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ACTIVITY REPORT 2021

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Activity Report
2021
Rector’s foreword

Dear colleagues and partners,

The University of Tartu annual report 2021 comes at a difficult time: the COVID-19 pandemic has affected our lives for two years, and now a war in Ukraine, initiated by the Russian Federation, is reshaping the world, its security situation and economy.

The university’s mission is to be a promoter of society and its provider of evidence-based support – also in crises. The year 2021 was a ground-breaking one for the future of Estonian universities. The government delivered the promise made in the Estonian Research Agreement in 2018 and increased public research funding to 1% of GDP. In spring, Estonian universities launched a public debate on higher education funding. In a short time, all parliamentary parties came to understand that the underfunding of higher education is one of the most important challenges facing the country in the coming years.

In 2021, we started to align our activities with the objectives of the university’s new strategic plan A2025. The COVID-19 pandemic inevitably disrupted the day-to-day running of the university, but at the same time, it gave an unexpected impetus to research and development. Coronavirus-related research projects helped boost research income, and the university also earned record income (incl. private funding) from teaching activities. Overall, the university’s budget revenue in 2021 was higher than ever. However, this does not alleviate the funding gap in higher education, as a total shortfall of around €100 million has accumulated in higher education funding in Estonia over the years.

In December, the university council completed its five-year term of office. During this time, it dealt with many important issues: compiled a new strategic plan and its supporting documents, agreed on longer-term principles of the university’s budgeting, and established the company UniTartu Ventures to better apply the university’s intellectual property in business. It is good to see that the new council, which started work in 2022, includes several members of the previous council as well as new and highly competent decision-makers from within the university, the private sector and abroad.

During the year, the university also worked hard to prepare for doctoral reform. The reform, which will come into force in 2022, will be a major step toward securing the next generation of both top-level professionals and academic staff the society needs. Doctoral students can now start working as researchers at the university and receive at least the average Estonian salary to dedicate themselves to their doctoral research.

In the field of developing management quality, we are proud of the 360° feedback survey for managers, which was carried out for the first time at the university. It provided a balanced overview of the perception of managers’ activities at different levels and supported managers’ development.

Many initiatives launched in 2021 will continue to influence our activities in 2022 and the coming years. The university needs to offer its in-depth knowledge to society also in the new security situation and, at the same time, support the Ukrainian academic community and students. To do all this, we have a strong community, but also smart and constructive cooperation with other universities and partners.

Toomas Asser
Rector of the University of Tartu
## Abbreviations

### Universities

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBS</td>
<td>Estonian Business School</td>
</tr>
<tr>
<td>EAA</td>
<td>Estonian Academy of Arts</td>
</tr>
<tr>
<td>EAMT</td>
<td>Estonian Academy of Music and Theatre</td>
</tr>
<tr>
<td>EULS</td>
<td>Estonian University of Life Sciences</td>
</tr>
<tr>
<td>TU</td>
<td>Tallinn University</td>
</tr>
<tr>
<td>TUT</td>
<td>Tallinn University of Technology</td>
</tr>
<tr>
<td>UT</td>
<td>University of Tartu</td>
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</tbody>
</table>

### Fields of study

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>Education</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities and arts</td>
</tr>
<tr>
<td>SOC</td>
<td>Social sciences, journalism and information</td>
</tr>
<tr>
<td>BUS</td>
<td>Business, administration and law</td>
</tr>
<tr>
<td>SCI</td>
<td>Natural sciences, mathematics and statistics</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technologies</td>
</tr>
<tr>
<td>ENG</td>
<td>Engineering, manufacturing and construction</td>
</tr>
<tr>
<td>AGR</td>
<td>Agriculture</td>
</tr>
<tr>
<td>HEA</td>
<td>Health and welfare</td>
</tr>
<tr>
<td>SER</td>
<td>Services</td>
</tr>
</tbody>
</table>

### Faculties of the University of Tartu

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>HV</td>
<td>Faculty of Arts and Humanities</td>
</tr>
<tr>
<td>SV</td>
<td>Faculty of Social Sciences</td>
</tr>
<tr>
<td>MV</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>LT</td>
<td>Faculty of Science and Technology</td>
</tr>
</tbody>
</table>

### Other abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2025</td>
<td>University of Tartu Strategic Plan for 2020–2025</td>
</tr>
<tr>
<td>ARWU</td>
<td>Academic Ranking of World Universities by Shanghai Ranking Consultancy</td>
</tr>
<tr>
<td>AS</td>
<td>aktsiaselts (public limited company)</td>
</tr>
<tr>
<td>ECTS</td>
<td>Credit point of the European Credit Transfer and Accumulation System</td>
</tr>
<tr>
<td>EHIS</td>
<td>Estonian Education Information System</td>
</tr>
<tr>
<td>EIT</td>
<td>European Institute of Innovation and Technology</td>
</tr>
<tr>
<td>ENLIGHT</td>
<td>European university Network to promote equitable quality of Life, sustainability and Global engagement through Higher education Transformation</td>
</tr>
<tr>
<td>ERA</td>
<td>European Research Area</td>
</tr>
<tr>
<td>ERC</td>
<td>European Research Council</td>
</tr>
<tr>
<td>ESI</td>
<td>Essential Science Indicators</td>
</tr>
<tr>
<td>ETIS</td>
<td>Estonian Research Information System</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>EU13</td>
<td>13 newest member states of the European Union</td>
</tr>
<tr>
<td>FTE</td>
<td>full-time equivalent</td>
</tr>
<tr>
<td>GDP</td>
<td>gross domestic product</td>
</tr>
<tr>
<td>HEI</td>
<td>higher education institution</td>
</tr>
<tr>
<td>mEUR</td>
<td>million euros</td>
</tr>
<tr>
<td>MoER</td>
<td>Estonian Ministry of Education and Research</td>
</tr>
<tr>
<td>MOOC</td>
<td>massive open online course</td>
</tr>
<tr>
<td>MTÜ</td>
<td>mittetulundusüüring (non-profit organisation)</td>
</tr>
<tr>
<td>OÜ</td>
<td>osaühing (private limited company)</td>
</tr>
<tr>
<td>PUT</td>
<td>personal research funding</td>
</tr>
<tr>
<td>QS</td>
<td>QS World University Rankings</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>research and development</td>
</tr>
<tr>
<td>SA</td>
<td>sutasuts (foundation)</td>
</tr>
<tr>
<td>SME</td>
<td>small and medium-sized enterprise</td>
</tr>
<tr>
<td>SIS</td>
<td>Study Information System</td>
</tr>
<tr>
<td>TAIE</td>
<td>Estonian Research and Development, Innovation and Entrepreneurship Strategy 2021–2035</td>
</tr>
<tr>
<td>THE</td>
<td>Times Higher Education World University Rankings</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
</tr>
<tr>
<td>UTTV</td>
<td>University of Tartu video portal</td>
</tr>
<tr>
<td>Employee figures are given as at 31 December.</td>
<td></td>
</tr>
<tr>
<td>Student figures are given as at 10 November.</td>
<td></td>
</tr>
<tr>
<td>The number of students does not include external students, visiting students and resident doctors. The first level of higher education includes professional higher education, bachelor’s studies and integrated bachelor’s and master’s studies.</td>
<td></td>
</tr>
<tr>
<td>The number of graduates of a given year refers to students who completed their studies during the period from 1 October of the previous calendar year to 30 September of the given calendar year.</td>
<td></td>
</tr>
<tr>
<td>The number of curricula in which students were enrolled includes curricula in which students were enrolled as at 10 November (including all joint curricula).</td>
<td></td>
</tr>
<tr>
<td>The number of publications includes Estonian Research Information System (ETIS) categories 1.1, 1.2, 1.3, 2.1, 2.5, 3.1, 3.2, 3.3, 4.1, 5.1, 6.3, 6.4. High-level publications include ETIS categories 1.1, 1.2, 2.1 and 3.1. The number of publications includes those authored by persons who had a valid employment contract with the University of Tartu or who were enrolled as regular doctoral students in the corresponding calendar year. The data retrieved from ETIS as at 15 February of the following year.</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Key figures</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Employees</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td>3,435</td>
<td>3,602</td>
<td>3,635</td>
<td>3,767</td>
<td>3,767</td>
</tr>
<tr>
<td>Number of employees (FTE)</td>
<td>2,805</td>
<td>2,935</td>
<td>2,957</td>
<td>3,055</td>
<td>3,166</td>
</tr>
<tr>
<td>incl. academic staff</td>
<td>51.1%</td>
<td>51.7%</td>
<td>51.3%</td>
<td>52.5%</td>
<td>52.1%</td>
</tr>
<tr>
<td>Number of academic staff (FTE)</td>
<td>1,432</td>
<td>1,517</td>
<td>1,518</td>
<td>1,604</td>
<td>1,650</td>
</tr>
<tr>
<td>incl. PhD holders</td>
<td>73.3%</td>
<td>74.3%</td>
<td>76.3%</td>
<td>74.5%</td>
<td>74.0%</td>
</tr>
<tr>
<td>incl. international academic staff</td>
<td>10.0%</td>
<td>12.3%</td>
<td>13.9%</td>
<td>15.5%</td>
<td>17.7%</td>
</tr>
<tr>
<td>Number of professors (FTE)</td>
<td>170</td>
<td>179</td>
<td>186</td>
<td>186</td>
<td>209</td>
</tr>
<tr>
<td>incl. female professors</td>
<td>22.8%</td>
<td>23.3%</td>
<td>25.9%</td>
<td>26.4%</td>
<td>28.3%</td>
</tr>
<tr>
<td><strong>Students</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of students</td>
<td>12,896</td>
<td>13,169</td>
<td>13,395</td>
<td>13,641</td>
<td>13,909</td>
</tr>
<tr>
<td>at the first level of higher education</td>
<td>60.8%</td>
<td>60.4%</td>
<td>60.6%</td>
<td>60.6%</td>
<td>60.6%</td>
</tr>
<tr>
<td>in master’s studies</td>
<td>29.9%</td>
<td>30.6%</td>
<td>30.9%</td>
<td>31.1%</td>
<td>31.1%</td>
</tr>
<tr>
<td>in doctoral studies</td>
<td>9.3%</td>
<td>9.0%</td>
<td>8.6%</td>
<td>8.3%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Number of international students</td>
<td>1,195</td>
<td>1,457</td>
<td>1,660</td>
<td>1,678</td>
<td>1,746</td>
</tr>
<tr>
<td>percentage of all students</td>
<td>9.3%</td>
<td>11.1%</td>
<td>12.4%</td>
<td>12.3%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Number of graduates</td>
<td>2,625</td>
<td>2,630</td>
<td>2,715</td>
<td>2,778</td>
<td>2,961</td>
</tr>
<tr>
<td>incl. number of PhD graduates</td>
<td>138</td>
<td>122</td>
<td>129</td>
<td>118</td>
<td>105</td>
</tr>
<tr>
<td><strong>Curricula</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of curricula to which students were admitted</td>
<td>162</td>
<td>161</td>
<td>159</td>
<td>159</td>
<td>160</td>
</tr>
<tr>
<td>incl. English-taught curricula at the first and second level of higher education</td>
<td>26</td>
<td>26</td>
<td>30</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>Number of curricula with enrolled students</td>
<td>213</td>
<td>198</td>
<td>197</td>
<td>188</td>
<td>182</td>
</tr>
<tr>
<td><strong>Research publications</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of publications</td>
<td>2,512</td>
<td>2,374</td>
<td>2,834</td>
<td>2,813</td>
<td>3,215</td>
</tr>
<tr>
<td>incl. number of high-level publications</td>
<td>1,709</td>
<td>1,709</td>
<td>1,983</td>
<td>1,995</td>
<td>2,382</td>
</tr>
<tr>
<td>incl. number of publications of the category 1.1</td>
<td>1,231</td>
<td>1,259</td>
<td>1,480</td>
<td>1,472</td>
<td>1,846</td>
</tr>
<tr>
<td><strong>Position in international university rankings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>THE</td>
<td>301–350</td>
<td>301–350</td>
<td>301–350</td>
<td>251–300</td>
<td>251–300</td>
</tr>
<tr>
<td>QS</td>
<td>314</td>
<td>321</td>
<td>301</td>
<td>285</td>
<td>300</td>
</tr>
<tr>
<td>ARWU</td>
<td>301–400</td>
<td>301–400</td>
<td>301–400</td>
<td>401–500</td>
<td>401–500</td>
</tr>
</tbody>
</table>

More detailed data are available on the UT website statistika.ut.ee.
UNIVERSITY GOVERNANCE

The highest decision-making body of the University of Tartu is the council, which is responsible for the university’s economic activities and long-term development, approves the university’s statutes and adopts the strategic plan and budget. The council has 11 members: five nominated by the university, five by the minister of education and research, and one by the Estonian Academy of Sciences. 2021 was the last year of the second composition of the council:

- Ruth Oltjer [Council Chair], General Manager of AS Chemi-Pharm,
- Eva Åkesson, former Rector of Uppsala University,
- Jaan Eha, UT Professor of Cardiology, Academician,
- Els Heinsalu, President of the Estonian Young Academy of Sciences,
- Heidi Kakko, expert in growth companies,
- Birute Klaas-Lang, UT Professor of Estonian as a Foreign Language,
- Vahur Kraft, entrepreneur,
- Tõnu Lehtsaar, Counsellor-Chaplain for UT staff,
- Ants Nõmper, Managing Partner of Ellex Raidla Law Firm,
- Jüri Sepp, UT Professor emeritus,
- Richard Villems, UT Professor of Archaeogenetics, Academician.

The senate is the university’s highest academic decision-making body, responsible for the university’s teaching, research and development activities and ensuring the excellent quality of these activities. The senate comprises 22 members: the rector as chair, four representatives of each faculty, and five student representatives. Senate members are elected for three years (student members are elected for one). In 2021, the senate included:

representatives of the Faculty of Arts and Humanities
- Professor Aivar Kriiska,
- Professor Railli Marling,
- Lecturer Ave Matsin,
- Professor Renate Pajusalu,

representatives of the Faculty of Social Sciences
- Professor Kairi Kreegipuu (until 30 March 2021),
- Professor Veronika Kalmus (from 1 July 2021),
- Professor Marju Luts-Sootak,
- Professor Maaja Vadi,
- Professor Urmas Varblane,

representatives of the Faculty of Medicine
- Professor Külli Kingo,
- Associate Professor Tanel Laisaar,
- Professor Pärt Peterson,
- Professor Mihkel Zilmer,

representatives of the Faculty of Science and Technology
- Professor Peeter Burk,
- Professor Krista Fischer,
- Professor Marco Kirm,
- Professor Tõnu Meidla,

student representatives (until 30 June 2021)
- Rait Bessonov,
- Karl Lembit Laane,
- Mari-Ann Lind,
- Kerdo Kristjan Tamm,
- Trine Tamm,

student representatives (from 1 July 2021)
- Joosep Heinsalu,
- Stella-Maria Kangur,
- Imar Yacine Koutchoukali,
- Kertu Liis Krigul,
- Katariina Sofia Päts.
The Rector of the University of Tartu is Professor Toomas Asser. The rector manages the everyday life of the university, following the resolutions of the council and the senate, and is responsible for the lawful and expedient use of the university’s assets. The Rector’s Office comprises the rector, vice rectors for research, academic affairs and development, deans of faculties, director of administration, head of finance, and academic secretary.

Studies and research are conducted at the University of Tartu in 27 institutes and four colleges of four faculties:
- Faculty of Arts and Humanities (HV),
- Faculty of Social Sciences (SV),
- Faculty of Medicine (MV),
- Faculty of Science and Technology (LT).

The academic structure also comprises four non-faculty institutions:
- Museum,
- Natural History Museum and Botanical Garden,
- Library,
- Youth Academy.
University structure
as at 31 December 2021

Faculty of Arts and Humanities
- Institute of History and Archaeology
- Institute of Estonian and General Linguistics
- Institute of Philosophy and Semiotics
- Institute of Cultural Research
- School of Theology and Religious Studies
- College of Foreign Languages and Cultures
- Viljandi Culture Academy

Dean of the Faculty of Arts and Humanities

Faculty of Medicine
- Institute of Biomedicine and Translational Medicine
- Institute of Pharmacy
- Institute of Dentistry
- Institute of Clinical Medicine
- Institute of Family Medicine and Public Health
- Institute of Sport Sciences and Physiotherapy

Dean of the Faculty of Medicine

Dean of the Faculty of Social Sciences
- Institute of Education
- Johan Skytte Institute of Political Studies
- School of Economics and Business Administration
- Institute of Psychology
- School of Law
- Institute of Social Studies
- Narva College
- Pärnu College

Faculty of Science and Technology
- Institute of Computer Science
- Estonian Marine Institute
- Institute of Physics
- Institute of Chemistry
- Institute of Mathematics and Statistics
- Institute of Molecular and Cell Biology
- Tartu Observatory
- Institute of Technology
- Institute of Ecology and Earth Sciences
- Institute of Genomics

Dean of the Faculty of Science and Technology

Vice Rector for Research
- University of Tartu Library
- Grant Office*

Vice Rector for Academic Affairs
- University of Tartu Youth Academy
- Office of Academic Affairs*
- Student Union Office*

Vice Rector for Development
- University of Tartu Natural History Museum and Botanical Garden
- University of Tartu Museum
- Centre for Entrepreneurship and Innovation*
- International Cooperation and Protocol Office*
- Rector's Strategy Office*
- Internal Audit Office*

Vice Rector for Development

Director of Administration
- Information Technology Office*
- Administrative Office*
- Estates Office*
- Human Resources Office*
- Marketing and Communication Office*

Academic Secretary
- University of Tartu Press*

Head of Finance
- Procurement Office*
- Finance Office*

* support units

Contents
Strategic plan

At the beginning of 2021, the university’s new **strategic plan** for 2021–2025 (A2025) took effect. The strategic plan is specified by other strategy documents: language and internationalisation principles, financial strategy, strategy for the involvement of private funds, and spatial development strategy. The strategy for the involvement of private funds adopted by the council in autumn 2021 is a completely new strategy document that aims to increase the university’s financial capacity by planning the activities necessary for implementing the strategic plan and increasing and diversifying the university’s revenues.

The strategic plans of all four faculties and the library were also compiled in 2021. To specify the objectives of the university’s strategic plan, the rector approved the action plan for teacher education and educational sciences, which is a follow-up of the previous action plan on the topic.

The implementation of the strategic plan is monitored using digital dashboards, and the data about the university’s core activities and assets are publicly available on the statistics dashboard.

To implement the university’s strategic goals, the Rector’s Office compiles an **action plan** each year and evaluates the achievement of the objectives based on the key performance indicators set in the strategic plan and other documents. The 2021 action plan linked the development tasks of A2021 and the performance agreements of the members of the Rector’s Office and the funding allocated from the central development funds for achieving them. Therefore, the planning of development activities is also directly linked to managers’ individual performance agreements.

The larger tasks in the university’s 2021 action plan concerned the development of

- teaching: e-learning, teacher training and new forms of study. Attention was on the changes needed in curricula to foster future skills and on expanding the opportunities of digital university and e-learning. Another focus was on teaching the Estonian language and culture and publishing textbooks in Estonian;
- research: increasing income from project-based funding measures, supporting doctoral reform and experimental research;
- the organisation in general: implementing the academic career model, information systems, and promoting management quality and equal treatment.

Units receive central development grants from several university **funds** based on measurable performance targets, indicators and deadlines:

- the development fund is used to support the implementation of the strategic plan, primarily cross-faculty development activities;
- the council’s strategic development support for higher education is used to fund the faculties’ teaching-related strategic developments. In the 2021 budget, almost a third of this support was related to the development of e-learning;
- the deans’ performance funding helps to achieve the new challenges set for the financial year;
- the rector’s reserve fund is used to cover one-off unforeseen needs.
In A2025, also the main courses of action for **sustainable development** were agreed upon as follows:

- we take joint effort with other universities and research institutions to apply the roadmap of the European Green Deal;
- we promote the attitude supporting the global sustainable development goals among students and provide the knowledge and skills required for that;
- our researchers contribute to achieving the goals of sustainable development and the roadmap of the European Green Deal;
- we cooperate with ministries to organise the studies and counselling needed to achieve the goal of Estonian climate neutrality;
- we develop and implement integrated environmental principles and promote a way of thinking that supports sustainable development in the university and in educating the public.

In November, the university organised a sustainable development seminar, which underlined that sustainable development starts with the sustainable individual. In 2021, the university continued to develop the areas of equal treatment, mental health, fairness of salary and career development.

Capital investments to improve the working and learning environment were planned with a focus on human well-being and environmentally sustainable building and energy solutions. Among other projects, the planning of the Maarjavälja green area was launched, with an emphasis on landscaping around the new academic and research buildings, providing opportunities for outdoor learning, working and recreation, and preserving biodiversity. The plan is to create an outdoor experimental area and promote organic gardening in cooperation with the City of Tartu to make the urban environment interesting, rich in life and close to nature.

In May, the senate adopted the university’s **principles of quality management**. Quality management is a part of strategic management, is based on the statutes and the strategic plan of the university and is the responsibility of the rector. Regular internal and external evaluations give information about the quality of the university’s main and supporting activities.

For external evaluation, in 2021, the institutional accreditation self-evaluation report was compiled, giving a detailed overview of the scope of the university’s activities and their compliance with the objectives and the relevant legislation across 12 evaluation standards. More than 80 people helped compile the self-evaluation report.

Under the University of Tartu Act, the university has created **national sciences professorships** engaged in the instruction, research and development of Estonian language, culture and history. In 2021, the results of the professors’ previous work period were assessed and, based on the updated action plans, the professorships of archaeology, Estonian history, art history, the history and dialects of Estonian language, Estonian as a foreign language, modern Estonian language, Estonian literature, Estonian and comparative folklore, ethnology, intellectual history and cultural semiotics continue at the university from 2022.

In its development activities, the university relies on its international experience and cooperation. For that, it participates in several university networks. An example is ENLIGHT, the European University Network to promote equitable quality of life, sustainability and global engagement through higher education transformation.
### Key performance indicators

<table>
<thead>
<tr>
<th>International national university</th>
<th>Baseline 2020</th>
<th>Result 2021</th>
<th>Target 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of graduates from teacher-training curricula</td>
<td>276</td>
<td>314</td>
<td>350</td>
</tr>
<tr>
<td>Percentage of international employees taking Estonian language courses</td>
<td>28%</td>
<td>30%</td>
<td>45%</td>
</tr>
<tr>
<td>Percentage of international students taking Estonian language courses</td>
<td>28%</td>
<td>40%</td>
<td>75%</td>
</tr>
<tr>
<td>Percentage of international graduates</td>
<td>15%</td>
<td>15%</td>
<td>13–15%</td>
</tr>
<tr>
<td>Percentage of international academic employees</td>
<td>12.5%</td>
<td>13.5%</td>
<td>15–20%</td>
</tr>
<tr>
<td>Percentage of students participating in learning mobility among graduates</td>
<td>12.7%</td>
<td>11.3%</td>
<td>18%</td>
</tr>
</tbody>
</table>

### Education

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2020</th>
<th>Result 2021</th>
<th>Target 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropout rate</td>
<td>9.5%</td>
<td>9.0%</td>
<td>&lt; 9%</td>
</tr>
<tr>
<td>Percentage of academic employees who actively participated in teaching-related development activities</td>
<td>41%</td>
<td>43%</td>
<td>50%</td>
</tr>
<tr>
<td>Students’ satisfaction with the teaching of courses</td>
<td>86%</td>
<td>87%</td>
<td>95%</td>
</tr>
<tr>
<td>Number of continuing education learners</td>
<td>40,493</td>
<td>41,012</td>
<td>43,000</td>
</tr>
<tr>
<td>Percentage of newly admitted students with outstanding study results</td>
<td>57%</td>
<td>73%</td>
<td>60%</td>
</tr>
<tr>
<td>Graduation rate of doctoral studies</td>
<td>35%</td>
<td>32%</td>
<td>50%</td>
</tr>
</tbody>
</table>

### Research

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2020</th>
<th>Result 2021</th>
<th>Target 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of publications among the world’s top 10% most cited research publications</td>
<td>17.1%</td>
<td>17.0%</td>
<td>17–20%</td>
</tr>
<tr>
<td>Volume of international research funding (mEUR)</td>
<td>12.8</td>
<td>14.9</td>
<td>17.8</td>
</tr>
<tr>
<td>Volume of business contracts (mEUR)</td>
<td>6.83</td>
<td>6.12</td>
<td>8</td>
</tr>
<tr>
<td>Number of university’s new spin-offs in a year</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

### Organisation

<table>
<thead>
<tr>
<th></th>
<th>Baseline 2020</th>
<th>Result 2021</th>
<th>Target 2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income per academic staff member €</td>
<td>124,158</td>
<td>127,550</td>
<td>150,000</td>
</tr>
<tr>
<td>Employee satisfaction</td>
<td>66%</td>
<td>65%</td>
<td>70%</td>
</tr>
<tr>
<td>Income from teaching per student €</td>
<td>5,662</td>
<td>5,829</td>
<td>6,500</td>
</tr>
</tbody>
</table>

In the following chapters, information about the achievement of the key performance indicators of the strategic plan is marked with “A2025”.
The European Commission’s 2021 Strategic Foresight Report says that at all levels of activity, from local to global governance and power structures, we are most affected by climate change, technological acceleration, digitalisation, and demographic shifts.

To support its strategic objectives, the European Commission reformed the European Research Area (ERA), renewed its governance and agreed on new priority areas for action:

- investing in research and innovation for a green and digital future;
- improving researchers’ access to infrastructure and facilities;
- supporting researchers’ mobility, skills and career opportunities;
- promoting gender equality and broader inclusion;
- disseminating the principles of open science and developing digital infrastructures and services to foster it.

The common, renewed European Research Area is implemented with the support of the Horizon Europe framework programme for research and innovation. Its budget for the next seven-year period is €95.5 billion, almost 25% more than that of the previous Horizon 2020 framework programme.

According to an analysis by the Estonian Research Council, Estonian institutions and organisations had received a total of €241.1 million from Horizon 2020 by the beginning of 2021; the University of Tartu had signed contracts for nearly €63.7 million of that amount. The support of the European Union (EU) framework programme to Estonian projects was nearly three times higher per gross domestic product (GDP) and one and a half times higher per capita than the EU average. Of all the Horizon 2020 grants to Estonia, the largest was the support for the ERA Chairs action: €34.6 million (14.4%). Seven University of Tartu projects were supported in this action, accounting for half of the projects supported in Estonia. Estonian applications fared best in the European Research Infrastructures action (50% success rate), where the University of Tartu received €3.2 million of the €4.4 million that came to Estonia.

According to the European Commission’s 2021 Economic Forecast, Estonia will receive more than €8 billion from EU funds, including the Recovery and Resilience Facility, over the next seven-year budget period. Nearly a quarter of this will be channelled into the green and digital dual transition. The best way to deliver large-scale and lasting change would be through the education system, but the state has not currently allocated money for universities to do this. Nearly €1.3 billion from EU funds is planned to support research and development (R&D) and innovation in Estonia. In supporting R&D and innovation, the focus is shifting to the promotion of knowledge transfer (incl. technology transfer) and supporting cooperation between the research system and the business sector to develop demand-driven R&D and innovation services. More detailed discussions on the measures will continue in 2022.

The Government of the Republic approved the Estonian Research and Development, Innovation and Entrepreneurship Strategy 2021–2035 (TAIE), which aims to increase the well-being of Estonian society and the productivity of the Estonian economy, providing competitive and sustainable solutions for the development needs of Estonia and the world. To achieve this, activities are planned on three axes:

- the research system axis ensures the high level and sectoral diversity of Estonian research;
- the business environment axis ensures favourable conditions for enhancing the competitiveness of enterprises;
- the knowledge transfer axis ensures synergies between the research system, the business environment and other systems to enhance society’s overall resilience and ability to adapt to crisis situations and global changes.
The Ministry of Education and Research (MoER) continued the preparation of the new Organisation of Research and Development Act. The university wishes to see clearer coordination of TAIE activities between the parties involved, incl. the organisation of research ethics, changes in the evaluation of R&D, and the linking of its results to the funding of R&D institutions. The discussion on the draft act continues in 2022.

The government approved the state budget strategy for 2022–2025, guided by its priorities: a rapid exit from the COVID-19 pandemic, green and digital transition, support for people’s mental and physical health, etc. Economic growth and increasing prosperity depend on increasing the knowledge intensity of the economy. The strategy foresees that at least 1% of GDP goes to R&D funding, i.e. is invested in boosting R&D and innovation.

The field of higher education reflects major global trends – population growth, ageing, migration, technological developments, etc. – as well as trends amplified by the COVID-19 pandemic – changing business models and the nature of work, and increasing inequality. These trends are not new, but the resulting pressures on formal education institutions have intensified.

Continuous change in the demand for new skills leads to a growing need for lifelong learning, i.e. further training and retraining, and career breaks for self-improvement.

Improving the quality of teaching, increasing the inclusion of target groups, cooperation with communities, supporting linguistic diversity and promoting lifelong learning skills are at the heart of the European Higher Education Area. One strategic initiative of the European Commission is to develop a common EU approach to micro-credentials to ensure the quality, recognition and valuing of continuing education.

The Foresight Centre has also indicated in its report on trends in higher education that factors shaping the future of higher education point to a growing expectation of a personalised provision of education. In a context of rapid and wide-ranging changes, higher education must prepare people to alternate between studies and work to improve choice and coping. Learning skills and flexible learning opportunities tailored to the target group’s needs are becoming increasingly important.

According to the European Commission’s review, the Estonian education system is linear and rigid, not allowing enough flexibility to combine work and studies and acquire new skills. A study commissioned by the MoER on the international experience of micro-credentials showed that most countries use short-term learning pathways to respond more quickly to labour market needs. In Estonia, micro-credentials have not yet been formally defined, but larger universities are already marketing micro-credential programmes, which are essentially paid continuing education programmes based on bachelor’s and master’s courses.

At the end of 2021, a draft act aiming to change the way doctoral studies are undertaken and funded was submitted to the Riigikogu. The doctoral reform aims to provide doctoral students with secure income and social guarantees. This is done by offering them the junior research fellow’s position at the university or an employment contract outside the university in a field related to their doctoral research. The reform also aims to foster cooperation between universities and businesses and to prepare top-level professionals with PhD for careers outside academia. According to the plan of the MoER, the amendments will enter into force by 1 August 2022, and the transition to the new model will take place gradually, starting from the admission of the 2022/2023 academic year.
The public spending on higher education in Estonia in 2021 was higher than the average of other European countries, but the expenditure per student was around the EU average. For instance, in Nordic countries, the public sector contributes more than twice as much per student. In Estonia, the activity support for higher education has increased by around 2.0–4.9% per year over the last five years, but this is not proportional to the economic growth indicators of the rest of society and does not provide universities with sufficient resources to provide quality higher education.

Compared to 2012, higher education expenditure as a percentage of GDP has fallen from 1.4% to 1.1%. The marginal increase in the activity support for higher education has not allowed universities to raise the salaries of academic staff in line with that of the rest of Estonia, which reduces students’ opportunities to get quality higher education.

Estonian universities joined forces in 2021 to draw public attention to the inadequate funding of higher education. A higher education support group was formed in the Riigikogu, which led a seminar entitled “The revolutionary situation in Estonian higher education”, and a debate on the funding of higher education as a matter of national importance was held in the Riigikogu.

According to the EU’s Education and Training Monitor for 2021, tertiary education attainment among 25–34-year-olds in the Estonian population (currently around 43%) has increased more slowly than the EU average over the past decade. Estonia ranks second in the EU in terms of the gender gap in tertiary education attainment. Among 25–34-year-olds in Estonia, 55% of women and only 33% of men have a university education. The number of people with higher education is insufficient to meet labour market demand. Given the country’s rising demand for high-skilled jobs in specific fields, falling numbers of enrolled students and a shrinking population, experts recommend tackling the gender gap in tertiary education attainment and reducing the drop-out rate in higher education. One way to increase the share of people with higher education is to attract international students and staff.

In 2021, there were 44,611 higher education students in Estonia, 83% of them in tuition-waiver student places. In ten years, student numbers have dropped in almost all fields of study. The only exception is information and communication technology, which had 11% more students in 2021 than ten years ago.

The number of international students admitted, which had shrunk due to the COVID-19 pandemic, increased by 21% compared to 2020 but was still 14% lower than before the pandemic. In the 2020/2021 academic year, 1,542 international students completed their studies in Estonia, accounting for 16% of all graduates.

According to Statistics Estonia, in the past academic year, the number of international students working was lower than before, but the amounts they earned, and therefore the tax revenue received by the state, were higher.

In 2021, as part of the Estonian study of Eurostudent VII, the first analysis of students’ mental health was completed. The most common conditions indicative of mental health problems were found in bachelor’s students and rather in younger students. In general, working students have a better emotional state than non-working students, and students who are parents have a better emotional state than those without children.
Financing

MoER uses a higher education funding model in which money for supporting higher education studies is divided into activity support and targeted grants. 80% of the activity support is baseline funding, the money distributed between higher education institutions based on the volume of funding in the previous three years. 20% of the activity support is performance-based funding, 17% of which is allocated based on meeting the performance indicators and 3% based on implementing the objectives of the administrative agreement made with the higher education institution (HEI).

In 2021, the MoER allocated a total of €187.2 million to Estonian higher education institutions based on administrative agreements, incl. €65.1 million to the University of Tartu.

The total activity support to Estonian public universities was €131.2 million, of which the University of Tartu received €50.2 million. The University of Tartu’s share in the activity support of public universities has remained at 38% since the new funding model was adopted in 2017. The overall volume of activity support to public universities increased by 4.4% compared to 2020. Despite the small rise, the change in higher education funding has remained below the increase in GDP and average salary for several years already. This underfunding is not compensated even by the university’s efforts to attract more private funding, which is why in 2021, the university with other members of Universities Estonia launched a public debate on alleviating the underfunding of higher education.

Compared to other universities, the University of Tartu has been relatively successful in terms of national performance indicators in recent years. In 2021, the performance-based funding was €10.2 million.

Besides activity support, the University of Tartu earned an additional funding of €21.3 million in 2021 from student-funded degree studies, continuing education, development projects and teaching grants, nearly 26.3% of the total teaching and study budget (excl. medical residency). That was €12,908 per one member of academic staff.
We develop curricula so that they ensure the ability to cope successfully in the labour market.

Curricula

In 2021, students were admitted to 160 curricula. Over four years, the number of curricula provided by the university has decreased by 15%. The university continues to regularly review and update curricula. In 2021, two new Estonian-taught master’s curricula were opened for admission, and one Russian-taught master’s curriculum in Narva College.

Number of curricula by study levels in 2017/2018 and 2021/2022

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>First level of higher education</td>
<td>56</td>
<td>55</td>
<td>78</td>
<td>61</td>
</tr>
<tr>
<td>Master’s studies</td>
<td>73</td>
<td>73</td>
<td>100</td>
<td>87</td>
</tr>
<tr>
<td>Doctoral studies</td>
<td>35</td>
<td>32</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>160</td>
<td>213</td>
<td>182</td>
</tr>
</tbody>
</table>

Students were admitted to 31 foreign-language-taught curricula, incl. 28 curricula of the second level of higher education, i.e. master’s level. In 2021, curricula taught in a foreign language accounted for 24% of all curricula of the first and second level of study.

Over the last five years, five new foreign-language-taught master’s curricula have been added. With the rise in the number of curricula taught in a foreign language, also the percentage of international students increased to 13% of the total number of students. Significant support to international master’s and doctoral students has been provided by the national scholarship programme Dora Plus (2015–2023) and the Development Cooperation Programme of the Ministry of Foreign Affairs.

The university has been successful in applying for funding from the Erasmus Mundus Joint Masters programme. In 2021, we participated in five joint curricula recognised by this programme. The university continues to lead the curriculum Excellence in Analytical Chemistry, which has been recognised by Erasmus Mundus for three times.

In 2021, the senate approved an amendment to the Statutes of Curriculum, according to which students of the first- and second-level curricula taught in a foreign language who have no knowledge of the Estonian language must take 6 ECTS of Estonian language and culture courses. The amendment must be introduced to curricula by the admission of the 2023/2024 academic year at the latest.
In the autumn, a new system of internal evaluation of curricula was implemented, based on curriculum statistics and feedback on curricula and courses. While earlier, the internal evaluation took place once in three years, according to new procedure, teaching quality is assessed every year: in the first two years, the programme director makes an interim report, and on the third year, a detailed report. Every year approximately one third of all curricula undergo detailed evaluation. This arrangement of evaluation enables the councils of academic units and faculties to better review the curricula’s strengths and proposals for development, as they can focus on fewer curricula at a time. For preparing, approving and publishing the internal evaluation report, a dedicated solution was created in the study information system (SIS).

Responding to a course feedback survey allows students to analyse their learning experience. The questions concern the coherence and structure of the course, organisation of studies and the learning environment, development of students’ competences and the work of support systems. In 2021, 54% of the respondents gave feedback on their curriculum, all in all 2,937 questionnaires were completed. Although the special arrangements resulting from the coronavirus have affected studies for several years already, students’ satisfaction has not decreased. The curriculum feedback survey of 2021 showed that 95% of students have chosen a curriculum that suits them and they find it interesting to study.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Did not agree</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I have chosen the right curriculum</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>It is interesting to learn in my curriculum</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>I am satisfied with the choices I can make within my curriculum</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>I had sufficient information about the organisation of studies</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>Online learning environments support my studies</td>
<td>4%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Results of the 2020/2021 curriculum feedback survey (percentage of agreement and disagreement with the statement)

Admissions

The university organises open doors days and other information events to support applicants in making informed career choices. The Open Doors Day 2021 was held online. A total of 1,379 people registered for the online conference introducing studies and university life and 1,158 for workshops. In June, 850 people registered to participate in the online information day for admission. Anyone who wants can become a student shadow at almost any time of the year to familiarise themselves with the specialisation of interest, attend lectures and seminars and get feedback directly from students of the same specialisation. 662 young people participated in student shadowing in 2021.

Commissioned by the MoER, the university developed preparatory courses for state examinations in Estonian and mathematics, aiming to support secondary school-leavers, whose performance was affected by distance learning due to the corona pandemic. More than 2,500 pupils studied in the preparatory courses for state examinations in broad and narrow mathematics and Estonian language. The university recognised the development and organisation of these courses with the teaching award 2021.

In 2021, 8,107 pupils completed general secondary education in Estonia. 3,599 (44%) of them continued studies at a higher education institution in Estonia. 1,265 pupils, or 35% of those who had just left school and applied for a higher education institution chose the UT (34% in 2020).

4,311 students started their studies – nearly 4% more than in the previous year. 2,506 students started at the first level of higher education: 1,775 in bachelor’s studies, 421 in professional higher education, and 310 in integrated bachelor’s and master’s studies. Recent upper secondary school graduates made up 64% of students admitted to regular studies and 13% of those admitted to block mode studies at the first level of higher education in 2021.
We admit students of high potential to study in our international curricula.

The percentage of newly admitted students with outstanding study results* in 2021 was 74%.

* The percentage is calculated by dividing the number of students matriculated to the first level of study whose score in the state examination in broad mathematics was at least 90 points by the average number of students in Estonia who have scored at least 90 points in this state examination over the last three years, and then multiplying the result by 100.

1,604 students started at the master’s level (2% more than the year before). 52% of those admitted to master’s studies at the UT in 2021 had completed their previous studies elsewhere, incl. 29% at a university abroad, 5% at Tallinn University, 5% at Tallinn University of Technology and 2% at Estonian University of Life Sciences.

According to the contract for allocating activity support, the university creates at least 164 student places for admission to doctoral studies every year in 2019–2021. In addition, it is possible to apply for faculty-funded student places. In 2021, 195 doctoral students started their studies. Compared to 2020, the university admitted 14 more doctoral students.

In 2021, the council adopted the strategy for the involvement of private funds. The university has gradually increased the proportion of student-funded studies over the last couple of years in both English-taught and Estonian programmes. In the 2021 admissions, the percentage of students starting studies in a paid student place surged, compared to the year before, from 8% to 15%. The university had the right to admit students to seven student-funded Estonian-taught curricula with part-time study.

659 international students started their studies, accounting for 4% of all new students at the first level of study, 29% in master’s studies and 50% in doctoral studies. The share of international students in all admitted students has increased over five years from 13% to 15%. The university does not aim to significantly increase international admissions.
Students and studying

In 2021, there were 13,909 students at the University of Tartu, 88% of them studying in non-student-funded places. Over the last five years, the number of students has gradually grown. Master’s and doctoral students accounted for 39% of the university’s student body, similarly to previous years.

Students studied in four faculties according to a total of 182 curricula, incl. five joint curricula. 125 students studied in joint curricula managed by the University of Tartu, and 175 students based on joint curricula managed by other higher education institutions. The largest number of students (5,936) studied in the Faculty of Social Sciences.

Digital learning is used at the university mostly in combination with classroom studies to support students’ individual work. In 2021, 5,414 degree courses, 81% of all courses, had full or partial online support. 7% of these courses were fully and 93% partly online. In 2021, the university offered 12 MOOCs (massive open online courses). A total of 6,825 learners participated in the courses and 2,431 learners completed them.

Use of digital learning at the university

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Online courses in degree studies</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of courses (percentage of all courses in brackets)</td>
<td>2,737 (35%)</td>
<td>3,738 (49%)</td>
<td>4,892 (69%)</td>
<td>5,282 (76%)</td>
<td>5,414 (81%)</td>
</tr>
<tr>
<td>incl. number of fully online courses</td>
<td>116</td>
<td>120</td>
<td>123</td>
<td>321</td>
<td>397</td>
</tr>
<tr>
<td>Number of participants</td>
<td>74,789</td>
<td>100,076</td>
<td>125,522</td>
<td>133,720</td>
<td>139,543</td>
</tr>
<tr>
<td><strong>Digital continuing education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of participants in digital continuing education</td>
<td>22,559</td>
<td>18,493</td>
<td>17,029</td>
<td>28,602</td>
<td>31,919</td>
</tr>
<tr>
<td>Number of MOOCs</td>
<td>15</td>
<td>20</td>
<td>19</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Number of MOOC participants</td>
<td>11,935</td>
<td>8,991</td>
<td>7,275</td>
<td>12,787</td>
<td>6,825</td>
</tr>
<tr>
<td>Number of Moodle courses</td>
<td>5,010</td>
<td>6,054</td>
<td>7,421</td>
<td>8,611</td>
<td>9,367</td>
</tr>
<tr>
<td><strong>Number of videos</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in UTTV video portal</td>
<td>5,166</td>
<td>6,997</td>
<td>7,470</td>
<td>7,828</td>
<td>8,180</td>
</tr>
<tr>
<td>on Panopto video lecture server</td>
<td>1,236</td>
<td>4,319</td>
<td>5,719</td>
<td>13,239</td>
<td>21,089</td>
</tr>
</tbody>
</table>

In 2021, faculties received about 384,000 euros from the strategic development budget to improve the quality of digital learning. The faculties used the support to hire e-learning support persons, develop the quality of online courses and purchase tools and equipment required for digital learning. 14 courses of the University of Tartu were awarded the e-course quality label by the Estonian Quality Agency for Higher and Vocational Education.
For the fourth time, the university organised an e-learning experience seminar to share good practice both in and outside the university. This seminar focused on using online practical classes.

Two years ago, the new course feedback survey was taken into use. All students must give feedback to four courses. In the autumn semester of 2020, the four courses were for the first time selected for the student by a SIS algorithm, to ensure that feedback is given to as many courses as possible, and that feedback is based on random sample rather than students’ preferences. Thanks to the algorithm, the number of courses that received feedback increased by 10%, mainly among those with a smaller number of enrolled students. In addition to the mandatory feedback, students may select more courses to rate.

Students’ grades improved significantly in the corona year. At the discussion of the survey results, the parties concluded that what contributed to the improvement of grades was the possibility to watch recorded lectures online, preference for using materials in exams instead of fact-checking (helped to understand the material and make connections), introduction of various online platforms, pre-exam self-assessment quizzes in Moodle, and the changes in the form of assessment.

Within the central support service, students received help in 2021 from
- two study advisers,
- four student mobility advisers,
- psychologists (3.1 FTE positions, incl. in regional colleges),
- two career counsellors,
- an entrepreneurship adviser,
- a special needs adviser,
- 107 tutors.

The university’s Centre for Applied Social Sciences carried out a survey on how students coped with the changed circumstances due to COVID-19 in 2020/2021. The study showed that students coped well in the corona year. Distance learning was more difficult for first-year and international students. These two groups of learners also took academic leave during the corona year more often than earlier. International students interrupted studies slightly more than in previous years.

### Results of course feedback survey in 2020/2021 (percentage of agreement and disagreement with the statement)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Did not agree</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>The structure of the course supported my learning</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>The teaching was varied</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>Students were given the chance to discuss the subject matter</td>
<td>9%</td>
<td>91%</td>
</tr>
<tr>
<td>The feedback helped me understand which knowledge I should develop further</td>
<td>15%</td>
<td>85%</td>
</tr>
<tr>
<td>The assessment was closely related to the teaching</td>
<td>6%</td>
<td>94%</td>
</tr>
<tr>
<td>All in all, the course was valuable for me</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>

### Results of course feedback survey in 2020/2021 about asking for information

<table>
<thead>
<tr>
<th>Source of information</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>... peers</td>
<td>67%</td>
<td>25%</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>... university websites</td>
<td>52%</td>
<td>12%</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>... university teachers</td>
<td>32%</td>
<td>13%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>... the academic affairs specialist</td>
<td>18%</td>
<td>38%</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>... the programme director</td>
<td>12%</td>
<td>27%</td>
<td>20%</td>
<td>41%</td>
</tr>
<tr>
<td>... the peer tutor</td>
<td>6%</td>
<td>13%</td>
<td>17%</td>
<td>63%</td>
</tr>
<tr>
<td>... the students’ counselling centre</td>
<td>4%</td>
<td>11%</td>
<td>79%</td>
<td></td>
</tr>
</tbody>
</table>

### Study and recreation spaces

For students are being created in several academic buildings. Supported by the central budget for occupational health, a fitness trail was created in the Omicum: the 630-metre indoor health trail runs through two interconnected academic buildings, going 199 steps up and 220 steps down on the way.
International studies

In 2021, the UT had 1,746 international students, 13% of the total number of students. While the overall number and percentage of international students in Estonia decreased compared to 2020 primarily due to coronavirus-related travel restrictions, at the University of Tartu their number rose. Of all UT international students, 55% were master’s students and 20% doctoral students. International students came from a total of 98 countries. Over the last five years, the percentage of international students has grown the most in the Faculty of Social Sciences. 39% of all international students studied in the Faculty of Science and Technology, 39% in the Faculty of Social Sciences, 12% in the Faculty of Arts and Humanities, and 9% in the Faculty of Medicine.

The coronavirus pandemic had a considerable impact on both incoming and outgoing study mobility. 436 students went abroad as exchange students, incl. 209 for traineeship. Compared to the previous academic year, the number fell by 11%. The percentage of those who studied abroad decreased by 28%, but 21% more students than in the previous year went abroad for traineeship. The most popular countries of destination were Finland (37%), United Kingdom (10%) and Germany (5%). 192 students, i.e. 40% of all students who studied and trained in foreign universities used the EU Erasmus+ higher education programme.

The number of international visiting students was 401, 29% fewer than the year before. Under the Erasmus+ programme, a total of 243 exchange students studied at the UT. One in four students using the Erasmus+ programme came from a partner university in Germany. Also French, Italian, Spanish and Czech students were highly interested in studying here.
The university’s goal is that at least 18% of its graduates would have international mobility experience. Among the graduates of 2021, 11% had mobility experience. Enhanced mobility opportunities are provided to students also by the ENLIGHT network through flexible, i.e. short-term learning opportunities and those combined with e-learning.

To allow for study mobility, as of 2020/2021, the curricula of the first and second level of higher education, excl. one-year curricula, the curricula of Medicine, Dentistry and Pharmacy, and the curricula with the obligation to study abroad, include a mobility window of 15 ECTS as an elective module. A mobility window is a module or set of courses in the curriculum, incl. practical training, which the student may perform abroad, if requested. This requires agreements with partner universities to support mutual recognition of studies. A mobility window helps to better plan studies abroad to avoid the extension of the standard period of study, and supports the achievement of learning outcomes during the studies abroad.

At the beginning of each semester, international (visiting) students are offered a short orientation course introducing the city and the University of Tartu. Also international student tutors and support students help them adapt better. Since 2019, tutor training has also been provided in English.

In 2021, the university started to use the SoleMove software to better organise student mobility, for example, to manage student exchange and cooperation agreements between higher education institutions. Before that, part of the mobility process was paper-based.

**Interruption of studies**

1,424 students interrupted their studies in 2021. The interruption rate was 10%: 11% at the first level of higher education, 9% in master’s and doctoral studies. However, part of these students continued their studies at the UT within a year. Comparing the total number of students in two consecutive years (2020 and 2021), it could be said that the dropout rate was 9%.

The main reasons for interrupting studies were:

- the student’s request (45%),
- expiry of study period (24%),
- insufficient academic progress (17%).

Since 2019, the UT has been developing a learning analytics model with the aim to reduce interruption of studies and support students’ progress through early detection. The learning analytics application has been prepared for the SIS and will be taken into use in 2022. The tool will notify programme directors and academic affairs specialists of students who need more attention to successfully cope with studies.

**Interruption rate by faculties in 2017–2021**

<table>
<thead>
<tr>
<th>Year</th>
<th>HV</th>
<th>SV</th>
<th>MV</th>
<th>LT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td></td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td></td>
<td></td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

For comparison, interruption rate in 2017 is shown in grey.
Graduation

2,961 students graduated from the University of Tartu in 2021, incl. 427 cum laude. The highest percentage of graduates were among students in the field of business, administration and law (22%). The percentage of international graduates in 2021 was 15%.

According to Statistics Estonia’s 2021 impact analysis result, the share of UT international alumni who stay in Estonia to work has increased significantly over the past year: in 2019, it was 44%, and in 2020, 52%.

The percentage of international students was the highest among the graduates of the field of engineering, manufacturing and construction (42% of the graduates of this broad field of study were international students). The number of graduates in 2021 was the largest in the field of ICT (83) and social sciences, journalism and information (82). According to the analysis of Statistics Estonia, the alumni of the fields of ICT and engineering, manufacturing and construction were the most likely to remain working in Estonia after graduation. This is facilitated by the large number of companies with a suitable international working environment.

The university’s objective is to increase the number of graduates from teacher-education curricula to at least 350 by 2025. In 2021, 314 students graduated from teacher-education curricula, which is nearly 40 more than the year before.

In 2021, 222 doctoral theses were defended in Estonia, nearly half of them at the University of Tartu. 105 doctoral students graduated from the University of Tartu, 11 fewer than in 2020. Doctoral graduation rate has generally improved over the last years. 32% of those admitted to doctoral studies six years before (standard period of study + two years) defended their thesis in 2021.
Doctoral studies

The university has put much effort in the development of doctoral studies since 2018, and many important changes were made in 2021. Changes within the university go in parallel with the national reform that gives doctoral students the status of junior research fellow, at least the average Estonian salary and social guarantees. In January 2021, a law amendment took effect, linking the post of junior research fellow to matriculation to doctoral studies. As a result, the number of junior research fellows working at the UT increased from 229 in 2020 to 333 in 2021.

In 2021, the senate approved the Regulations for Doctoral Studies, which brought several UT bylaws together into one document, and made a clearer distinction between doctoral studies and studies at the first and second level of higher education. Amendment of the university’s bylaws continues in 2022 in line with changes in law.

Instead of 34 former doctoral curricula, eight new doctoral programmes were opened. From now on, the faculties will manage the doctoral studies through the faculties’ centres for doctoral studies. The new programmes are more flexible and research-focused than the former curricula. The assessment of research in ECTS and the requirement for a course-based curriculum structure were abandoned. The volume of compulsory studies was reduced from 60 ECTS to 30 ECTS. More importance is attached to transferrable skills and non-academic career opportunities.

An interim analysis was made about the supervisors of doctoral theses to get an overview of cooperation with institutions and enterprises. In 2017–2019, 391 doctoral theses were defended, in which 87% of the supervisors were UT employees. Other organisations included, for example, Tartu University Hospital, Cybernetica AS, Solis BioDyne OÜ, OÜ BioDesign, Tallinn Zoo, Estonian Taxpayers’ Association, and the North Estonia Medical Centre. In addition to supervising, cooperation with the non-academic sector takes the form of cooperation agreements (R&D projects) and topics for doctoral theses.

Continuing education

In 2021, a total of 41,012 continuing education learners participated in 1,423 courses: 40,004 took continuing education courses and 1,008 studied in courses of degree programmes. The university also organised 234 internal training courses attended by 3,548 people. There were 2,88 continuing education learners per one student at the university. Income from continuing education, incl. projects, programmes and targeted financing, was 7.04 million euros.

Compared to 2020, the overall number of continuing education learners increased 1.3% and income earned from continuing education rose 14.3%. The percentage of fully or partly online continuing education programmes increased from 59% to 72% over the year.

### Number of continuing education courses and participants in 2021

<table>
<thead>
<tr>
<th>Courses</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing education in total</td>
<td>1,423</td>
</tr>
<tr>
<td>Continuing education programmes</td>
<td>944</td>
</tr>
<tr>
<td>incl. partly or fully online courses</td>
<td>677 (72%)</td>
</tr>
<tr>
<td>incl. MOOCs</td>
<td>12</td>
</tr>
<tr>
<td>Degree study courses</td>
<td>479</td>
</tr>
</tbody>
</table>

The university provides continuing education to both public- and private-sector institutions. Among others, courses were commissioned by the Environmental Board, Financial Supervision Authority, Integration Foundation, Estonian Unemployment Insurance Fund, Social Insurance Board, National Institute for Health Development, State Agency of Medicines, the Estonian Patent Office, Tax and Customs Board, Chamber of Notaries, the Supreme Court of Estonia, Swedbank AS, several ministries, local authorities and educational institutions. For the second year in a row, the university provided free courses to employees of SMEs on the basis of state-commissioned continuing education. In 2021, the project supported 22 courses completed by 899 learners.
In 2021/2022, the university started offering **micro-credential programmes** – longer, comprehensive continuing education programmes that take into account the labour market needs and the opportunities of employed people. They enable to obtain another specialisation or competence in a narrow field of activity and, if requested, continue studies in a degree programme and complete higher education in the field. In the autumn semester of 2021/2022, the UT started 18 micro-credential programmes, with more than 200 learners.

Continuing education was successfully provided also outside Tartu: the highest participation rates were in the counties of Harju, Ida-Viru, Pärnu, Saaremaa and Viljandi, i.e. mostly in regions where the university has a college or an office.

Programmes of the **University of the Third Age** have expanded nearly all across Estonia. As it was not possible to organise popular lectures in 2020/2021 due to health risks, the programmes switched to online learning and the participants were offered video and radio lectures in Estonian and Russian. In the autumn semester of 2021/2022, 12 programmes were opened in 11 locations in Estonia. In addition, the programme of health and psychology webinars started, allowing to study in real time. All in all, more than 2,281 people participated in the University of the Third Age programmes.

Due to the coronavirus pandemic, the highly popular lectures of the University of the Third Age were suspended at the end of the year. Instead, online lectures and webinars and pre-recorded video and radio lectures were offered. Also workshops, language and computer courses, and lecture viewings for small groups were organised. Online learning helped develop the digital skills of the elderly, and motivated them to use computer-based communication channels more confidently.

The Põlva programme of the University of the Third Age received the teaching award of the year in Põlva County, and the Võru programme was nominated for the teaching award of the year in Võru County. The online programme of the University of the Third Age won Tartu County’s special teaching award of the year.
Financing

In 2021, the University of Tartu was allocated €20.5 million from the state budget for the baseline funding of research. This was 44% of the total baseline funding (€46.3 million) divided between the 20 positively evaluated research and development institutions in Estonia. The amount of baseline funding has increased, but its share in the university’s research revenue in the past three years has not. The increase in baseline funding in the state budget is slower than the increase in the number of private research and development institutions applying for it.

The university council allocated the part of baseline funding intended to support national disciplines (€1.1 million) to the Faculty of Arts and Humanities. 4.2 million euros of the main part of the baseline funding was allocated for investments in academic and research buildings, and the rest was distributed as follows:

- 74% to academic units according to their contribution to earning the university’s baseline funding,
- 20% to the UT development fund,
- 6% to the rector for performance-based funding of faculties.

Academic units used their allocations to initiate and co-finance more than one hundred research topics and projects, incl. to support experimental development. From the development fund, bridging grants were allocated to units whose research grants and baseline funding decreased by more than 10% compared to the previous year so that they could reorganise their work and cover the costs of applying for new projects. Labour costs accounted for nearly 33.5% (€6.6 million) of the costs made from the financial accounts of baseline funding.

Baseline research funding allocated to R&D institutions for 2017 and 2021, in million euros

<table>
<thead>
<tr>
<th>R&amp;D institution</th>
<th>2017</th>
<th>2021</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT</td>
<td>7.4</td>
<td>20.5</td>
<td>13.1 (2.8 times)</td>
</tr>
<tr>
<td>TUT</td>
<td>3.8</td>
<td>10.5</td>
<td>6.7 (2.8 times)</td>
</tr>
<tr>
<td>TU</td>
<td>1.2</td>
<td>3.4</td>
<td>2.2 (2.8 times)</td>
</tr>
<tr>
<td>EULS</td>
<td>1.5</td>
<td>3.5</td>
<td>2.0 (2.3 times)</td>
</tr>
<tr>
<td>Other</td>
<td>3.0</td>
<td>8.4</td>
<td>5.4 (2.8 times)</td>
</tr>
<tr>
<td>Total</td>
<td>16.9</td>
<td>46.3</td>
<td>29.4 (2.7 times)</td>
</tr>
</tbody>
</table>

Distribution of baseline funding for research in 2017–2021 between the university’s main budget and capital budget after distribution of performance-based grants and allocations from the development fund (in million euros)
The **personal research funding** (PUT) of the Estonian Research Council yields most of the university’s research income (nearly 25%). In 2021, a total of €15.6 million were allocated for new projects under the two types of PUT – start-up and team grants – in Estonia. UT researchers received €9.2 million (60%) of that amount to launch 50 new projects. Also, 127 existing PUT projects continued and received €17 million. In addition, three new post-doctoral researchers received PUT funding (€377,340 in total).

In 2021, 32 contracts financed from the **structural funds** were concluded at the university, in the total amount of €6.7 million. This includes nearly one million euros from the Mobilitas Plus programme, supporting the research by international or returning post-doctoral researchers in Tartu. Structural funds also largely financed the university’s **COVID-19** research.

Starting from the beginning of the coronavirus pandemic in 2020, the university has concluded research contracts on COVID-19 for a total of €15.8 million.

R&D contracts concluded in 2021 amounted to a total of €66.7 million, nearly 25% of them being contracts with international funding.

With the support of foreign funders, €16.8 million worth of R&D contracts were signed at the university in 2021. Contracts funded from the **Horizon 2020** programme (17) were concluded in the total amount of €7.3 million. As at the end of 2021, this programme had funded the university’s projects with a total of €69 million. This places the UT second among the universities of Central and Eastern Europe (EU13).

So far, the most successful initiative of Horizon 2020 has been the **ERA Chairs action**: the university has received a total of €17.3 million for seven chairs, which is the best result in Europe for one institution. From the closed Horizon 2020-funded European Green Deal Call, the university’s researchers received €2.3 million for two projects.

The first project, WaterLANDS, aims to find practical solutions for carbon sequestration in wetlands. The project will test the opportunities for restoring common types of mire in Europe and the management and funding models needed to achieve this. Apart from the university, Estonian partners of the project include the Estonian Fund for Nature, the State Forest Management Centre and Tootsi Turvas AS. In total, partners from 13 European countries are involved.

The second project, oPEN Lab, aims to identify and test economically feasible integrated solutions, based on the examples of cities in Belgium, Spain and Estonia, that would allow creating positive energy neighbourhoods integrated with the existing energy system.

2021 was the first year of the new EU framework programme **Horizon Europe**, intended to support research and innovation from 2021–2027. The university’s employees submitted nearly one hundred applications to this programme. These included four applications in the Teaming action, aiming to create pan-European centres of excellence at the University of Tartu.
Thanks to Horizon Europe, more than 30 partnership networks were launched during the year. Around a third of all Horizon Europe funding is planned for implementing partnership schemes. In 2021, the university continued to participate in three networks of the European Institute of Innovation and Technology (EIT), through which it received a total of €800,000 for 13 projects. These networks are:

- European innovation network EIT Urban Mobility,
- European cooperation network of innovative manufacturing technologies EIT Manufacturing,
- Network of European health innovators EIT Health.

Between 2015 and 2021, the university received a total of €6.7 million in co-funding from the European Commission through Horizon 2020 partnerships, which makes about 10% of the total funding received from Horizon 2020 and Horizon Europe over the same period.

To encourage and support the applicants for high-level European Research Council (ERC) grants, the university created the ERC Incentive Grant. It was awarded to 16 young researchers based on internal competition. If the action proves effective, the university plans to develop the financial support and advice for ERC grant applicants into a permanent support service.

### Publications

According to the Estonian Research Information System, UT members published 3,215 research publications in 2021, incl. 2,382 classified as high-level (387 more than in 2020). Thus, the average number of high-level publications published per academic staff member (FTE) was 1.24.

As at September 2021, 17% of publications by UT researchers published in the past five years (2016–2020) and indexed in the Web of Science database have reached the top 10% most cited publications in their field.
According to the research database Essential Science Indicators (ESI), 74 researchers affiliated with the University of Tartu ranked among the 1% most cited researchers in their field in 2021 (70 in 2020). Five of them (marked with an asterisk) have been included for their research impact in the “Highly Cited Researchers 2021” report by Clarivate Analytics, which is based on ESI data and lists the 6,000 most influential researchers in the world.

According to ESI data, during 2021, the publications by the university’s staff in the past ten years brought the UT among the top 1% of the most cited institutions in 14 out of 21 fields. Two new such fields were added in 2021: engineering and materials science. Ten years ago, the university was among the top 1% in six fields only.

Tsipe Aavik  
Priit Adler  
Helene Alavere  
Sten Anslan  
Mohammad Bahram*  
Mikhail Brik  
Miikael Brosche  
Alexander John Davison  
Tõnu Esko  
Krista Fischer  
Toomas Haller  
Aveliina Helm  
Indrek Hiiesalu  
Inga Hiiesalu  
Angela Ivask  
Heikki Junninen  
Toomas Kivisild  
Hannes Kollist  
Indrikis Krams  
Urmas Kõljalg  
Trinu Köressaar  
Ülo Langel  
Ivo Leito  
Jaan Liira  
Ülo Mander  

Andres Merits  
Andres Metspalu  
Ene Metspalu  
Mait Metspalu  
Kairit Mikkel  
Lili Milani  
Mari Moora  
Reedik Mägi  
Mari Nelis  
Jane Oja  
Elin Org  
Eveli Otsing  
Leopold Parts  
Hedi Peterson  
Kadri Põldmaa  
Sergei Põlme  
Kadri Pärtel  
Meelis Pärtel  
Maido Remm  
Lauri Saag  
Irja Saar  
Ave Suija  
Martin Zobel*  
Mari-Liis Tammeveski  

Tiit Teder  
Leho Tederseoo*  
Tanel Tenson  
Martti Vasar  
Richard Vilems  
Jaak Vilo  
Maarja Öpik  
Helder Almeida Santos  
Vinay Choubey  
Alastair Forbes  
Mikk Jürisson  
Allen Kaasik  
Maire Lubi  
Toomas Marandi  
Pärt Peterson  
Margus Punab  
Jüri Allik  
James Hammilton Love  
Rene Möttus  
Henn Ojaveer  
Anu Realo  
Frank Jacomina Albert Witlox*  
Kessy Abarenkov*

| LT | MV | SV | Natural History Museum and Botanical Garden |

Percentage of publications ranking in the world’s top 10% by citations for their field of all UT publications in 2017–2021

Percentage of publications ranking in the world’s top 10% by citations for their field of all publications in 2021. For comparison, the percentage in 2017 is shown in grey.
ENTREPRENEURIAL UNIVERSITY

The total volume of **R&D service contracts** with the private and public sector in 2021 was €12 million, which is nearly 10% less than a year before. The largest R&D contractors by amount were Bolt Technology OÜ, the University of Helsinki, the Ministry of the Environment and H2Electro OÜ. The services included research on self-driving car technology, genetic studies, fisheries stock assessment and the development of novel hydrogen energy storage devices.

Private companies have commissioned services related to developing future technologies, such as renewable energy solutions and applied research to tackle the health crisis. In 2021, nine of the ten largest private-sector R&D partners were Estonian companies, and their total contribution to the R&D activities carried out in cooperation with the university was €4 million. A year ago, there were only six Estonian companies among the ten largest contractors. The Ministry of the Environment and its agencies continue to be the largest public-sector contractor of R&D services, having invested €1.8 million in environmental research and monitoring.

2021 saw fewer applied research contracts signed with companies using public support measures. This may be due to the fact that the new applied research programme of Enterprise Estonia no longer obliges the companies to cooperate with universities (unlike the previous similar measure, Nutikas).

The new applied research programme, focusing more on product development, was not fully launched in 2021. However, it is good to see an increase in the volume of new service contracts signed without public support measures. The total volume of business contracts was €6.12 million.

For six years, the university has coordinated **Adapter**, the cooperation network of Estonian R&D institutions. 18 institutions have joined it by now. In 2021, Adapter mediated the contacts of research and development institutions most often to enterprises in the manufacturing, science and technical sectors. Enterprises are most often interested in physics, chemistry, and materials science and topics related to food and cosmetics. Adapter is a cooperation partner of Pärnu Management Conference. The 2021 conference focused on the role of research in improving the competitiveness of Estonia.

The university’s **partnership programme** offers enterprises a wide range of teaching, research, and development services. More than 70 enterprises and business associations have joined the programme. In 2021, the university concluded contracts worth €0.56 million with these enterprises, offered more than 50 traineeship positions to students, involved experts in giving lectures and cooperated in large and international projects.

Entrepreneurs have commissioned continuing education courses and offered both financial and non-financial support. A new direction in 2021 was to involve the university’s spin-off companies in the partnership programme. The value of service contracts concluded with them in 2021 was €1.43 million (€0.76 million in 2020).

Tartu Science Park is the university’s main partner in developing an ecosystem for knowledge-intensive enterprises. In 2021, procedures were streamlined so that companies stemming from the university could move more smoothly into the science park’s incubation programmes. Also, two pitching competitions were organised jointly for knowledge-intensive start-ups: Nordic Pitchmatch during sSTARTUp Day and Pitching Hero Competition during the Entrepreneurship Week in October.
Cooperation with the investors’ community also continued in 2021. Together with SuperAngel, a fund of angel investors, the Science Base Camp was organised, where the university’s research-intensive start-ups could test their ideas on customers and potential investors during a development sprint. Two participants of the spin-off programme went to Stage Two, the pan-European competition for business ideas. The European Institute of Innovation & Technology chose the university, together with Tartu Science Park, as a pan-European training partner for research-intensive start-ups. Twenty new teams and researchers joined the university’s spin-off programme in 2021. Five teams completed the programme. In 2021, start-up companies created by UT researchers involved more than €2 million of private investors’ money. The university and the City of Tartu chose ÖÜ TBD-Biodiscovery as the most successful spin-off company of the university of the year based on their financial results. At the Estonian Startup Awards 2021 gala, the spin-off company Up Catalyst ÖÜ received third place in the category The Big Bang of 2021.

In 2021, the university invested €171,000 in protecting its intellectual property. The amounts used for intellectual property protection have tripled over the past three years. At the end of 2021, the university had 39 pending patent applications and 54 valid patents for 27 inventions. Lactobacillus fermentum ME-3 continues to be the university’s most successful object of intellectual property.

From the Feasibility Fund, the university supported 15 projects with a total of nearly €0.5 million in 2021. In the three years of the fund, the university has invested one million euros in experimental development. The results of the first years have shown that it is the first and crucial step for taking research results outside the university. Several research-intensive start-ups have been created based on the projects of previous calls, and the research results have also been applied in existing companies.

The annual Delta Career Day was held online in 2021. More than 45 companies were present, incl. Tele2 Eesti, Eesti Energia, Swedbank and Telia Eesti. The career day aims to bring together IT students and ICT companies to share information about traineeship and job opportunities.

In the workshops of the Starter pre-incubation programme within “Edu ja tegu” entrepreneurship education programme, mentors help students of various disciplines develop their ideas into business models, work on their presentation skills and set up a business. In 2021, 44 teams completed the Tartu programme of Starter, with 152 participants and nearly 30 mentors from outside the university. At the students’ business ideas competition of the international business festival STARTUp Day, teams of the Starter programme won special prizes. For instance, the Tartu City Government’s prize went to team Echo, which is creating an on-demand reusable packaging system for take-away food. The team BerryBot, developing an AI-based strawberry-picking robot, was accepted into the university’s spin-off programme.

In the university-wide optional course “Project-based internship”, from the 2020/2021 academic year, students can also be involved in the development of local life. The innovative learning format “Kodukohta tagasi” (“Back home”) helps to make university studies more practical and gives an opportunity to apply theoretical knowledge to solve a real-life problem or promote local life. In 2021, a pilot project was carried out in the municipality of Põltsamaa, which ended with a community radio broadcast during one summer week. The 2,500-euro Ülo Pärnits Scholarship by Ülemiste City went to a project-based internship team Help Students Learn for their proposals on designing the learning environment of the new building of Tallinn International School. The team comprised seven students of four curricula, supervised by Eneken Titov, a member of the management board of AS Mainor.

In 2021, the preparatory phase of the cooperation project “Development of innovative capacity and entrepreneurial competence of Ukrainian universities: sharing best practice of Estonia” (UnivEntre) started. The project is led by the university’s Startup Lab and funded by the Ministry of Foreign Affairs. A meeting was held with the Ukrainian partner to develop a course for the teaching staff of Ukrainian universities to support entrepreneurship education.
CONTRIBUTION TO SOCIETY

Estonia’s national university

For the many-sided intellectual and creative development of the university’s members, the professorship of liberal arts has been created. A prominent Estonian creative person is invited to fill this position every academic year. In the spring semester of 2021, Olga and Priit Pärn continued in this position. Their most popular lectures have been watched more than 3,000 times on UTTV. For the 2021/2022 academic year, the poet, essayist and translator Hasso Krull was elected to the position of professor of liberal arts. His lecture course “Gods of the Future: Ontological War and the Art of Attunement” focuses on understanding the society of the future. In the autumn semester, Hasso Krull gave 14 lectures, each of which has been watched nearly 1,000 times on UTTV.

The expatriate Estonian professorship aims to promote collaboration between the university’s academic community and top researchers of Estonian descent elsewhere in the world, increase students’ opportunities to attend lecture courses taught by top-level international professors, and introduce Estonia’s national university in the world. In 2021, Jaan Valsiner, Professor of Cultural Psychology at Aalborg University, started as the expatriate visiting professor at the University of Tartu. He is one of the world’s leading cultural psychologists, whose research focuses on the intersections and interconnections of psychology and semiotics, and who has helped to promote Estonian research in the world. Jaan Valsiner’s course focuses on the dynamics of meaning-making in irreversible time, in sign systems, nature, culture and society.

On the Mother Tongue Day, Associate Professor of Applied Linguistics Kristiina Praakli gave a public lecture about changes in the Estonian linguistic environment over the past 25 years. This was the tenth Mother Tongue Day lecture at the university.

The university in regions

The impact of the university’s colleges in Narva, Pärnu and Viljandi reaches far beyond the organisation of studies. For instance, Viljandi Culture Academy coordinates the activities of Viljandi as the UNESCO Creative City of Crafts and Folk Art and has signed a cooperation agreement with the City of Viljandi for the development of creative entrepreneurship.

The City of Pärnu and the UT have signed a five-year cooperation agreement to make the college a prominent centre of higher education and competence in western Estonia. In 2021, the Association of Local Authorities of Pärnu County joined this cooperation. Academia Pernaviensis, founded with the co-support of Pärnu College, aims to promote an academic communication environment in Pärnu.

Narva College organises Estonian language and literature clubs and the largest teachers’ conference in Estonia. The XXII pedagogical conference held in 2021 focused on the trends of multilingual education in Estonia. The college is also one of the leaders of the Ida-Viru Education Cluster. On the college’s initiative, the Ida-Viru research council was established to support the Union of Ida-Virumaa County Municipalities.

For all these societal functions, from 2021, the MoER has also allocated separate activity support to colleges.

Knowledge sharing

In the 2020/2021 academic year, more than 2,700 pupils took part in 48 Youth Academy courses and nearly 800 learners from 69 schools in the workshops programme. More than 2,400 pupils from nearly 230 schools started learning in 55 Youth Academy courses and more than 500 pupils from 43 schools registered for workshops.
The Youth Academy organised the final rounds of the Olympiads of 15 subjects with 931 participants in total. 137 Estonian pupils participated in 22 international subject competitions and Olympiads and brought home four gold, 21 silver and 31 bronze medals. To prepare Estonian pupils for international Olympiads, numerous selection competitions and training camps supervised by the university’s researchers were organised.

In addition to Olympiads, the Youth Academy organised open competitions in astronomy, mathematics, computer science, chemistry and physics. These attracted 1,025 participants. Among online competitions, the mathematics contest Känguru organised at schools was by far the most popular, with nearly 12,000 participants in 2021.

The integrated experimental learning programme for chemistry, physics, biology and mathematics Uurimislabor (‘Investigation Lab’) is meant for pupils of basic and secondary schools. In 2021, a total of 524 pupils took part in the programme.

The Youth Academy coordinates the programme “Talendid Tartusse!” (‘Talents to Tartu!’), supported from the university’s development fund. It offers talented young people more diverse learning opportunities at the UT and a scholarship for the three best applicants. Starting from their first year of studies, students in the programme can take part in research projects or develop their teaching skills besides their curricular courses. 41 students joined the programme in 2021.

The UT Museum had 27,539 visitors in 2020, which is only 42% of the visitor numbers before the pandemic. 364 education programmes were organised, 134 of them online, reaching 7,120 pupils. At the end of the year, a new part of the permanent exhibition – the Cathedral’s Chamber of Mysteries – was opened, seeking answers to questions about the cathedral’s history. In the new project “Art or Science”, a large number of instructional posters and other illustrative teaching materials from the university’s collection were made publicly available in the Estonian museums’ online portal muis.ee and will soon be on display at the exhibition. Supported by the state-funded project “Digitisation of Cultural Heritage 2018–2023”, the large-scale digitisation of collections continued.

During the year, in addition to the permanent exhibitions of the Natural History Museum and Botanical Garden, visitors could see an exhibition about insect pollinators and human-animal interaction, take part in the events of the mushroom week, get to know valued plants from Estonian forests and meadows, and enjoy Veljo Runnel’s photo exhibition “Fifty shades of green”. Led by the Natural History Museum and Botanical Garden, the seventh Nature Festival was held in 2021. As a result of the nature observations marathon, more than 7,500 entries were added to the eBiodiversity data portal from all over Estonia, which is the new participation record.

In spring, the third citizen-science campaign “Looking for cowslips” took place, led by the university’s researchers and the Estonian Fund for Nature. By spring 2021, the campaign spread across entire Europe, so that cowslip observations were done in nearly 30 countries.

By the end of 2021, the UT Library had 31,866 registered users, 30% of them from outside the UT. Students accounted for 58% of the total number of readers. During the year, the main building of the library was visited 122,415 times and 3.8 million virtual visits were registered. By the end of the year, access to 134 online databases had been created via the library. In 2021, the multispectral imaging lab was launched, allowing images to be taken in 16 types of light, incl. infrared and ultraviolet. Photographing different materials in the lab can give researchers important information about what is invisible to the eye: pigments, fibres, underdrawings, retouching, erased or faded lettering and watermarks.

The library staff organised 12 exhibitions, the most significant of which was “Life on the Front Page. Estonian Newspapers 1821-2021”. 

We find talented youth in general education schools across Estonia and support their interest in research and the development of their skills from an early school age until the end of secondary school.

We create opportunities that enable talented youth to prepare for university studies and devote themselves to self-development during their studies.
In collaboration with state authorities, we create a motivating environment for researchers to find solutions to societal problems by involving experts from different fields.

In 2021, more than 5,000 new donors joined the Estonian Biobank. There are more than 207,000 biopank donors by now, which is nearly 20% of the Estonian adult population. Thanks to them, genetics research in Estonia can progress in great strides.

Led by Associate Professor of Neuropsychiatric Genetics Kelli Lehto and Professor of Epi- and Pharmacogenomics Lili Milani, the largest genetic study on mental health and well-being in history was launched. 86,000 biopank donors completed its online questionnaire.

In 2021, also the personality study started, unique in both its size and depth. The study will provide an opportunity to match people’s personality traits with their genetic makeup and determine what life experiences and genes shape personality traits and how these traits translate into health. The study is led by two Estonian researchers: Associate Professor of Behavioural Genetics Uku Vainik from the University of Tartu and Reader in Psychology Rene Mõttus from the University of Edinburgh.

Feedback from society

The national research award for outstanding lifetime achievements in research and development went to Professor emeritus Jüri Talvet, whose contribution to Estonian research is founding Spanish studies and bringing the study of Spanish literature and culture to a world-class level. In 2021, Jüri Talvet was also awarded the title of the Honorary Citizen of Tartu.

Academician and Professor of Physical Chemistry Enn Lust and Associate Professor in Physical and Electrochemistry Alar Jānes received the national research award in chemistry and molecular biology. Their series of works was entitled “Development and application of operando methods for investigation of porous electrodes of Na-ion batteries and other porous materials and fuel cells”.

Academician and Professor of Human Physiology Eero Vasar, Associate Professor of Translational Medicine Mario Plaas, Associate Professor in Human Physiology Mari-Anne Philips and Associate Professor in Psychiatry Liina Haring received the national research award in medicine for their research “Translational research in neuropsychiatry: from genetically modified laboratory animals to schizophrenia spectrum disorders in people”.

Professor in Marine Ecology Jonne Kotta received the national research award in geology and biology for his series of works “Marine life in the winds of climate change”.

The Estonian Academy of Sciences elected Maris Laan as the Academician of Public Health and Elmo Tempel as the Academician of Astronomy and Astrophysics. The research of Professor of Human Genetics Maris Laan focuses on reproductive genetics and genomics. Professor of Astronomy Elmo Tempel mainly studies galaxy formation processes, the mapping of large-scale structures in the universe and the origin of dark matter.

Academician and Professor of Geology and Mineralogy Kalle Kirsimäe was awarded the Order of the White Star, 3rd class. He was recognised for his contribution as a leader of Earth’s crust projects and for research on the mineralogy and geochemistry of industrial and mining wastes and their potential application, which has shaped the Estonian energetics landscape.

Three university employees received the Order of the White Star, 4th class. Professor emerita of Language Technology Mare Koit was recognised for her work in teaching and developing the discipline of language technology. Her research focuses on artificial intelligence, machine translation and the modelling of oral communication. Professor of Civil Law Irene Kull was recognised for her scientific-theoretical work on issues related to the law of obligations and for drafting practical legislative proposals on that basis. Order of the White Star, 4th class, was also awarded to a geologist and visiting professor at the University of Tartu Alvar Soesoo.

Order of the White Star, 5th class, was awarded to Head of the Lifelong Learning Centre Tiia Ristolainen, who is a leader of adult education, incl. the University of the Third Age.
Order of the Estonian Red Cross, 1st class, was awarded to Professor in Medical Microbiology Irja Lutsar for her work as the head of the government’s COVID-19 scientific advisory council, giving research-based and well-considered recommendations and measures that helped curb the spread of the virus in Estonia.

The Young Environmental Scientist Award was given to Associate Professor of Atmospheric Physics Velle Toll, who studies the climatic impact of human activity to improve weather prediction accuracy in the future.

The Tiitu Sild memorial lifetime achievement award for long-standing and systematic popularisation of research and technology was granted to Tõnu Viik, long-time astronomer and scientific advisor of Tartu Observatory, who has worked in the field of astronomy for nearly 60 years. He has worked actively to make the observatory known in Estonia and other countries and make people aware of the usefulness of astronomical knowledge.

The best science and technology communicator prize was awarded to Associate Professor of Computational Neuroscience and Artificial Intelligence Jaan Aru, who is able to present brain science in an engaging way to children and ministry officials alike, showing that knowledge about the brain can help us act more effectively.

Another research communication award was given to curators of the Voronja Gallery’s season 8 summer exhibition “Trinity – Science. Art. Fiction”, Professor of Human Genomics Tõnu Esko and Associate Professor of Materials Chemistry Kaija Põhako-Esko. They received the first prize for activities and series of activities to popularise science and technology for showing science from a novel perspective and bringing it closer to people who otherwise have no contact with science.

Professor of Urban and Population Geography, Academician Tiit Tammari received the Medal of the Baltic Academies of Sciences for bringing Estonia to the forefront of modern human geography.

In 2021, both main prizes of the National Contest for University Students went to doctoral students of the University of Tartu: Sander Ratso for his research paper “Electrocatalysis of Oxygen Reduction on Non-Precious Metal Catalysts” and Juhan Saharov for his research paper “From Economic Independence to Political Sovereignty: Inventing ‘Self-Management’ in the Estonian SSR”. A total of 62 papers by students of the University of Tartu were awarded a prize or a mention in the contest.

In the field of youth work, MoER recognised Junior Lecturer in Youth Work of Narva College Kaur Kõtsi for his contribution to the promotion of professional standards in youth work and the development of youth work curricula.

In 2021, lead editors of media outlets in the Estonian Association of Media Enterprises named the COVID-19 scientific advisory board the friend of the press: Professor of Medical Microbiology Irja Lutsar, Professor of Mathematical Statistics Krista Fischer, Associate Professor of Affective Psychology Andero Uusberg, Professor of Surgical Diseases Peep Talving, Lecturer in Infectious Diseases and physician of infectious diseases at Tartu University Hospital Pilleriin Soodla and Professor of Applied Virology Andres Merits.

The university received the honorary title “Spordisõber 2021” (Friend of Sports) from the Ministry of Culture and the Estonian Olympic Committee for allowing athletes admission under special conditions and a more flexible schedule of studies.

Feedback from the Estonian population shows that the university’s work is recognised: 84% of the respondents to the survey by Kantar Emor consider the University of Tartu to be the most reputable higher education institution in Estonia. Respondents say that the university’s reputation lies, above all, in reliability, high-level education and research, and the high value of diploma in the labour market. In addition, respondents regard the competition for studies at the university as tight and university graduates as successful. Also, the internationality of the national university is seen as a great advantage.
We provide students with an integrated university experience, giving them possibilities to participate in student organisations, cultural activities, sports organisations, professional societies and representative bodies.

Culture and sport

Tartu Academic Male Choir at its traditional Christmas concert at the university’s assembly hall

Concert of the Academic Women’s Choir of the University of Tartu “Pöördumine” at the university’s assembly hall

Brass band Popsid performing at the Car-Free Avenue in Tartu

Concert of the University of Tartu Folk Dance Ensemble at the Car-Free Avenue in Tartu

The U16 and U18 teams and the first team of the University of Tartu Academic Sports Club won gold medals in the finals of the 2021 Basketball Cup
Employees

At the end of 2021, a total of 3,941 people worked at the University of Tartu either part-time or full-time. The number of full-time equivalent (FTE) employees was 3,166. 2,127 people worked in academic positions, incl. 241 professors, 65 of whom (27%) were women.

The university’s staff included 469 foreign nationals from 73 countries. 377 international employees held an academic position. International employees accounted for 18% of the total number of UT academic staff. Most of them were junior research fellows (123) or research fellows (99). 45 foreign nationals were employed as professors.

1,471 of academic staff members held a PhD (69%). The requirement to hold a PhD or an equivalent qualification applies to professors, associate professors, lecturers and research fellows.

The average gross monthly salary of UT employees was €2,095. In a year, the average gross monthly salary increased by 8%: 7.7% among academic staff and 8.9% among support staff. The average salary increase was the biggest for teachers (17.2%), junior lecturers (11.7%), lecturers (10.5%) and associate professors (9.5%). The average salary increased by 8.1% for professors, 7.4% for research fellows and 6.8% for junior research fellows.

Average salary (in euros) by positions and faculties in 2021
We apply the principles of equal treatment and the best practices of the university.

In 2021, the Gender Equality Plan was developed, which is the first major step towards addressing this issue more extensively and systematically at the university. In the plan, the university has set four main objectives for the following four years:

- to enhance the members’ awareness of gender equality and to show its connections with the university’s main activities (teaching and studies, research, service to society);
- to promote gender equality among the members through gender-responsive recruitment, creating equal career opportunities, career counselling and mentorship, reducing the gender pay gap, creating flexible working arrangements that support work-life balance;
- to involve, in a balanced way, employees of both genders in governing bodies and decision-making;
- to promote an organisational culture that values the equal treatment of all members, incl. to improve the members’ awareness of equal treatment and sexual harassment; to focus on preventing and solving of problems.

Training courses

43% of academic staff have actively participated in the development of teaching skills in the past five years.

The university supports the development of teaching and supervising skills of academic staff by offering training courses, counselling, collegial feedback communities, the scholarship of teaching and learning, and teaching conferences. All teaching staff members who want to enhance their teaching skills can get support from the academic developers of each faculty and instructional designers. In 2021, 64 training courses and seminars on the development of teaching skills were organised for 1,643 participants.

The main courses for developing teaching and supervising skills include “Learning and Teaching in Higher Education”, “Supervising Student Papers”, and the English-taught “University Teaching.” There are many other courses on teaching-related topics, including support for using the Moodle e-learning environment, effective teaching methods, flipped learning, analysing feedback, creating audio lectures, creating group cohesion and organising online exams.

As in the previous years, the UT allocated 12 grants for the systematic development and research of teaching skills. Together with earlier grant recipients, the university has supported 84 teaching staff members in researching and developing their teaching and sharing the results.

For the third year, the “Visit your colleague” week took place, during which teaching staff members opened the doors of their lecture halls to colleagues. In 2021, the programme included 40 open lectures and attracted 99 visits. One of the week’s goals is to encourage teaching staff to discuss teaching and learning with colleagues. They are encouraged to visit the classes of other faculties because one may get valuable ideas from the work of colleagues from other fields of study.

In 2021, the annual conference “From Lecturer to Lecturer” was dedicated to the topic of learning and teaching spaces. Nearly 300 participants registered for the conference. Discussions about the learning space ranged from physical spaces that support learning and traditional lecture halls to modern virtual environments supported by artificial intelligence. The workshops explored how to organise secure and supervised online tests, how educational psychology can be applied in the system to support teaching staff, and how to delimit the learning space. Participants shared their experiences of teaching digital and media literacy and discussed teaching during the corona pandemic. In online poster presentations, teaching staff members shared their experiences of changes and innovations in teaching.
We provide our international staff with high-quality support services to ensure that they quickly adapt to the working and living environment.

30% of international staff have taken an Estonian language course in the past five years.

To promote good language use and orthography, four training courses and seminars took place, attended by 150 UT employees. The UT supports the Estonian language learning of its international staff. 74 international employees and 16 family members learned Estonian, so the number of international employees who learned Estonian increased by 23% compared to the previous year. Interest in learning Estonian is constantly growing.

The university organises various adaptation-supporting events for international staff and their families. There were fewer events and participants during distance learning, but some events did take place, such as a guided orienteering tour, a Christmas event, and a cooking workshop. 58 people took part in these events.

For the professional development of staff, 152 training courses, seminars and events took place in 2021 for 3,975 participants. English language courses, especially for the development of conversation skills, continue to be popular. Also, training courses related to the development of teaching skills, self-management and mental health were in high demand. A Russian language course was organised in 2021. The majority of courses were delivered online.

Eight training courses were offered to managers during the year, with 221 participants. The most popular training course was the one on conducting remote meetings. Training courses were also offered on topics such as performance appraisals, strategic planning, and coping with disagreements and changes.

In 2021, the first edition of the 360° feedback survey for managers took place, aiming to support the self-analysis and development of managers, collect feedback to better understand the expectations and needs of their colleagues and partners, and map the strengths and development needs of managers. After the survey, a feedback session with a consultant helped each manager to reflect on the results and set new development goals. Feedback was given to the members of the Rector’s Office, heads of institutes, colleges and institutions, heads of support units and vice deans – a total of 69 senior-level managers. Each manager received feedback from about 15–20 colleagues and cooperation partners. Involving different parties in the survey helped get a balanced overall picture of how the manager’s activities are perceived.

2021 saw the continuation of the training of peer group counselling leaders which started a year earlier. Over two years, 42 employees have completed the training programme. In 2021, masterclasses were held where peer group counselling leaders could improve their knowledge and exchange experiences. In peer group counselling, participants can get support, inspiration and solutions to work-related problem situations from their colleagues. In a trusting and constructive atmosphere, solutions are sought to stories that group members want to discuss. It is a well-established form of collaboration that helps maintain a fresh outlook on work and benefits both the participants and the organisation as a whole.

527 people took part in the university’s second mental health and well-being conference. The solution-centred online conference offered food for thought and useful techniques for maintaining one’s mental health and coping with stress. Speakers talked about how to support one’s mental fitness, how to rest one’s brain during busy times, why it is important to fit exercise into working life and how to do it smartly. The power of collegiality and techniques for creating a good working atmosphere were also discussed. By the end of 2021, the UTTV recording of the conference had been watched more than 3,300 times.
Work environment

In 65% of units, at least 3/4 of staff are completely or generally satisfied with their job.

1,436 employees (37% of all staff) responded to the 2021 job satisfaction survey. The annual survey provides employees with an up-to-date overview of the work environment in their unit and the university, and gives managers feedback and ideas on how to design, maintain and develop a good work environment.

Compared to five years ago, employees are significantly more likely to perceive that the university cares about its staff. Ratings to opportunities to be involved in decision-making, the timely communication of management decisions and the recognition for good performance have also improved.

At the university, employee satisfaction mostly depends on interesting work, salary and work atmosphere. 97% of respondents found their job interesting, and 90% were satisfied with their work atmosphere. As in previous years, ratings for salary fairness were the lowest: only 67% of respondents considered their salary fair. The ratings for satisfaction with recognition (77%) and work-life balance are also relatively lower: 79% of university staff find that work leaves enough time for their personal life.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Did not agree</th>
<th>Agreed</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work is interesting</td>
<td>3%</td>
<td>97%</td>
</tr>
<tr>
<td>My work leaves me enough time for personal life</td>
<td>21%</td>
<td>79%</td>
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<tr>
<td>The information I require for my job is available to me</td>
<td>7%</td>
<td>93%</td>
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<tr>
<td>I am satisfied with my physical work environment</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>The atmosphere at my workplace is positive</td>
<td>10%</td>
<td>90%</td>
</tr>
<tr>
<td>My good work performance receives recognition</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>I receive a fair salary</td>
<td>33%</td>
<td>67%</td>
</tr>
<tr>
<td>I am proud to work in the University of Tartu</td>
<td>5%</td>
<td>95%</td>
</tr>
<tr>
<td>All in all, I am satisfied with my job</td>
<td>7%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Job satisfaction survey in 2021 (percentage of agreement and disagreement with the statement)

Recognition

The university recognises its members and outstanding members of society for their impressive deeds and achievements. There are three levels of recognition:

- central forms of recognition (the award “Contribution to Estonian National Identity”, granting of honorary doctorates and honorary fellowships, the award “Pillar of the University”, and honorary decorations);
- annual awards to university members (research award, contribution to society award, language award, teaching award, teaching quality award, teaching staff of the year award);
- recognitions by structural units.

With the “Contribution to Estonian National Identity” award, the UT annually recognises individuals whose creative work has made an outstanding contribution to promoting the national identity of Estonians and Estonia. In 2021, the UT “Contribution to Estonian National Identity” award went to composer Erkki-Sven Tüür.

The university’s highest recognition, the University of Tartu Grand Medal, was awarded to the leader of the development of hydrogen technology in Estonia, Professor of Physical Chemistry, Academician Enn Lust, whose long-term outstanding work has helped to promote sustainable research-based green energy.

In addition, the university awarded 18 University of Tartu Medals, 69 Badges of Distinction, 12 Stars of Appreciation and 15 decorations “100 Semesters at the University of Tartu”.

In 2021, the senate appointed four honorary doctorates:

- Professor Marja–Liisa Helasvuo from the University of Turku;
- Professor Astrid Stadler from the University of Konstanz;
- Professor Mart Saarma from the University of Helsinki;
- Director of the European Bioinformatics Institute and Deputy Director of the European Molecular Biology Laboratory Ewan Birney.
The UT **research award** 2021 was granted for developing tumour-penetrating peptides for drug delivery, which will allow using smaller drug doses in cancer treatment in the future, significantly reducing the side effects of drugs. The award went to Professor Tambet Teesalu.

The UT **contribution to society award** 2021 was granted for introducing the nationwide wastewater monitoring method. The method has been used since autumn 2020 for detecting the spread of the coronavirus. In the future, wastewater monitoring can be applied for various goals, such as detecting illegal drugs and drug residues. The award went to Professor Tanel Tenson and his research team, incl. Associate Professor Veljo Kisand, Research Fellow Helen Tammert, Research Fellow Peeter Laas and Specialist Kristel Panksep.

The UT **language award** 2021 was granted for research and development combining language and technology in machine translation and neural speech synthesis. The decisive factor in choosing the awardee was that digitisation enables to ensure the development and preservation of the Estonian language. The award went to Professor Mark Fišel and his research team, incl. Head of Applied Natural Language Processing Liisa Rätsep, Junior Research Fellows Hele-Andra Kuulmets and Andre Tättar and Programmers Annika Laumets-Tättar, Rasmus Lellep, Agnes Luhtaru, Taido Purason and Maali Tars.

**Teaching staff of the year** in 2021 were

- Teacher of Norwegian Language Antonina Kostina from the Faculty of Arts and Humanities;
- Professor of Communication Studies Triin Vihalemm from the Faculty of Social Sciences;
- Professor in Dermatology and Venereology Külli Kingo from the Faculty of Medicine;
- Lecturer of Botany Ene Kook from the Faculty of Science and Technology.

The **teaching quality award** is given to recognise an institute, college or faculty for activities supporting the quality of teaching that have been designed and implemented successfully and effectively in cooperation of staff and students over the past three years. The teaching quality award 2021 went to the Institute of Pharmacy for the continuous and systematic development of pharmacy studies.

To value good teaching, the **teaching award** was given out in 2021 for the first time. The award was given to recognise three activities that value effective cooperation, development and innovation in the university’s degree studies and continuing education:

- the development of clinical practice for the master’s curriculum in Physiotherapy (team: Kadri Medijainen, Margot Bergmann, Monika Mets, Doris Vahtrik);
- experience seminars on the development of teaching methodologies at the Faculty of Science and Technology and the Institute of Estonian and General Linguistics (team: Reidar Andreson, Toomas Esperk, Krista Fischer, Heili Kasuk, Evely Kirsiaed, Asko Löhmus, Janika Raun, Maido Remm, Vesal Vojdan, Kaire Üboleht, Helen Plado, Maigi Vija);
- Estonian language and mathematics state examination courses for upper secondary school students (team: Ilona Tragel, Külli Habicht, Maigi Vija, Kristel Mikkor, Tiina Kraav, Kerli Orav-Puurand, Karin Täht).
International cooperation

In internationalisation, the university continues to focus on developing network-based cooperation, which allows having a say in EU higher education and research policy-making as an equal partner.

The project of the European Universities Initiative ENLIGHT and the related network of nine comprehensive European research universities are off to a good start. In 2021, the network’s project ENLIGHT RISE received a positive funding decision from the Horizon 2020 programme “Science with and for Society” (SwafS). The project focuses on developing research support services and launching joint research projects.

Although most international seminars and conferences were virtual or hybrid events, also some high-level visits and meetings took place during the year. Ambassadors from many countries visited the university to mark the 100th anniversary of the establishment of diplomatic relations with Estonia or the 30th anniversary of the re-establishment of diplomatic relations, and several exhibitions, lectures and concerts took place.

In March, the University of Tartu and the University of Göttingen organised a joint virtual conference, “The Impact of Digitisation on Internationalisation. Challenges and Opportunities for the Future of Universities”. It was the opening event of the annual culture festival “German Spring” led by the German Embassy.

At the EXPO 2020 World Expo in Dubai, which opened in October 2021, a week introducing Estonian education was held in December. The Estonian delegation led by the Minister of Education and Research Liina Kersna included Rector Toomas Asser. Education was very much in the spotlight at this year’s EXPO, with a focus on educational needs and possible solutions to meet them. The University of Tartu was permanently represented in the Estonian pavilion with its own screen and short videos introducing the contribution of Estonian researchers to solving global problems.

Communication channels

The functioning of the marketing and communication work at the university was analysed and reorganised in 2021. The role, content and appearance of the university’s magazine Universitas Tartuensis were also renewed, and the construction of the university’s new website was completed. The new website was launched at the beginning of 2022.

In 2021, the university joined the Brussels-based collaboration and information agency Science Business Network, which mediates information on the latest developments in research and innovation policy and brings together leading organisations from industry, research, innovation and policy-making in the EU and its member states. There are 30 universities in the network, incl. the University of Tartu and Tallinn University of Technology from Estonia.

During the year, the Estonian media mentioned the University of Tartu 20,663 times, which was 54.2% of the media coverage of all Estonian public universities. Estonia’s major media channels published more than 6,700 stories on research topics related to the University of Tartu. The university was mentioned in the media most often in connection with the corona pandemic, which accounted for almost half of all media coverage of the university. Research-related media coverage has increased steadily in recent years. This is due to both the increased interest of different audiences and the researchers’ willingness to present their work. The university offers its staff counselling and training on research communication.

In 2021, the Facebook initiative “Ask a researcher anything about coronavirus” took place. It was led by young researchers who felt that new ways to alleviate vaccine-related fears were needed and that direct communication channels should be used to address people’s concerns. Within a week, researchers received more than 70 questions. The answers were grouped by topic and were published in major news portals and local newspapers. The bold initiative of UT researchers inspired the “Kust sa tead?” network to organise a similar campaign a few months later, with a wider range of partners and answers in both Estonian and Russian.
Traditional events

In 2021, graduation ceremonies took place in a large tent on Toome Hill in Tartu.

The opening ceremony of the academic year was held in front of the main building.

At the opening ceremony, the new mascot Tiksu greeted students for the first time.

Memorial Day in Raadi cemetery.

Rector’s reception for international staff.

To celebrate the 102nd anniversary of Estonia’s national university, candles were lit in front of the main building.
Finances

At the end of 2021, the consolidation group of the University of Tartu consisted of the university and eight other legal entities. The group’s operating revenue in the 2021 fiscal year was €233.9 million, up 14.6% since 2020.

The university’s financial strategy supports the implementation of the strategic plan by means of effective budgeting at all levels of the university. The financial strategy aims to ensure the long-term financial sustainability of the university and all faculties, and increase the efficiency of the university’s activities in all fields of study and research and in the service of society.

In 2021, the university met the general goals set in the financial strategy:
- cash flows from economic activities are positive; result: +21.5 million euros;
- the university’s net assets form at least 75% of the balance; result: 76%;
- loan burden does not exceed 25% of the annual revenue; result: 9%.

Main indicators of the field and volume of activity of the legal entities in the consolidation group in thousand euros

<table>
<thead>
<tr>
<th>Legal person in public law</th>
<th>Field of activity</th>
<th>Operating revenue</th>
<th>Total net gain / loss</th>
<th>Balance sheet total</th>
<th>Net assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tartu Ülikool</td>
<td>Higher education, research</td>
<td>229,693</td>
<td>9,111</td>
<td>348,961</td>
<td>266,991</td>
</tr>
<tr>
<td>NORDWISE BioTech OÜ</td>
<td>Research and development, sales of BioCC products</td>
<td>148</td>
<td>-86</td>
<td>2,902</td>
<td>2,830</td>
</tr>
<tr>
<td>Academus Hostel OÜ</td>
<td>Accommodation</td>
<td>0</td>
<td>0</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>E-Kyla Arendus OÜ</td>
<td>Software development for student residences</td>
<td>15</td>
<td>-3</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td>BioCC OÜ</td>
<td>Research in natural sciences</td>
<td>1,726</td>
<td>96</td>
<td>1,254</td>
<td>511</td>
</tr>
<tr>
<td>MTÜ Tartu Üliõpilasküla</td>
<td>Student accommodation</td>
<td>3,789</td>
<td>-55</td>
<td>1,608</td>
<td>853</td>
</tr>
<tr>
<td>UniTartu Ventures OÜ</td>
<td>Intellectual property investment in enterprises</td>
<td>0</td>
<td>-79</td>
<td>85</td>
<td>71</td>
</tr>
<tr>
<td>MTÜ Tartu Ülikool Akadeemiline Spordiklubi</td>
<td>Students' sports activities</td>
<td>3,134</td>
<td>228</td>
<td>620</td>
<td>434</td>
</tr>
<tr>
<td>MTÜ Tartu Üliõpilasmaja</td>
<td>Students’ cultural activities</td>
<td>432</td>
<td>7</td>
<td>445</td>
<td>259</td>
</tr>
<tr>
<td>University of Tartu group</td>
<td></td>
<td>233,947</td>
<td>9,222</td>
<td>351,579</td>
<td>268,574</td>
</tr>
</tbody>
</table>
Major investments in 2022 with projects’ estimated costs:

- reconstruction of the Lossi 3 academic building will be completed (€8.4 million);
- renovation of the Nooruse 7 student residence will start: design in 2022, construction in 2023–2024 (€3.7 million);
- renovation of Biomedicum will be completed, and the building will be connected to district cooling (€2.5 million);
- reconstruction of the roof of the university library will be completed, and a solar park will be constructed (€2.4 million);
- renovation of the university’s main building will start, which is planned to be completed over three years (€2.1 million);
- the Old Anatomical Theatre will be renovated for the Information Technology Office, Youth Academy and Johan Skytte Institute of Political Studies (€1.7 million);
- the Struve building (Uppsala 6) will be renovated for the Human Resources Office (€0.8 million);
- the extension of the building of the Estonian Marine Institute at Mäealuse 14a, Tallinn, will be completed (€0.9 million).

Major investments in 2021 with projects’ total costs:

- reconstruction of the Jakobi 5 academic building for the Institute of Education was completed (€7.6 million);
- reconstruction of the Liivi 2 academic building for the Institute of Ecology and Earth Sciences was completed (€7.2 million);
- reconstruction works were done in Pärnu College (€0.8 million).
ACTIVITY REPORT

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Photos on the cover:
• Kait Tamra performing on the Tartu City Piano in front of the university’s main building
• Presentation of the award “Contribution to Estonian National Identity” to Erkki-Sven Tüür
• Graduates of the Faculty of Medicine
• Presentation of the world’s first autonomous hydrogen vehicle
• Olga and Priit Pärn handing over the professorship of liberal arts to Hasso Krull
• Recording of the New Year’s video greeting in front of the university’s main building
• Mascot Tiksu at the ice rink on Town Hall Square