Studies and Dissemination 2016-2024, 2 projects under the National Science Programme "Modernity in Lithuania", 1 project under the National Science Programme "Welfare Society", 1 project for the development of doctoral studies, 2 purposeful research projects, 4 projects under the Materials Science and Innovation M-ERA.NET programme.

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1 European Space Agency project under the Plan for European Cooperating States (PECS) and 32 research projects funded by other international programmes or institutions were carried out in 2022.

83 projects were carried out by the University's scientists under the 2014-2020 EU Funds Investment Action Programme in 2022.

3 projects funded by the National Paying Agency under the Ministry of Agriculture were carried out in 2022.

3 projects from other national research programmes were carried out in 2022.

In 2022, the University's scientists and other researchers participated in 43 European Cooperation in Science and Technology (COST) activities.

The University's scientists and other researchers carried out 4 projects under the EU 2014-2020 Territorial Cooperation Objective Programme INTERREG (including 3 research projects under the INTERREG EUROPE programme) as part of the development of their international cooperation networks.

Strengthening of the R&D&I ecosystem

The University receives revenue through outsourced R&D&I works, as well as pilot, construction and technological service contracts with various enterprises and institutions. In 2022, R&D&I works and services for more than 4 442 thousand EUR were performed for Lithuanian and foreign business entities and other organisations, of which 19% - 850.75 thousand EUR – were orders by foreign entities.

In 2022, R&D&I works were carried out for more than 2 804 thousand EUR and services of a technological or social nature related to research activities were provided for more than 1 638 thousand EUR. Most of the R&D&I works and services outsourced by economic entities were performed by the Faculty of Chemical Technology and the Food Institute.

On 27 October 2022, the international conference of the Baltic Network of Technology Transfer Centres (TTO) "TTO Baltic" was held to mark the launch of the network. During the event, a cooperation agreement was signed between the State Patent Bureau and the Lithuanian TTO Network which unites KTU, VGTU, LSMU and KU. A memorandum was also signed between the PINO and the Baltic universities on cooperation and expert assistance to the Baltic TTO Network.

21 international patent applications and 10 patent applications were filed with the Lithuanian State Patent Bureau in 2022. 8 Lithuanian patents, 1 USA, 3 European and 1 Chinese patent have been obtained on behalf of the University. Licensing revenue of 240.6 thousand EUR was received in 2022, 48% more than in 2021 (see Fig. 2).

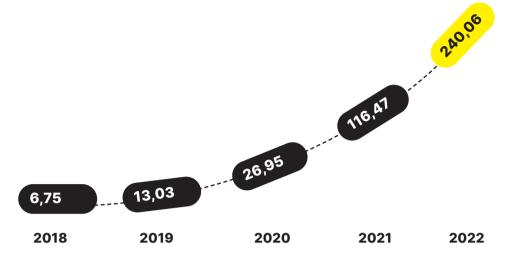


Fig. 2. Revenue from licencing/transfer of rights, thousand EUR

In 2022, 5 new companies in the fields of e-commerce, sustainable food technology, engineering, and health technology were established in KTU Startup Space.

In November 2022, a grant agreement was signed with the European Commission for the European Digital Innovation Hub (EDIH). The first meeting of the EDIH members took place in November and the next steps for the members were planned. The EDIH was introduced to the EDIH representatives of the Baltic Sea Region at a conference in Riga.

The activities of the Knowledge and Innovation Communities of the European Institute of Innovation & Technology "EIT Health" and "EIT RawMaterials", coordinated by the University, continued actively throughout the year, with over 20 different events on the topics of entrepreneurship promotion and start-up development.

Two intensive workshops (hackathons) to develop and expand innovations took place over two autumn weekends in 2022: the sustainable environment hackathon "DIGITwin – Built Environment Digital Twin Hackathon" (70 participants), organised in collaboration with the Faculty of Civil Engineering and Architecture on 4-5 November, and the health solutions hackathon "Hospiton'22. Rare Diseases" (60 participants) on 18-20 November.

On 26 May 2022, the annual "Technorama" technology exhibition and competition was organised for the twentieth time. The exhibition showcased 70 innovative technological solutions, and the authors of the best entries shared a prize fund of more than 14 thousand EUR.



Dissemination of research results

909 papers were published in peer-reviewed scientific journals or conference proceedings in 2022, of which 792 were published in publications by foreign publishers. 645 articles were published in journals with an impact factor indexed in the Clarivate Analytics Web of Science (WoS) or Elsevier Scopus databases. 414 papers were published in open-access scientific journals with an impact factor, of which 364 were published in journals with an impact factor in the second quartile (Q2) or higher.

The number of articles published in the journals with an impact factor indexed in the WoS database increased by 8.3% to 583 (data of 1 February) compared to 2021. According to the data of the WoS database, the share of all WoS publications in open-access scientific publications increased to make 66.6% in 2022 (see Fig. 3). However, the effects of the constraints of the COVID-19 pandemic have become apparent, with the proportion of publications with foreign co-authors in scientific publications decreasing to make 44.8% in 2022.

2 scientific monographs and 16 parts of scientific monographs were published in 2022 by internationally renowned publishers. A total of 30 monographs, research studies or parts thereof were published.

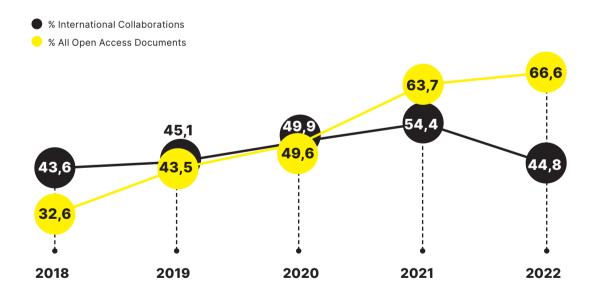


Fig. 3. Share of WoS publications with foreign co-authors in scientific publications and share of all WoS publications in open-access scientific publications

Strengthening of international project portfolio

Training was organised for the University community on the preparation of project proposals: in 2022, in cooperation with the MITA national contact representatives and international experts, 4 information and training events were organised for scientists and other researchers on the EU Research and Innovation Programme "European Horizon" and the preparation of project proposals.

Doctoral studies

In 2022, the University provided doctoral studies in 20 science/art fields in the areas of natural sciences, technology, social sciences, humanities and arts.

In 2022, 67 state-funded doctoral positions were allocated to the University, and 13 additional doctoral positions were won by KTU researchers from the LMT (competitive doctoral studies). A total of 117 people applied for these positions (1.46 applications per place; 1.94 in 2021). The largest competitions were held in the fields of architecture (8.0), educology (3.0) and management (3.0).

At the end of 2022, a total of 339 doctoral students were studying, of them ~26.5% were foreign citizens (see Fig. 4). The largest numbers of doctoral students were in Materials Engineering (44), Chemical Engineering (34) and Chemistry (30).

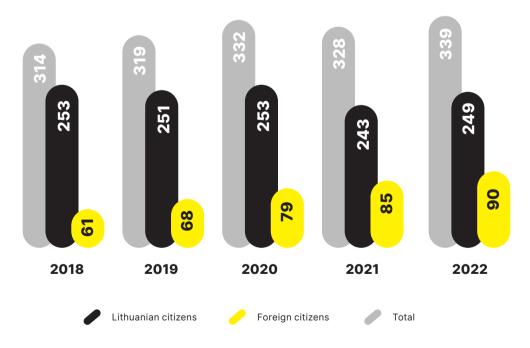


Fig. 4. Changes in the numbers of doctoral students according to their citizenship in 2018–2022.

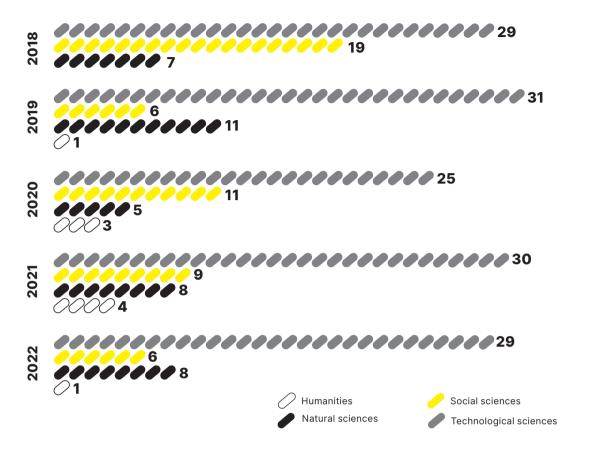


Fig. 5. Number of doctoral dissertations defended at the University in 2018–2022 according to the scientific areas

44 dissertations were defended at the University (51 in 2021), of which 4 were defended externally and the rest were defended on time, i.e. within 1 year of the end of studies. 14 dissertations were defended by foreign doctoral students. 73% of the total number of dissertations defended in 2022 were written in the English language and 3 were based on scientific papers (see Fig. 5).

In 2022, two agreements for the joint supervision of doctoral students were signed with the Aix-Marseille University (France) and the University of Bologna (Italy). A total of 10 doctoral students were studying at the University in 2022 (9 in 2021) under this type of cooperation agreement with foreign higher education institutions.

In 2022, the LMT assessed the quality and efficiency of doctoral studies in 11 study fields for the period 2016-2021. The quality and efficiency of doctoral studies in the fields of economics and management were assessed positively and the continuation of doctoral studies was proposed; in the fields of physics,

electrical and electronic engineering, civil engineering, transport engineering, environmental engineering, energy and thermal engineering, mechanical engineering and measurement engineering, recommendations were made for adjustments to the doctoral programmes; in the field of educology, the assessment is still in progress.

In 2022, a doctoral students' competition subsystem was created in the University's Academic Information System (hereinafter - AIS), in cooperation with the Department of Information Technologies. The subsystem can be used by doctoral students to submit applications to KTU Doctoral Fund, KTU International Scientific Events Fund, and the Most Active Doctoral Student Competition. A researchers' competition subsystem was also created, where researchers can apply for the competition for dissertation topics and scientific supervisors. KTU subsystem for admission to doctoral studies has been translated into the English language and is completely adapted for the admission of candidates from abroad to doctoral studies.

Library

In 2022, the University spent 506 686 EUR on subscriptions to databases. This amount accounted for 28% of the funds needed for database subscriptions, with the remainder paid for by the Ministry of Education, Science and Sports of the Republic of Lithuania, allocating the funding provided to the Lithuanian Research Library Consortium. Access was acquired to 55 international databases of scientific information which provided access to 111 725 journals and other periodicals (122 205 in 2021), including 32 142 full-text scientific journals (29 334 in 2021). KTU community could use the following databases: ScienceDirect, IEEE/IEL, Emerald, American Physical Society, IOP (Institute of Physics Journals), SAGE Journals Online, Nature, ACS Publications and others. Members of the University community downloaded 1 332 778 electronic full-text documents (1 315 840 in 2021).



KTU

Access to 541 717 ebooks (495 495 in 2021) from EBSCO, ScienceDirect (ebooks by the Elsevier publisher), ProQuest Ebook Central, SpringerLINK, Taylor&Francis eBooks, Morgan and Claypool Synthesis Ebook Collection, SPIE eBooks, Wiley Online Library publishers and databases was acquired.

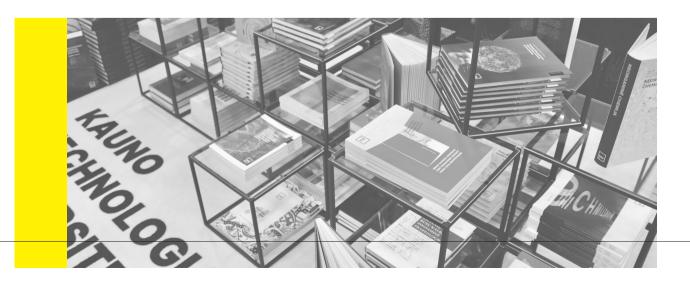
In 2022, two Erasmus+ projects were launched: "University Libraries Strengthening the Link between Academic Community and Society through Citizen Science in the Baltic Countries (LibOCS)" (project number 2021-1-EE01-KA220-HED-000031125) and "Resilience of Higher Education in the Refugee Crisis: Strengthening Social Inclusion through Capacity Building, Citizenship Engagement and Skills Recognition (AGILE)" (2022-1-FR01-KA220-HED-000087334).

The general competencies module on Research Data Management is taught to doctoral students.

Publishing House "Technologija"

In 2022, the University's Publishing House "Technologija" published the publications of 49 titles, of which 39 publications were published as ebooks, as well as 55 doctoral dissertations and dissertation abstracts.

In 2022, after the completion of the improvement works at ebooks.ktu. edu ebook reading room, the ebooks were made available not only to KTU community members (students, staff, alumni) but also to students of other Lithuanian universities and other readers. Currently, over 500 e-publications published by KTU publishing house are available in the reading room.





Highlights of activities for 2023

- Strengthening the general competencies of doctoral students and the supervision skills of doctoral supervisors.
- Implementation of the activities of the project "Artificial Intelligence Centre of Excellence for Sustainable Living and Working".
- Strengthening the international project portfolio, with priority given to the projects of the European Research Council.
- Putting the "M-Lab" centre for experimental and prototyping laboratories in physical and technological sciences into use.
- Improving the efficiency of R&D&I through the digitalisation of contract management.

VALUE CHAIN IN ORGANISATIONAL DEVELOPMENT

Table 5. Strategic indicators of the value chain in organisational development.

	2020	2021	2022
Evaluation of employee satisfaction	3,6	3,82	4
Number of academic employees who upgraded their qualification	597	673	646
of them participated in fellowships, training and other events at foreign institutions	38	195	191
of them participated in fellowships, training and other events at Lithuanian institutions	99	164	221
of them participated in fellowships, training and other events at KTU	460	314	234
Number of non-academic employees who upgraded their qualification	274	189	371
of them participated in fellowships, training and other events at foreign institutions	7	47	104
of them participated in fellowships, training and other events at Lithuanian institutions	63	47	144
of them participated in fellowships, training and other events at KTU	204	95	123
Excess/deficit, thousand EUR	137	108	516
Investment costs, %	5,2	8,3	5
Share of management costs in revenue, %	6,3	6,4	6,6

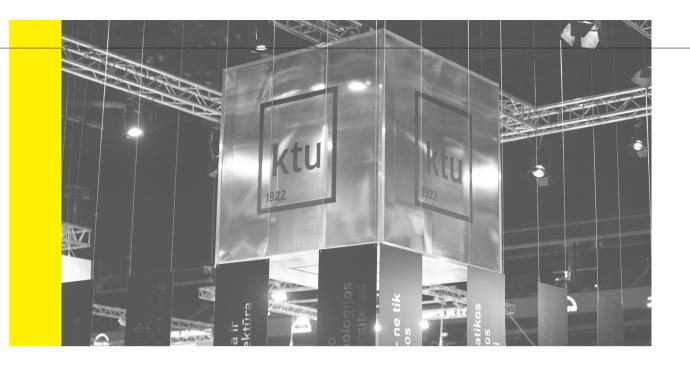


Marketing and communication

As part of the implementation of the plan of commemoration of the 100th anniversary of the University of Lithuania and the Year of Lithuanian Universities, a wide range of events were held throughout the year for the community of the University, Kaunas City and the entire Lithuania. The first event organised was the February 16th concert at Žalgiris Arena. The concert was also broadcasted on LRT. 171 students from 4 KTU art societies performed in the programme. According to the data provided by LRT, the broadcast of the concert was the most watched programme in Lithuania that day.

6 open lectures for the public were initiated and delivered by KTU scientists (live broadcast of events was available on the LRT portal), 4 mobile seminars for pupils in the regions and 2 educational events were organised. The communication of the 100th anniversary of KTU and the 100th anniversary of the University of Lithuania was integrated into the content broadcasted on LRT programmes: reports and interviews broadcasted by the programmes "Curiosity Gene", "7 Days of Kaunas", "Good Morning, Lithuania" "Morning Allegro", etc.

In 2022, compared to the previous year, a higher involvement of KTU representatives in external communication was recorded: the relative share of expert speeches by the University representatives in the overall flow of communication topics increased from 19.6% to 27.94%.



The University's website and its structure have been updated. Compared to the previous two years, the number of visitors to the ktu.edu website (15.16%) and the number of pages viewed (18.53%) increased.

In 2022, the development of new communication content was started, available to the users in video or audio formats: 4 new podcast series were produced and aired ("The Hmm Effect", "Scientists Speak", "Living University Stories", "Edu_Lab Dialogue"). Integrated media solutions were used to disseminate the new video and audio content: posting on websites, cooperation with the 15min portal, promotional posts on social media accounts, publication of texts and interviews promoting the programmes on portals.

In 2022, KTU continued to develop its network of partner schools: 4 cooperation agreements were signed with gymnasiums in Lithuanian regions; a network of 13 schools with the right to establish a KTU class was formed at the initiative of KTU Faculty of Chemical Technology. In 2022, a total of 83 meetings of KTU representatives with pupils were organised. 120 pupils from 7 partner schools in Kaunas City and Kaunas District participated in KTU "Children's University" educational classes. 13 groups of pupils were formed, which delved into different science fields.

To strengthen the internal communication system, monthly remote meetings of the Rector's team and KTU community were organised. During the meetings, in cooperation with the departments responsible for different areas of activities, topics related to the University's strategic priorities were discussed. The Rector's team also had meetings with KTU students.



Human resource management

The employee adaptation process was reviewed and updated in 2022. As part of the development of the new/returning employee adaptation system, guidelines and recommendations for the manager and the adaptation supervisor were developed on the University's intranet. An 'Employee's Guide' has been developed (https://ktu.edu/darbuotojo-atmintine). New/returning employee event launched to establish/expand new contacts, present the University's values, mission and vision and share success stories of employees. 3 such events were organised in 2022, attended by 36 new/returning employees of the University.

Focus group discussions were organised in the context of the development of the University's general competencies model, involving the University employees working in various positions. During the group discussions, the key general competencies (11 competencies in total) and their behavioural indicators were identified and clarified. A pilot assessment of the general competencies was carried out (30 employees in a group).

Development programmes for employees continued in 2022 with 125 employees trained.

An emotional health development programme was developed for employees, including the use of the Mindletic app; targeted training was organised to improve the competence of employees in mental health (19 employees trained) and increase their involvement in specific physical health promotion programmes. In 2022, the University additionally offered employees to participate in Kaunas City Public Health Bureau's projects "Move Healthy" and "Active Institution" (40 employees participated in the projects).

To ensure the physical, psychological and emotional safety of the University's employees and students, as well as equal opportunities for the implementation of all areas of the University's activities, the Policy of Kaunas University of Technology on Equal Opportunities and Diversity and Prevention of Violence was updated and a Gender Equality Plan was developed and approved.

The University's Committee for Evaluation of Job Positions analysed and evaluated 87 job positions in 2022.

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Digitisation of the University's administrative processes

The digitisation of operational processes was successfully implemented in 2022: the functionality of the University's Document and Process Management System (DPVS) was expanded (by implementing the signing of bilateral and trilateral learning e-agreements and transferring the process of coordination and approval of job positions, and the management of contracts to the DPVS); the AIS was further developed (student application subsystem, subsystem for the proposals of the topics for product development projects, subsystem for the study field and programme indicators, the integration of the AIS administrator's environment and the employee environment, and the introduction of the AIS subsystem for the management of the employees' access rights).

A survey section was created on KTU intranet, and the study feedback system was updated. The "Mobility Online" system of the International Relations Department was integrated into the University's current information technology systems.

As part of the development of KTU data analytics tool system "Business Intelligence", a separate website for visualisation only - analitika.ktu.lt - was additionally created and used to present the results of data analytics.

In 2022, the research group information system was launched. It manages general information and compositions of the research groups formed by the researchers of the faculties.





Increasing the involvement of the University's alumni in the University's activities

To increase the involvement of the University's alumni in the activities of the University, the Alumni Association of Kaunas University of Technology (hereinafter - KTU Alumni Association) organised 12 meetings of alumni and the academic community.

On the last Wednesday of every month, KTU alumni meetings "Alumni Invite Alumni" have been launched, during which KTU alumni with various professional experiences share their experiences, career success stories, scientific achievements, and initiate discussions of public interest.

According to the data of 31 December 2022, KTU Alumni Association has 1462 associate members and 79 members joined KTU Alumni Association in 2022.



Creation of an attractive academic and research environment by installing energy-efficiency solutions

In 2022, the project "Installation of Renewable Energy Sources in the Buildings of Kaunas University of Technology" was implemented, during which photovoltaic solar power plants were installed at Studentų St. 50, Studentų St. 67, Studentų St. 69, Studentų St. 71, Kaunas. The total capacity of these power plants is 464.82 kW, and it is estimated that the power plants will generate about 439 310 kWh/electricity, and the CO2 emissions will be reduced by about 305 t/m.

Within the framework of the project "Installation of Renewable Energy Sources in the Buildings of the Student Campus of Kaunas University of Technology", a solar photovoltaic power plant was purchased from the solar parks for the buildings of the University at the following addresses: Radvilėnų pl. 19, Studentų pl. 56, K. Baršauskas St. 59, Kaunas. The total capacity of the purchased photovoltaic power plant is 1199.80 kW.

To achieve energy efficiency, the renovation of the building of the Faculty of Mechanical Engineering and Design has also started, which is expected to save about 42% of the building's thermal energy consumption.

In 2022, the construction contract works of the twelve-storey dormitory No. 10 (Gričiupio St. 13, Kaunas) were completed (complete renovation of the dormitory's exterior and interior, providing modern accommodation services that meet the needs of students). Modernisation works have started on dormitory No. 11 (Pašilės St. 37, Kaunas).

Other activities

In 2022, the University's working group consisting of academic and non-academic employees, students, social partners and alumni, started the work of the University's self-assessment. The members of the working group carried out data analysis, collected and organised information and together prepared a summary of the self-assessment which will be submitted to an international external institutional evaluation team. One of the key objectives of the external evaluation is to determine the quality of the performance of the higher education institution, based on the materials and information collected during the expert visit to the University. The University is evaluated in four areas: management, quality assurance, studies and research/artistic activities and impact on regional and national development.

To ensure the need for continuous improvement of the quality of performance and further increase the involvement of employees in quality management, a lot of attention was paid to the strengthening of the internal quality assurance system in 2022: the quality assurance model was reviewed, the Quality Manual of Kaunas University of Technology was transferred to the cyberspace, the relevant documents describing the feedback collection processes were updated, the composition of the Internal Control Committee of KTU was expanded by including quality management experts, and the new information system for mapping of operational processes ivps.ktu.lt was developed.

In cooperation with the Ministry of Finance of the Republic of Lithuania and other Lithuanian higher education institutions, functional deficiencies of the information system of the general public sector financial management of the Government of the Republic of Lithuania were identified and considered while adopting an amendment to the resolution of the Government of the Republic of Lithuania which extended the period of connection to the general subsystem of the public sector financial accounting of the State Budget, Accounting and Payments System (FABIS).

The infrastructure used for the provision of the .lt domain service was expanded abroad in 2022. In cooperation with the National Cyber Security Centre under the Ministry of National Defence, a DNS firewall service was installed to enhance the cyber security of Lithuanian internet users.



University in the rating in 2022

In the international QS World University Rankings, KTU is ranked among the top 801-1000 universities in the world. The best results were achieved in the "Reputation among Employers" indicator, where the University's position levelled up by 49 positions.

In the Times Higher Education ranking, KTU ranks among the universities in 1201-1500 positions in the world. The score of KTU in all 5 indicators has increased from 1.7% to 11.5%. KTU is also included in the Times Higher Education Impact Ranking. In this category, universities are assessed against the 17 United Nations' Sustainable Development Goals (SDGs). In this ranking, KTU is ranked among the top 801-1000 universities in the world. KTU is the best-ranked university in terms of SDG 9 - Industry, Innovation and Infrastructure, ranking between the positions 201-300.

According to the data of the magazine "Reitingai" published by the national ranking agency, KTU has been firmly in second place in the ranking of all Lithuanian higher education institutions for the past 4 years. The best indicator is "Competing in the International Study Area", where KTU has been ranked 1st for the second year in a row.





Highlights of activities for 2023

- Review and improvement of the University's financial management model.
- Development of the digitisation of the University's administrative processes.
- Creation of an academic and research environment adapted to modern needs.
- Enhancing the emotional well-being of employees.
- Strengthening the University's brand recognition and unified communication.
- Implementation of sustainable development objectives and initiatives.

Kaunas University of Technology

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