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# **University Development 2030**

Technische Universität Braunschweig



### Foreword

The University Development Concept 2030 is our joint framework that maps out the strategic development of TU Braunschweig. The concept was developed in several steps with broad participation from the university community, and describes our vision for TU Braunschweig.

In a world that is changing ever more rapidly, and where new conflicts and challenges require flexible and rapid adaptation, the prioritisation and implementation of our objectives remains a dynamic process. It is my conviction that, with our strong focus on engineering and our emphasis on interdisciplinary collaboration, we will continue to be anchored in the region, internationally visible and open to new and current issues, actively shaping our performance dimensions of Research, Study & Teaching, Transfer, Governance & Administration in a constructive and forward-looking manner.

It is important to me that we develop our objectives and strategies in a mutual and

participatory manner, so that we can find support through a common understanding while maintaining our agility. As a university, it is important for me that we meet the challenge of being a place of constant institutional and personal development that responds to the latest scientific findings and demands.

This second version of 'University Development 2030' provides the framework for the newly developed strategies in the performance dimensions and overarching areas, and builds on the developments and successes that our University – and therefore all of you – have achieved over the past two years, despite a number of truly challenging circumstances.

I would like to thank all of you who, through your daily commitment and hard work, have made this possible.



oto: Kristina Rottig | TU Braunschweig

President of TU Braunschweig Prof. Angela Ittel

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# TU Braunschweig – Profile & Potential

Based on an extensive participatory process of involving the members of TU Braunschweig, the University Development Concept defines a framework for the future direction of the university.

As a university, we have a responsibility to contribute to the shaping of societal change and the furthering of scientific progress that benefits its development. Hence, as a technical university with a clear focus on engineering and a strong emphasis on the life, natural and social sciences, and with our long-standing research priorities, we focus on key scientific and societal issues of the future: mobility, metrology, engineering for health, and the city of the future. Our scientists address these future-orientated issues in an interdisciplinary fashion across faculties, and work successfully in large-scale collaborative projects. We have a clearly recognisable profile that makes our expertise visible and makes us attractive for strong partnerships at the national and international level. The clusters of excellence 'QuantumFrontiers' and 'SE²A – Sustainable and Energy-Efficient Aviation' at TU Braunschweig are an essential and successful part of this, and contribute to raising our profile.

All scientists at TU Braunschweig are invited to contribute their expertise and ideas to the research priorities and to further develop our cutting-edge research.

Our university is part of a regional scientific ecosystem that is internationally positioned and makes itself known through strong partnerships. From this, we aim to develop a vision that transcends the boundaries of our own disciplines and works more closely with our regional partners to shape the scientific landscape of the region. We see close and strategic cooperation – both within TU Braunschweig and with our university and non-university partners

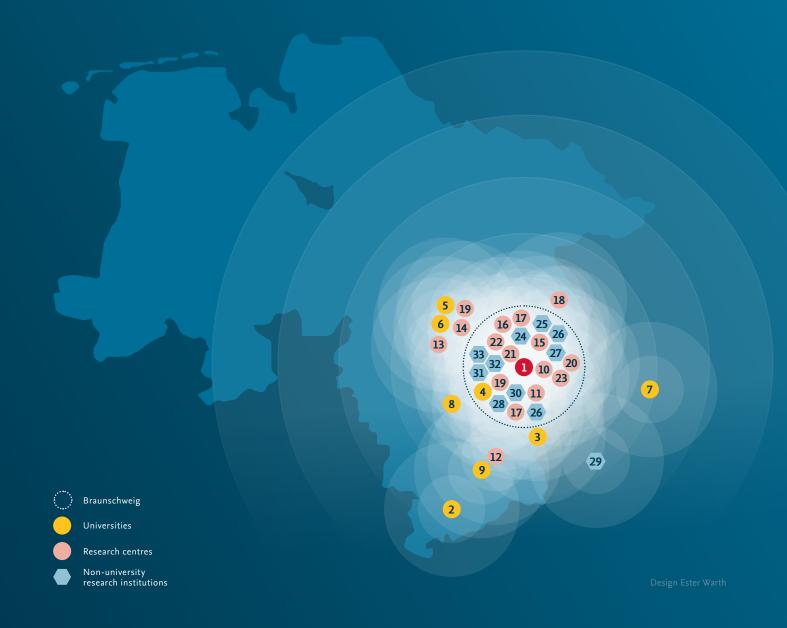
at the local, regional (see Figure 1) and international level  $^{C}$  – as the decisive basis for our future development:

We see particular potential in our strong roots in the city and region of Braunschweig, with its many strong partners, and in our unique research density<sup>1</sup> in the European context. We firmly believe that it is only through a holistic developmental and interdisciplinary research approach that we can meet the global challenges of the present and the future, the changes in society, and the competition for talent.

This approach (see Section 2) is based on democratic and collaborative principles across all of a university's performance dimensions and knows no disciplinary or structural boundaries. It makes an effective contribution to the United Nations' 2030 Agenda for Sustainable Development, offers compatibility for partners, and creates clear spaces for action (see Sections 5-8). We want to play an active role in shaping change in this scientific ecosystem and see ourselves as an initiator of this process. It is this open and collaborative approach that makes us attractive to the next generation of scientists who, as changemakers, will help shape our future.

1 Eurostat regional yearbook 2023, page 152

# LOCAL AND REGIONAL COOPERATION PARTNERS AND CENTRES



### FIGURE 1 8/24

- 1 TU Braunschweig
- 2 University of Göttingen
- 3 Ostfalia University of Applied Sciences
- 4 Braunschweig University of Art
- 5 Leibniz University Hannover
- 6 Hannover Medical School
- 7 Otto v. Guericke University Magdeburg
- 8 University of Hildesheim
- 9 Clausthal University of Technology

- 10 BatteryLabFactory Braunschweig
- Braunschweig Integrated Centre of Systems Biology
- 12 Energy Research Centre of Lower Saxony
- 13 Coastal Research Centre
- L3S Research Center Trustworthy AI & Digital Transformation
- 15 Laboratory for Emerging Nanometrology
- 16 Automotive Research Centre Niedersachsen
- 17 Aeronautics Research Centre Niedersachsen
- 18 Open Hybrid LabFactory
- 19 Peter L. Reichertz Institute for Medical Informatics
- 20 Center of Pharmaceutical Engineering
- 21 Center for Mechanics, Uncertainty and Simulation in Engineering
- 22 Research Institute of Teacher Education
- 23 Center for Fire Research

- German Aerospace Center
- Fraunhofer Institute for Wood Reasearch Wilhelm-Klauditz-Institut WKI
- 26 Fraunhofer Institute for Surcface Engineering and Thin Films IST
- Fraunhofer Institute for Toxicology and Experimental Medicine
- 28 Helmholtz Centre for Infection Research
- JKI Julius Kühn-Institut Federal Research Centre for Cultivated Plants
- DSMZ-German Collection of Microoganism and Cell Cultures GmbH
- Leibniz Institute for Educational Media '
  Georg Eckert Institute
- Physikalisch-Technische Bundesanstalt
  National Metrology Institute
- 33 Johann Heinrich von Thünen Institute Federal Research Institute for Rural Areas, Forestry and Fisheries



### Our model

University Development 2030 involves all organisational units and status groups of our university. Together, we regularly reflect on the overarching goal to be achieved through the holistic development of TU Braunschweig, from which the strategic principles and objectives for performance and overarching dimensions are derived. These guide TU Braunschweig in its development and provide orientation for development planning. We achieve our objectives by coordinating and managing strategic activities across all performance and overarching dimensions in a targeted fashion.

The concept of holistic university development (see Fig. 2) systematically links the four central performance dimensions of our

university – Research, Study & Teaching, Transfer, Governance & Administration – with the overarching dimensions of digitalisation, internationalisation, equality & diversity, and knowledge exchange, which are strategically important for TU Braunschweig. The paradigm of sustainability <sup>CF</sup> is the guiding principle for all our decisions in all performance and overarching dimensions.

As part of this holistic development plan, process and development targets have been formulated for all performance dimensions. These are in line with current national and international standards on higher education, competitiveness, and practices. All members of the university are encouraged and called upon to take

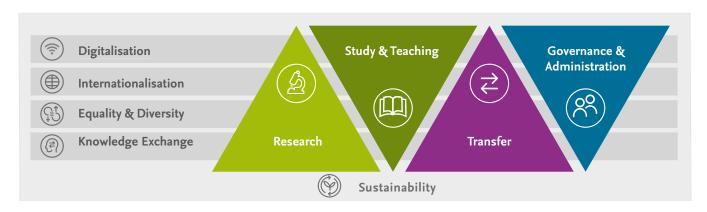


Figure 2: Holistic development model of TU Braunschweig

### Holistic Development

on responsibility in their respective fields of activity and to position their activities within the framework of the performance dimensions for the holistic development of TU Braunschweig.

The paradigms of holism and sustainability underpin the development objectives of TU Braunschweig. Only on the basis of these guidelines the TU Braunschweig will remain sustainably effective and competitive in the future, both nationally and internationally.

The university's development planning is consistently organised in a participatory manner and requires its members to identify strongly with TU Braunschweig and personal responsibility as a central element of the self-understanding of its organisational units. Strategies have been developed for each of the overarching dimensions, which complement our university development concept in the respective dimension and elaborate on the strategic objectives. The following sections summarise these objectives. In addition, the sections on the performance dimensions (see Sections 5-8) establish the respective links between the performance and overarching dimensions and describe the activities and objectives at the interfaces.





os: Kristina Rottig | TU Braunschweig

## Digitalisation



We are actively shaping the digital transformation and harnessing the potential of digitalisation in Research, Study & Teaching, Transfer, Governance & Administration to operate more efficiently and sustainably, and to support the diverse life situations of our university members.

This transformation is already underway and will fundamentally change the university. Shaping it will require changes in the role and requirements profiles of staff and students, needs-based training and skills development, contextual management tools, a willingness to standardise heterogeneous processes, but also to adapt teaching and learning content. In addition, digitalised working environments are needed that enable flexible working and learning in terms of time and space, and which promote a sense of belonging without neglecting personal interactions.

In order to successfully navigate the digital transformation, we are investing in the development of digital infrastructures and technologies that benefit both academic and administrative sectors and are based on sustainable principles. These include intelligent building technologies, high-performance centralised computer servers, resource-efficient technology and the integration of innovative learning platforms that provide students

with a personalised and interactive learning experience. Furthermore, digital and Al-enabled tools and cloud services will facilitate research and foster collaboration beyond institutional and geographical borders.

Our vision of a digitalised university strives to create an inclusive and supportive environment that empowers all members of the university community to reach their full potential. We also place great emphasis on data protection and IT security to protect our IT systems from attack and to ensure the confidentiality and integrity of our University's data.

### Internationalisation



We see ourselves as a cosmopolitan and global research university which is attractive for students, scientists, and academics from all over the world. We experience internationality as an enrichment of our university culture and as a process of mutual learning.

The promotion of exchange and experience in an international context is of great importance to our members and to our university. To achieve this, we rely on a broad network of international collaborations. In particular, we work closely with our strategic partners<sup>2</sup>, who help us to enhance our international standing. We ensure that our partnerships and collaborations are interest-driven, competency-based and risk-reflective.

Our central location in one of Europe's most research-intensive regions makes us particularly attractive to international guests and shapes the intercultural study and working environment at our university. There is always an international dimension to our activities in all performance dimensions. Internationality is taken into account at all levels of decision-making and in all performance dimensions.

For us, internationalisation is a key part of making our courses attractive. Studying at TU Braunschweig offers our students both international content and international networking. This is a prerequisite for our graduates to pursue successful careers in research, business, politics and other areas of society. The internationalisation of our university is a proactive and ongoing process. It is also the basis for our success in winning over attractive collaboration partners, committed students and outstanding academics.

<sup>2</sup> Tampere University, Finland; University of Rhode Island, USA; University of Strathclyde, Scotland; Universidad Nacional Autónoma de México, Mexico

# **Equality & Diversity**



We are committed to a diversity-conscious university that offers equal opportunities: We are aware of our social responsibility as an educational institution and a place of personal development, and as a university community, we strive for equitable participation for all.

We want to be a university that strives for equality, recognises diversity, reduces discrimination, and whose members are committed to democratic values, an inclusive society and protection against discrimination.

In all our activities, equality stands for equal opportunities for all genders. The aim of the legal equality mandate is to increase the number of women in science and in top positions, to pay them equally and to ensure their equal participation in decision-making processes. TU Braunschweig is constantly developing as a family-friendly university: We take into account the diverse life plans of our members, recognise individual care challenges and support students and employees in balancing care responsibilities with their studies and careers in the best possible way.

Diversity describes the variety of people or groups, and diversity management stands for a conscious and respectful approach to

social diversity. This involves members of our university valuing each other's individuality and working together to promote an environment where everyone can study and work together, free from discrimination. Multiple perspectives and personalities enliven and enrich the discourse at universities; they are the basis for excellent and innovative research, scholarship and teaching, as well as the administrative services and structures that support them. Engaging with diversity contributes significantly to the holistic development of our organisation and creates the necessary conditions for a forward-looking, competitive and funded university. Our strategic guidelines can be found in TU Braunschweig's diversity strategy.

# Knowledge Exchange



Knowledge exchange is an important hallmark of our work and, alongside technology transfer<sup>C</sup>, knowledge transfer<sup>C</sup> and relationship management, describes an essential dimension of our transfer activities.

We think in terms of a circular transfer: from the university to society and the economy, in order to address their needs and expectations, and from society and the economy to the university, in order to take up and jointly formulate relevant issues and impetuses. Knowledge exchange refers to any process by which academic ideas and findings are shared and external perspectives and experiences are incorporated and co-constructed into our university work. According to our understanding of transfer, the main actors in an innovation system (science, politics, business and civil society) do not interact in a unidirectional push-pull relationship, but are engaged in a multi-layered, dynamic and multidirectional exchange. This emphasises the role of society as an important stakeholder in innovation systems and the importance of actively involving the public in innovation projects.

Knowledge exchange activities and processes should be mutually beneficial to all parties involved, with the aim of translating knowledge, ideas and research findings into outcomes and impact. Knowledge exchange encompasses a range of activities, formats and skills that enable close collaboration between universities and partner organisations. Partners in this context include all conceivable regional, national and international actors with whom we collaborate, e.g. companies, NGOs, cultural institutions, research institutions, foundations, social economy entities, associations, religious communities as well as political and community actors. By integrating knowledge exchange tools, we aim to significantly increase the scope of our work in the performance dimensions.

# Sustainability



The paradigm of sustainability guides our decisions in all performance and overarching dimensions. Sustainability in its ecological, economic and social dimensions is at the heart of our strategic direction and objectives.

Our responsibility to the environment and to our fellow human beings in the here and now, as well as to future generations, is the basis of our contribution to sustainable social transformation. With excellent research on future-oriented topics, the integration of sustainability into teaching and research, efficient transfer, knowledge exchange and results-oriented administrative processes, we actively shape, change and, in particular, take into account the need for environmentally sustainable action.

As members of our university, we critically examine the impact of our actions and make responsible decisions in the interest of sustainability. We promote an organisational culture that enables all members of TU Braunschweig to act sustainably and that prioritises sustainability. We are harnessing the potential and contribution of digitalisation to sustainable transformation and are working to better assess and quantify the impact of new developments on sustainability objectives in order to respond

appropriately to the high level of dynamism in this field. Through the development of in-depth, sustainability-related professional and interdisciplinary skills, we enable future generations of academics to meet current and future challenges so that they can play a competent, confident and critical role as responsible and conscientious citizens in a strong democracy. As an internationally oriented research university, we act in the knowledge that complex problems and issues of sustainable social change can only be solved in open and global contexts for thought, research and action.



# **Objectives and values**

Our strategic objectives and the framework for our actions are set out in the University Development 2030 vision and the holistic development model. In times of multiple crises, we are more aware than ever of the urgent need to join forces with our regional, national and international partners to harness the full potential of our research ecosystem. We are building networks to anticipate, research and communicate the pressing issues of our time.

In the future, science, industry, politics and society will have to interact even more closely in order to jointly find solutions and measures for the major challenges of our time. To this end, we are developing ourselves and our strategic objectives together with our collaboration partners along the performance dimensions of our development model. Equitable and inclusive scientific collaborations and strategic partnerships, as well as international academic exchange, are crucial strengths for conducting excellent research and thus contributing effectively to overcoming global challenges.

We are consistently implementing this vision of University Development 2030. This is done both in line with the overarching objective at the university level and in the context of the specific objectives in the derived strategies of the performance and overarching dimensions. We prioritise our objectives so that they can be pursued in a timely fashion with the necessary resources. We therefore focus on the following key overarching themes unitl the end of 2025.

# Empowering, training and recruiting changemakers

We aim to be an attractive university and employer for a new generation of scientists, employees and students. People who look beyond the boundaries of traditional disciplines and dare to collaborate and drive change. Our members should be prepared to deal with the demands and challenges of a changing world. To this end, innovative teaching formats are as important to us as a demand-driven range of english-language teaching. We also enhance our attractiveness to students and faculty by consistently integrating sustainability issues into our teaching curricula, involving students in the university's strategy development processes, and engaging in targeted student marketing. As an attractive employer, we offer our employees unique research infrastructure and modern working conditions. We are characterised by a cosmopolitan, appreciative and tolerant approach to each other. Our work environment is one of trust, personal responsibility, a strong service orientation and flexible job organisation. Only by constantly adapting and dynamically aligning ourselves with the demands of our environment can we live up to our ambition to attract, develop and retain talent. The improvement of internal processes is therefore an important area of focus. To achieve this, we promote a culture of error, risk and trust. We also promote reliable, lean and increasingly digital administrative processes. This process is supported through innovative development processes at all levels through continuous development formats, the transparent and effective sharing of ideas and data, and collaborative working and research methods.



o: Marek Kruszewski | TU Braunschweig

### Science ecosystem:

# Strong research networks and good research frameworks

To further develop our excellent potential and remain internationally competitive, we will continue to network with strong institutional partner organisations at the regional and international levels. At the regional level, we are using our good relations with our non-university, municipal and business partners to establish and expand a scientific ecosystem in the Braunschweig region, creating a structure in which the partners create transparency through their strategic planning and recognise the added value of increasingly synchronising them. An important part of building mutual trust is being open to exchanging information and permeability for all member groups. This will make the Braunschweig region more attractive internationally as a centre of science and research to talented individuals and for strategic partnerships at all levels.

Cross-faculty priorities form the organising principle of our cuttingedge research and transfer activities. We consolidate and promote our areas of research excellence, in particular the existing research clusters, through the potential of the humanities and social sciences, the intensification of interdisciplinary projects and the systematic expansion of our research infrastructure. We provide excellent conditions for researchers through new research buildings, the expansion of digital infrastructure and demand-driven support services. In order to remain one of the best technical universities in Germany, we attach great importance to the consistent development of these structures.



hoto: Frank Bierstedt | TU Braunschweig



### Vision and mission



We develop science-based solutions to address the societal challenges of today and tomorrow. Our basic research is the foundation for the profitable transfer of research findings to society. We believe that interdisciplinarity and freedom of research and teaching are essential for innovation. In our four main research areas of metrology, mobility, engineering for health and the city of the future, our researchers are therefore working across disciplines to answer complex research questions.

As one of the largest technical universities in Lower Saxony, we are integrated into and have a high visibility in national and international research networks. We not only bring the strengths of the university to the table, but also benefit from the close networking within our high-performance regional ecosystem.

By creating excellent conditions for research and providing structured support for scientific careers, we strengthen our position in the competition for the most talented scientists.

# Challenges and opportunities

The challenges facing the research community are characterised by a framework that is currently undergoing rapid change. New areas of research are emerging, particularly at the interfaces between disciplines. More and more knowledge is being generated in increasingly shorter periods of time and, thanks to digitalisation, is rapidly made available. Open science formats have further opened up research, but at the same time there is a growing challenge to reliably verify research findings.

Universities are confronted with barely sufficient basic funding for research, especially in comparison with national research institutions, while at the same time facing stiff competition for national and international research funding.

In addition, competitive research infrastructure and the degree of digitalisation in the respective institutions are crucial for the attractiveness of research locations, and at the same time a cost factor. A greater international alignment of all governance and administrative structures is also a prerequisite for attracting top scientists, and requires additional resources for a successful transformation into an internationally active research institution.

The research profile of TU Braunschweig is characterised by the four interdisciplinary research priorities of mobility, metrology, engineering for health and the city of the future, with the associated research centres. A dynamic development of these research priorities, combined with an openness to new fields of research, can tap into new areas of research. The priorities address relevant societal issues in an interdisciplinary approach and cover the full spectrum from knowledge-based basic research to application-oriented innovation transfer.

Clusters of excellence and special research areas have emerged from the research priorities, enabling TU Braunschweig to significantly increase its scientific visibility. Furthermore, the significant expansion of the research infrastructure and strong

national and international collaboration have helped to position TU Braunschweig internationally as an attractive university with a strong research focus. Going forward, these areas are to be made sustainable, securing the current competitive advantage.

The further development and maintenance of an internationally competitive research infrastructure and the expansion of digitalisation in research and administration will therefore be of central importance for the further development of research-relevant framework conditions. The existing range of services for researchers, from administration and research funding to the support and promotion of open science formats, as well as transparent career paths and structured and continuous career support, will be further developed in order to remain attractive for researchers from all over the world.

# Strategic objectives and principles



TU Braunschweig aims to be a leading technical university in Germany, particularly for the core subjects and with the research topics of its focal points, and to achieve visibility in the global research arena through outstanding research achievements.

This takes place in an integrated approach between the engineering sciences and the natural, human, social and economic sciences.

Important indicators<sup>3</sup> of research success and thus of the attractiveness of a research location continue to be the volume of third-party funding, the acquisition and successful implementation of large research projects in national and international competition, and the publication of high-quality, internationally visible articles, preferably in an open science medium. The aim is to achieve a high number of patents and spin-offs, which indicate a successful transfer of research results into the real world and the relevance of the research findings. Joint publications with renowned international collaborators are the result of our scientists' extensive network. In addition, TU Braunschweig, together with

its strategic partners and in the context of the European CoARA initiative, is actively pursuing the development of alternative approaches to the internal evaluation of research performance.

The specific goal must therefore be to continuously improve the conditions for research at TU Braunschweig in order to attract excellent scientists. The basic prerequisites for this are having competitive (research) infrastructure and a creative, open research environment, as well as a service-oriented, research-supporting administration with process implementations that support and facilitate its core activities, especially for international researchers.

3 Research indicators are highly specific to the field and cannot be adequately presented in their entirety in the context of the present text. These indicators are considered at the departmental level in faculty development discussions.

#### Research excellence

The research profile of TU Braunschweig provides an environment in which all subjects can contribute to interdisciplinary research projects. The objective is not only to expand particularly visible and high-performance research areas over the long term — especially those related to the clusters of excellence and special research areas — and to secure existing competitive advantages, but also to identify and promote areas with potential. In addition to maintaining and developing our clusters of excellence<sup>CF</sup>, we intend to prepare and launch additional cluster initiatives. We also support our core research areas in their efforts to attract special research areas, so that corresponding applications can be submitted from each core research area by 2030.

The four core research areas and their associated research centres provide a solid foundation for this. Competitive internal research funding (e.g. start-up funding from the Impulsfonds) combined with active support from Research Services creates space for the development of creative research ideas and increases the number of successful research proposals in national and international contexts. Prudent and targeted hiring and staffing policies, combined with talent development and continued investment in research infrastructure, including the acquisition of competitive funding, also strengthen collaborative activities in core research areas.

Research at TU Braunschweig is always particularly successful when it is able to fall back on established and trustworthy structures of cooperation. The clusters of excellence and special research areas are examples of fruitful collaboration between scientists from different institutions and disciplines and the synergistic use of research infrastructure and resources. Following these examples, interdisciplinary research projects within and between the

research priorities are specifically promoted, and cooperation with our university's and non-university research institutions in the region and internationally is established in the form of researchoriented ecosystems.

When competing with other scientific institutions, it is particularly important to attract motivated and talented scientists to TU Braunschweig. This is achieved by providing targeted support to talented individuals early on in their careers. In order to be attractive to this target group, structured and clearly communicated opportunities are needed to best prepare them for the next step in their academic careers. To this end, a framework is being created in which people with the career goal of a professorship in particular can acquire relevant skills and competencies in a targeted manner during their time at TU Braunschweig. This includes not only the opportunity to conduct independent research during the postdoctoral phase, but also the acquisition and application of teaching, leadership, and communication skills. Transparency about internal and external career options, support via the graduate academy and the postdoc programme, and the opportunity to discuss career development with supervisors and mentors will encourage and optimize well-founded career decisions. As part of a strategic human resources policy, measures for the active recruitment of (international) academic staff will be further expanded, particularly in cooperation with the Research Services and Strategic University Development units and the Welcome Support Centre.

### Research



#### DIGITALISATION

Powerful digital tools that support scientific work in areas such as collaboration, communication, and dissemination are essential for successful research. Furthermore, the creation of good framework conditions for the implementation of the open science strategy and the availability of efficient central IT-related services (e.g. high-performance computing, research data management, Al tools, etc.) are essential.

To increase the transparency and visibility of research projects, a research information system will be implemented to provide centralized access to information on ongoing and completed research projects. This will also help researchers to find suitable internal collaborators for the development of new joint projects.



#### INTERNATIONALISATION

Top-level research predominantly takes place in an international context. Therefore, TU Braunschweig must increase its attractiveness to international scientists at all phases of their careers and intensify its efforts to initiate and participate in international research projects and collaborations. For both approaches, support structures in Research Services and administration designed for international exchange, as well as a welcoming culture in the central and decentralized areas of TU Braunschweig, are indispensable. These measures include, for example, projects to internationalize the administration, the support of an active recruiting office with a focus on international candidates, and the expansion of the Welcome Support Centre for international scientists.



### **EQUALITY AND DIVERSITY**

In line with the principles of equality and diversity, it is a selfevident objective that the recruitment and promotion of talented individuals and employees in research must be free of discrimination with regard to all dimensions of diversity. TU Braunschweig, which has received several awards as a family-friendly employer, also aims to promote the compatibility of family and a research career. In addition, the targets set out in the central equal opportunity plan to increase the proportion of women at all stages of their academic careers continue to apply. To this end, existing and new measures will be (further) developed to promote an open and non-discriminatory working and research environment and to improve personnel selection and assessment processes (e.g. training courses on unconscious/implicit bias). Measures to attract women to scientific careers, particularly in the STEM fields, remain a key focus. The development, implementation, and evaluation of such measures are carried out in close cooperation with the offices of Equal Opportunity, Strategic University Development, as well as Professional and Personnel Development. Gender- and diversityrelevant aspects of research will be systematically evaluated and, where appropriate, initiated or integrated in the form of specific research projects. To this end, cooperation with the BMBF-funded GeDiMINT programme of the Braunschweig Centre for Gender Studies at TU Braunschweig will be expanded and promoted.



### KNOWLEDGE EXCHANGE

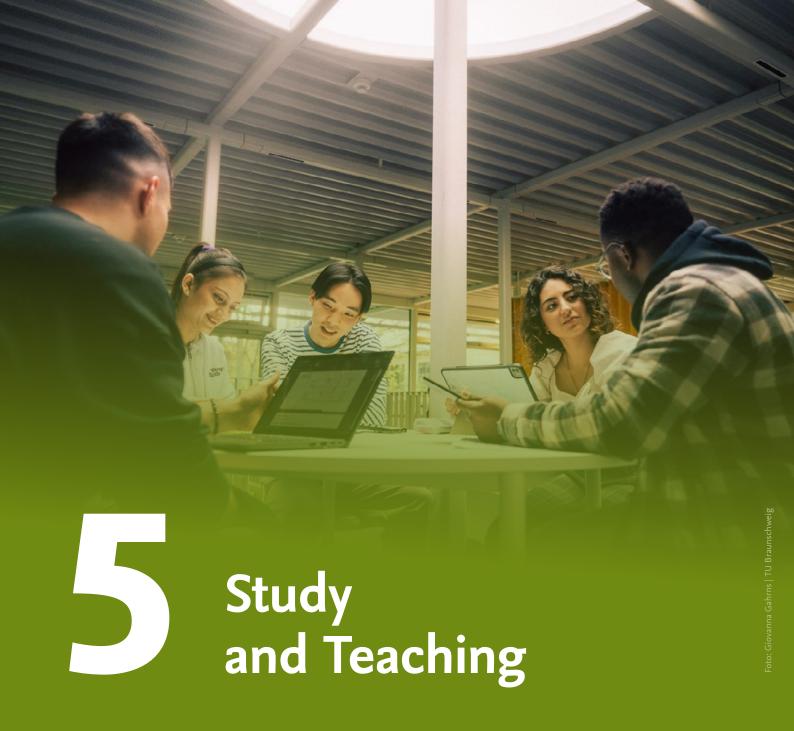
Knowledge exchange is the generic term for all types of exchange of knowledge, experience and technologies between the university and a wide range of actors, ranging from other scientific institutions to industry or socio-political actors. In this vein, the areas of technology transfer and knowledge transfer in particular are supported with appropriate measures in close coordination with the Transfer Service and the Communication and Press Service, in order to improve the transfer of research results into economic and societal applications and to inform the public in an appropriate manner. At the same time, formats are supported that can be used to intensify active exchange with society (e.g. citizen science formats, real-world laboratories, etc.). New approaches to interdisciplinary and transdisciplinary research projects can also be generated using these formats. Tailored interdisciplinary training and advisory services for scientists in the early stages of their careers will be expanded (GradTUBS, postdoc programme) in order to strengthen technology transfer and start-up activities in particular.

contributions to the sustainability objectives of the UN. The creation of appropriate technical, organizational and infrastructural frameworks (offerings for open science, research software engineering, AI, etc.) also ensures the sustainability of research data, methods and results.



### SUSTAINABILITY

Sustainability is understood to have dimensions: ecological, economic and social sustainability, whose objectives may be in conflict with each other. In many research projects, at least one, if not all, of the dimensions of sustainability are either addressed as a direct aspect of the research or considered in the assessment of the impact of the research findings. Based on the interdisciplinary research profile of TU Braunschweig, research makes relevant



### Vision and mission



The quality of our teaching is held to the highest standards. Our objective is to enable our graduates to operate internationally and professionally in and actively shape a constantly changing society and world of work. Our degree programs empower students to think and act in a sustainable way.

We offer our teachers a wide range of professional development opportunities to help them meet the highest standards of teaching. Our quality standards are achieved in collaboration with our strong institutions, which provide the technical and physical infrastructure, support services and quality management.

# Challenges and opportunities

A wide range of processes of change, such as digital transformation, (de-) globalisation and climate change, are currently shaping research, the economy and society, as well as university teaching. Our graduates therefore not only need to develop sound scientific, technical and methodological knowledge, but also the comprehensive skills to come up with innovative and creative solutions to important societal problems and to act as changemakers in this respect. The ability to think and evaluate critically, independence, and an open mind are also characteristics of our graduates. The continued development of quality management in study and teaching with the objective of system accreditation holds great potential. Furthermore, our (quality) understanding of teaching is set out in our mission statement and forms the basis for continuous quality development in study and teaching.

Due to demographic change, the number of students is falling, while the demand for skilled workers remains high. As a technical university with a focus on STEM subjects, we will increasingly need to attract students by offering an appealing range of courses. It is therefore important to systematically anticipate and evaluate societal changes in the development and especially in the creation of new courses, and to incorporate these changes into new, attractive courses.

In their professional lives, our graduates are expected to operate professionally in an international environment and to be familiar with international perspectives in their field of study. This is why we will be stepping up the internationalisation of our teaching. Courses taught in English make us attractive to international students as a university or as an exchange partner, while also benefiting our German-speaking students. We want to enable all students to gain international experience, and will strengthen the framework for them to do so. We aim to increase the proportion of outgoing students and to increase the proportion of international students to 20% across the university.

Digital teaching is a key factor in the competition for students: By expanding it, we are creating versatile and effective teaching formats, providing flexible access to learning materials, breaking down barriers, and increasing the academic success of our students. At the same time, we are an university that relies on in-person attendance, where interaction with students in courses is essential.

We wish to capitalise on the potential that arises from the diversity of our student body and teaching staff. As a result, we create individualised access to learning and teaching that provides equal opportunity and strives to be accessible. Studying and teaching at TU Braunschweig are consistently aligned with the principles of sustainability, as described in our sustainability strategy. In addition, the United Nations Sustainable Development Objectives will be further integrated into the degree programmes and made visible in existing courses in the coming years.

# Strategic objectives and principles



We are committed to providing our students with an excellent education and the best career prospects. To do so, we place students and their success at the centre of our teaching and learning culture.

We continually develop our degree programmes and competency profiles to meet the needs of academic research, professional life, and society. This ensures an attractive range of educational programmes. Our research-based teaching gives students the opportunity to test their scientific skills by working on their own practical and research questions. In doing so, they will not only acquire in-depth knowledge of the subject, but also strategies for solving problems based on modern scientific methods.

The academic success of our students is of paramount importance to us. That is why, in addition to excellent teaching, we offer our students advice and support in their self-directed learning process, for example through extensive counselling and coaching services. We always encourage independent, responsible and creative work, both individually and as part of a team, as well as the acquisition of future-oriented skills. We believe in

the active participation of students in the design of courses and campus life. Along with staff, students contribute to the continuous improvement of the programme's structures, fostering a committed and collaborative relationship that lasts beyond the course.

As part of our internationalisation efforts, we support the integration and academic success of international students and faculty. In every course, we create opportunities for international experiences and support the global networking of our students.

Our teaching and learning culture recognises and values diversity and actively promotes equal opportunities and equality. We use digitalisation in a targeted manner to reduce possible disadvantages and break down barriers in order to create an inclusive learning environment.

We contribute to the sustainable development of society. That is why we integrate ecological, economic and social aspects of sustainability into our teaching to promote resource-efficient lifestyles.

Degree programmes

By continuously developing and updating our curricula, we at TU Braunschweig offer our students an attractive range of courses with a clear structure and a wide choice of specialisations. Innovative learning and teaching formats, digital flexibility in teaching and modern equipment are the cornerstones of this approach. The commitment of highly qualified teachers, both in terms of didactics and subject matter, enables us to integrate outstanding interdisciplinary and transdisciplinary research into our teaching. Our collaborations with international and regional research institutions, businesses, and public bodies also reflect our focus on research-based learning to provide our students with an excellent academic and professional education.

The range of courses needs to anticipate and reflect social change. It should enable our students to develop a critical and analytical distance to relevant current issues on the basis of the academic and professional skills they have acquired, while at the same time empowering them to be agents of change. Our portfolio of study programmes is based on a systematic analysis of the needs of the future.

The involvement of all stakeholders in clear structures characterised by transparent and efficient communication is the basis for excellent study organisation and support structures adapted to the diverse needs of a student body that is characterised by diversity. A powerful campus management system with services

that are easy to access for both prospective and current students is a cornerstone of this. Support measures are constantly being developed and implemented to ensure that studying, care work and paid work can easily be reconciled.



to: Marek Kruszewski | TU Braunschweig

### Study and Teaching



### **DIGITALISATION**

We support the study programmes with digital learning opportunities and create a space for active learning in the classroom. Our aim is to develop targeted subject-specific digital and hybrid teaching and learning scenarios and to embed them systematically in degree programmes. This will enable us to provide more support for individual learning. It will also make it possible to study in a variety of life situations. That is why we make our digital teaching accessible. To ensure that the integration of digital teaching-learning scenarios into our teaching can be holistically successful, we are also developing our teachers' skills in the digital organisation of teaching and examinations.

Collaboration at TU Braunschweig is particularly important to us. Digitalisation will help further this objectives. In this way, we are creating both physical and virtual learning spaces for students and teachers to collaborate on campus and beyond. We are also developing strategies to provide and fund a versatile teaching and learning infrastructure.



### INTERNATIONALISATION

We educate for a global labour market, integrating international career perspectives and promoting international mobility. To this end, we are increasing the proportion of classes taught in English and continuing to develop and expand our network of international partner universities in attractive target countries.

To strengthen internationalisation, we support mobility opportunities (incoming, outgoing, curriculum agreements with international partner universities) and integrate international and intercultural aspects into curricula and campus activities. Mobility should be facilitated by a reliable culture of recognition of academic achievements. As an international and multilingual university, we are committed to ensuring the integration and success of our international students and staff. This includes valuing, utilising and developing everyone's diverse linguistic and intercultural skills. We also provide opportunities to help international students transition into the German labour market.



### **EQUALITY AND DIVERSITY**

As an open and diverse university, we are committed to providing equal access to our university for all our students. We aim to identify and reduce potential disadvantages resulting from different starting and study conditions by developing targeted compensatory measures for the success of all students. To this end, we provide appropriate guidance and support services that take into account the diversity of our students and their different life situations. We promote individual learning through target group-specific and inclusive teaching, thereby improving learning conditions. By incorporating gender equality and diversity-relevant issues into our teaching, we aim to empower our students to participate confidently in shaping relevant social discourses.



### KNOWLEDGE EXCHANGE

Central to our university's self-image is the transfer of socially relevant knowledge and the effective communication of this knowledge. Social engagement and professional learning should be seen as one and the same. We want to provide our students not only with an excellent technical education, but also with the ability to transfer their knowledge and skills to different societal contexts. The aim is also to impart a sense of democratic social responsibility. Interdisciplinary teaching formats, project-based learning approaches and collaboration with external partners from business, politics and society form the basis for this.

Our university promotes the dialogue between science and society and participates in the communicative exchange that both contributes to solving current social challenges and highlights the social responsibility of the sciences.

velopment Objectives, ensuring a comprehensive commitment to sustainability with the support of the Green Office.

take on sponsorships for the United Nations Sustainable De-



#### SUSTAINABILITY

As a technical university, we are committed to providing our students with knowledge- and technology-based solutions that contribute to the sustainability of science, business and society. This is always done in keeping with our commitment to sustainability and the vision of enabling resource-efficient living. Our programmes encourage students to think and act in a future-oriented way. Sustainable development aspects are integrated into all degree programmes. We encourage our students to take an active part in the transformation of our university by providing events and opportunities for them to do so. Faculty also



## Vision and mission



We meet today's global challenges with a passion for innovation. We make our research-based knowledge available to society and industry rapidly, easily and in high quality, while at the same time drawing on stimuli from society and industry. Located in one of the strongest research regions in Europe, we have strong regional links with non-university research institutions and are constantly expanding these partnerships, including internationally. With our transfer activities, we are following a path that aims to create impact, i.e. to have an effect at the level of civil society and to offer spaces to jointly shape the transformation of the present for a better future. In our Transfer and Innovation Ecosystems (TIES), we accelerate transfer through successful collaborations and value-creating partnerships.

## Challenges and opportunities

TU Braunschweig is located in a region characterised by a large number of innovative companies and high-performance research institutions, as well as a vibrant civil society. Braunschweig, the 'City of Science', boasts excellent prerequisites for transfer activities, both for collaboration between universities, regional research institutions and innovative companies, as well as with numerous social actors. At the same time, the region is facing massive transformation processes, such as changes in the world of work and mobility, as well as the effects of climate change.

In the face of social change and increasingly complex global challenges, universities are increasingly called upon to translate research and transfer into innovation and to make knowledge easily understandable and accessible, thereby contributing to solving global problems. The broad understanding of transfer at TU Braunschweig therefore consciously involves a wide range of stakeholders from science, industry, politics and civil society in the innovation process. We prioritise transfer, dialogue and participation formats that, more than ever, are focused on the mutual and collaborative exchange of ideas, knowledge and technologies. In this manner, knowledge and research results are to be communicated externally and external ideas and impulses will be communicated internally to generate new research questions and perspectives, as well as to promote innovation. In the long term, the success of the transfer activities at TU Braunschweig will depend on whether it is possible to motivate people to carry out these activities and on the extent to which nonscientific actors provide significant support for these activities.

With this in mind, TU Braunschweig's transfer strategy of focuses on transdisciplinary<sup>4</sup> transfer and innovation ecosystems (TIES), for which we have formulated our own TIES-specific objectives. The six TIES are: TIES Research, TIES Valorisation, TIES Entrepreneurship, TIES Next Generation, TIES Studying and Teaching, and TIES Alumni. Our transfer mission is to expand our existing interdisciplinary networks by involving external partners to create vibrant ecosystems. The TIES, which we are actively developing and helping to shape, offer the potential to advance application-oriented, cutting-edge research together with all possible actors in the innovation process, leading to effective technological and social innovations with impact. Long-term national and international partnerships on equal terms, effective knowledge transfer and knowledge sharing (mutual, multidirectional exchange) characterise our collaborative work and enable TIES to become a driving force for collaboration and innovation.

4 According to a definition by Jürgen Mittelstraß, '[...] transdisciplinarity refers to science and/or research breaking free from its subject-specific, disciplinary boundaries and defining its problems with a view to non-scientific, societal developments in order to solve these problems independently of disciplines and subjects'.

## Strategic objectives and principles



Our fundamental objective in transfer is to develop and expand the transfer and innovation ecosystems in a targeted fashion in order to expand existing transfer activities, to create space for new transfer pathways and innovation processes, and to establish and promote a broad understanding of transfer.

To achieve this, the TU Braunschweig has set itself the strategic objectives of a) anchoring transfer institutionally and b) developing extended central transfer structures as part of its transfer strategy.

The measures formulated for institutional anchoring establish consistent transfer governance within the university. The Transfer Service unit combines expertise in technology transfer, knowledge transfer, relationship management and continuing education. As a central unit, it coordinates the implementation of the transfer strategy in cooperation with the Vice President for Transfer and Innovation. The transfer service involves other transfer-relevant persons and institutions (including research centres, faculties, the Communication and Press Service),

supports the development of transfer and innovation ecosystems, and creates close links between central and decentralised organisational units for transfer and innovation. At the same time, the Transfer Service works closely with Innovationsgesell-schaft Technische Universität Braunschweig mbH<sup>C</sup> (iTUBS) in the area of knowledge and technology transfer and with Haus der Wissenschaft GmbH<sup>C</sup> (HdW) in the area of science communication, strategically expanding the transfer portfolio in a concerted fashion.

The measures formulated to develop extended, centralised transfer structures make transfer activities visible and establish an incentive system to strengthen a commitment to transfer. A wide range of transfer activities is to be recognised, valued and

specifically promoted in the spirit of a broad understanding of transfer.

Existing transfer indicators for technology transfer (including patents, start-ups, collaborations) will be revised to include further transfer activities in knowledge transfer, relationship management and knowledge exchange in line with our broader understanding of transfer, and provided with an appropriate, compatible set of indicators for our purposes. In order to better reflect the performance dimension of transfer, these indicators will be included in individual target agreements with our faculty. TU Braunschweig also uses national and international benchmarks and performance indicators, including the Stifterverband's 'Transfer Barometer', which includes not only technical subjects but also the humanities and social sciences. At the same time, a transfer monitoring system is to be developed alongside this, to record and visualise transfer activities and serve as a basis for the strategic further development and impact measurement of TIES.

#### The concept of transfer/innovation ecosystems

Each of the six transfer and innovation ecosystems benefits from the central strategic objectives and actions formulated above, and is given the opportunity to develop its transfer potential along a specific sub-objective, briefly presented here, within an independent specific TIES governance structure.

The concept of transfer and innovation ecosystems fits seamlessly with TU Braunschweig's aim to anchor its performance dimensions in the regional ecosystem. TIES Research focuses on strengthening transdisciplinary relationships in society, politics and business, as well as the proactive involvement of industry partners. TIES Valorisation focuses on the systematic identification and exploitation of innovations with economic and/or societal benefits based on the active and modern IP management developed, in particular with the involvement of iTUBS. TIES Entrepreneurship's ambitious goal is to become one of Germany's start-up hotspots and to create sustainable, successful spin-offs that have an impact on the economy and society.

TIES Next Generation is interested in and attracts young people from different walks of life and social backgrounds to research, science and higher education. TIES Studying and Teaching aims to involve strategically selected industry partners in teaching and learning, thereby providing our students with universally applicable transfer and innovation skills. TIES Alumni focuses on strengthening individual links and relationships with our alumni around the world who, as a visible part of our vibrant community, work with us to make effective use of their time, talent and financial commitments (time-talent-treasure).

## Transfer



### **DIGITALISATION**

When developing and integrating the transfer monitoring system, it should be considered from the outset how it can be integrated into the university's common documentation and database systems (e.g. research information system). The aim is also to digitalise transfer processes that are suitable for digital transfer services. To this end, we are reviewing existing services, processes and forms and professionalising the range of needs-based and digital transfer services both within and outside TU Braunschweig for all areas of transfer.

Digital tools such as cloud services and video platform services support collaborative work and network the sciences with our external partners from industry, civil society and politics. In addition, social media platforms offer opportunities to build transfer marketing, make transfer activities visible and contribute to the profiling of our university.



## INTERNATIONALISIERUNG

Within the framework of transfer and innovation ecosystems, we deliberately involve international partners in order to increase internationality and interculturality. Both our strategic university partnerships and our presence in Singapore, iTUBS Singapore, offer a wide range of opportunities to establish and expand international transfer partnerships. Our relationship and networking activities in TIES Alumni actively targets international personalities who, as multipliers, can also open doors to new partnerships abroad.

We use our many contacts with international research institutions and commercial companies to strengthen our TIES, and attend international transfer conferences to develop our relationships with international transfer organisations. Through the exchange of good or best practices, valuable insights are gained to strengthen the transfer to our university according to international models.



## **EQUALITY AND DIVERSITY**

We involve a wide range of people in the design, conception and implementation of our transfer activities and see ourselves as enablers of opportunity. We offer participation and opportunities for everyone to shape and constructively secure the future of human life in partnership with technological and social innovation. Within the transfer and innovation ecosystems, we consciously target social groups that have been under-represented in transfer activities, taking into account equality and diversity standards.

We use tailored and empirically validated formats to target first-generation prospective students, for example, to inspire young people from diverse backgrounds to pursue a university education. We embed social and women's entrepreneurship through support services to increase equality and diversity in our start-up activities.



## KNOWLEDGE EXCHANGE

Knowledge exchange is an important hallmark of our work and describes an essential dimension of our transfer activities. Our multi-directional relationships are designed to ensure that all involved parties benefit from mutual exchange. We think in terms of a circular transfer: from the university to society and the economy, in order to address their needs and expectations, and from society and the economy to the university, in order to take up relevant issues and impetuses.

Knowledge exchange is firmly anchored in TIES' transdisciplinary mission statement. Consciously working with different actors on equal footing recognises the value of specific expert and lay knowledge and is essential for co-designing sustainable change.



## SUSTAINABILITY

Transfer activities should generate an impact, i.e. have an effect at the level of civil society, in order to actively shape the transformation of the present. For us, transformation means being guided by the United Nations' 17 sustainability objectives and taking responsibility for contributing to global justice and sustainable development for present and future generations.

The development and promotion of a transfer mindset for all university members is to be sustainable and long-term. We are building structures and services to promote transfer and cooperation skills that support continuous, multi-directional exchange with civil society, business and political partners. Alumni play an impor-

tant role in this, opening valuable doors to partnerships as vital ambassadors and as part of our student-employee-alumni lifecycle



Photo: Kristina Rottig | TU Braunschweig



## Vision and mission



TU Braunschweig is characterised by horizontal and decentralised governance with the corresponding business processes. We act transparently with an awareness of common objectives. This makes decisions easier to understand and builds trust. The principle of subsidiarity applies.

**Administration 4.0:** Our innovative university administration is state-of-the-art in its structures and processes, its development dynamics, and its own continuous professionalisation. The university administration is service-oriented, responsible, sustainable, transparent, open-minded, digital and communicative. Together, we provide the best service for excellence in research, study & teaching and transfer, and through our activities, create the necessary scopes for our other performance and overarching dimensions.

# Challenges and opportunities

The administration contributes significantly to holistic development in research, study & teaching and transfer as well as to the development of excellent infrastructure. The innovative environment of TU Braunschweig is highly attractive to all staff and students, not least because of its lean, streamlined and service-oriented administrative processes. We compete for staff with other universities, research institutions, the industry, and the public sector. TU Braunschweig is working systematically and continuously to make itself increasingly attractive to work for. Employee and leadership development activities develop and support the health, performance and learning potential of our people and contribute to the quality of the work-place. Taking into account the individual circumstances and needs of our employees, we are making our working environment increasingly flexible.

The administration is characterised by a strong culture of welcome and hospitality towards people from around the world. The structures for a highly international and intercultural environment at TU Braunschweig are anchored in the administration and embraced by all employees. Supported by policies on orientation, bilingualism, staff development and digitalisation, administrative processes are and will continue to be internationally oriented.

At TU Braunschweig, we are committed to the 17 Sustainable Development Objectives of the UN Agenda 2030 in our day-to-day operations. As a building owner, we use our freedom to innovate and consider the entire life cycle of a building. In support of these objectives, we also successfully participate in projects and campaigns funded by third parties. In doing so, we increase the sustainability of our administration and operations and serve as a role model throughout the university and beyond. We are well-prepared to use the funds at our disposal to maintain and improve the attractiveness of the campus and the research infrastructure.

With a vibrant culture and shared values, we succeed in our challenging work with the administration and the university as a whole each and every day. We embrace a culture of errors that we learn

from and provide each other with constructive feedback to improve how we work together.

As a state-funded technical university, we strive to make the most of our autonomy and, ideally, to expand it. As we are dependent on decisions made by third parties (legislators, ministries, third-party funding providers, etc.) that affect our internal administrative scope, it is as important to contribute our expertise to networks as it is to be in constant dialogue with the relevant decision-makers.

## Strategic objectives and principles



As an administration, we have multiple organisational units involved in all performance dimensions. Research, study & teaching and transfer also give rise to administrative tasks – we work together, hand in hand.

For us, transparency in service delivery is a fundamental principle for traceability and trust. We see information and communication as critical success factors for our collaboration and strive to combine the comprehensiveness of our administrative tasks with the visibility of our performance. We are committed to proactive task fulfilment in the face of comprehensive change and to methodological innovation as a motivating response to new challenges. By aligning the different speeds and closing the gaps, we will be able to deliver our services in an even more demand-driven way across all organisational units involved.

The dynamic relationships between faculties with transient structures, such as research centres and research priorities, are clarified and optimised according to demand. Projects are temporary organisational entities for which university-wide project

management standards are developed and introduced. We map important decisions to appropriate committee structures and processes of participation. Our working groups work across the university to prepare decisions for achieving our strategic objectives. They are temporary, operate at high speed and require a high degree of transparency in their work. Internal resource management uses the principle of self-regulating systems in its flexible components (e.g. energy budgeting, measurement of space requirements, internal formulas, appointment funding). Malfunctions and disincentives are identified together with all stakeholders and a solution is worked out. This also includes the allocation of resources for basic funding. Providing financial and non-financial incentives accelerates initiatives, such as seed funding for strategically important developments such as collaborative research projects or new courses of study. The control

elements of university development are transferred to the central institutions in an appropriate form, e.g. development discussions and target agreements.

#### Administration and infrastructure at TU Braunschweig

In the competition for the best minds, our HR policy is holistic, from onboarding to offboarding, international, diversity-conscious, and features a flexible working environment. We plan to further refine our appointment strategy in line with our strategic objectives. Our processes for transparent, quality-assured appointments provide the technical foundation. We are actively addressing the skills shortage with our own targeted training capacity. Following the positive evaluation of our pilot dual degree programmes, we are rolling out the dual degree model on a permanent basis. In addition, our people development approach unlocks professional potential across all performance dimensions.

Our excellent infrastructure and innovative formats contribute to the TU Braunschweig's visible attractiveness as an employer and collaboration partner. In construction and operation, we are addressing the need to reduce greenhouse gas emissions beyond the legal target of 80% below 1990 levels. As a result, energy-related measures will play an even greater role in the renovation and construction of new buildings. Accessibility is systematically taken into account in new buildings and considered in renovations. We are prepared to test organisational innovations (e.g. special service units, breaking up spatial or organisational structures, novel location concepts, etc.). We use proposals from our sandbox platform to test new ideas. We also create digital teaching and learning environments and new student learning spaces.

Our organisation is characterised by robust performance pro-Zcesses, particularly for critical business processes. Through consistent organisational development and structured change management, we are streamlining administrative processes within the TU and making them more efficient for all staff and users. We are agile in adopting appropriate innovations from research and industry. Our objective is to increase customer satisfaction with our services. Our constructive culture of error and our future ideas management will fundamentally encourage the testing of new approaches. Thanks to our open feedback and reporting culture, we can make productive use of process knowledge right in the office. We communicate across the organisation using a variety of communication formats.

## Governance and Administration



## **DIGITALISATION**

The digital transformation of the administration of follows the principle of using control systems to harmonise data and standardise business processes across organisational boundaries. This aims to increase job and service satisfaction, which is systematically monitored through regular feedback mechanisms, and goes hand in hand with the systematic development of employees' digital skills. TU Braunschweig is shaping the digital transformation of the administration with the involvement and input of all stakeholders and their skills in order to take into account the needs of different working environments, to incorporate new ideas and perspectives, and to develop appropriate solutions. Digital data storage enables us to regularly collect university-wide data on key performance indicators for use in development discussions, evaluations, external reporting requirements, or in the context of research proposals and rankings. We are progressively expanding the use of the latest business software and control systems in core administrative areas. Risk management and crisis prevention will successively and comprehensively be extended to the entire organisation.



## INTERNATIONALISATION

Internationalisation is firmly anchored in the administration's mindset. Our services and infrastructure are characterised by a strong culture of welcome and openness to the world. We network with international partners and create and use exchange formats for decentralised and centralised administration. On the basis of a needs assessment, we are developing new staff

development opportunities to support the internationalisation of the university as a whole. Internationalisation is taken into account in digitalisation and supported via the exchange of best practices. We will continue our strong multilingual approach in our processes and our range of written and verbal services.



## **EQUALITY AND DIVERSITY**

The innovative, inclusive and low-barrier working environment has a successful impact on family-friendliness, equality, and diversity for all members of TU Braunschweig. We live and breathe our family-friendly leadership principles, continue to develop them, and raise awareness among our managers of the issues involved in reconciling various phases of life. We regularly measure the gender pay gap and analyse its causes in order to take appropriate action to reduce it. As part of our overall people development, we offer formats to address various aspects of equality and diversity. In view of the special responsibility and function of managers as role models, the diversity competence of our managers is developed comprehensively in the programme for managers.



## KNOWLEDGE EXCHANGE

When it comes to contracts, legal safeguards to protect the sensitive transfer of knowledge are part of our day-to-day. Wherever possible, we simplify our processes by using standard templates, for example for service contracts. We optimise the constant exchange between administration and science through a practical laboratory for research results, trend analysis, the initiation of new

research topics, real-world laboratories and agility in the development of location-specific concepts. Through our consistent service and quality orientation, we support all members of TU Braunschweig in the exchange and transfer of knowledge, for example in university-wide networks and by establishing exchange formats. Process innovations in knowledge exchange, just like large-scale projects, take place in complex conditions – all of us at TU Braunschweig contribute to their success from different perspectives.



## SUSTAINABILITY

We contribute to shaping the TU Braunschweig's activities in line with our values, following sustainability criteria in all dimensions, from the economical use of tangible and intangible resources<sup>CF</sup>, to economically and ecologically sensible procurement, to sustainable and thus future-oriented and respectful interaction with one another. We see ourselves as creative and responsible drivers of innovation, providing important impetus for sustainable change and making TU Braunschweig an attractive employer, both now and in the future.



Fotos: Giovanna Gahrns | TU Braunschweig



Fotos: Marek Kruszewski | TU Braunschwei



The six faculties of TU Braunschweig are the foundation of our university. Each faculty has its own focal points in all performance dimensions and contributes equally to the holistic development of TU Braunschweig.

- Carl Friedrich Gauß Faculty
- Faculty of Life Sciences
- Faculty of Architecture, Civil Engineering and Environmental Sciences
- Faculty of Mechanical Engineering
- Faculty of Electrical Engineering, Information Technology, Physics
- Faculty of Humanities and Education

The present university development concept provides a strategic framework within which the faculties can define their profiles of excellence and their objectives. The Executive Board coordinates with each faculty in an annual development meeting to make development objectives transparent and to jointly identify challenges. Representatives from the faculties, central institutions and

staff units are regularly invited to workshops and other events to exchange information on strategic projects and best practice models, to create synergies and to gain inspiration. This ensures that TU Braunschweig continues to develop in line with its holistic development principles.