

Strategic Agenda TU Delft **2024-2030**

Impact for
a sustainable
society

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– Instellingsplan TU Delft: Strategische Agenda 2024-2030.
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Publication

Delft University of Technology
March 2024

Design

Haagsblauw, The Hague

Print

ADC Vanderheym, Barendrecht

Photography

P4 P36: Eva Bloem (UN Studio)
P24: Ector Hoogstad Architecten
Other: Beeldbank TU Delft, Getty Images

Information

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Strategic Agenda TU Delft **2024-2030**

**Impact for
a sustainable
society**



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Foreword

Before you lies the Institutional Plan TU Delft – Strategic Agenda 2024-2030. Its subtitle – *Impact for a Sustainable Society* – epitomises our university’s societal focus and you will quickly see it as a common thread throughout this strategy plan. TU Delft’s vision thus remains consistent with the broadly accepted global sustainable development goals set by the United Nations (UN SDGs).

This institutional plan provides a synthesis of ongoing talks regarding the future direction of the organisation since the onset of the COVID-19 pandemic in 2020. It builds on the course that is charted in TU Delft’s Strategic Priorities 2022-2024, and integrates the outcomes of more recent strategic discussions. One telling example is the broad discussion currently taking place on how TU Delft can contribute even more to answering the growing societal demand for technically educated people in order to realise the urgent societal transitions. Another illustration is the important role that alliances and partnerships, such as Convergence, Leiden-Delft-Erasmus (LDE) and 4TU.Federation, play in the future of TU Delft. A third example is the essential function of data and digitalisation for the entire university; not just today, but also well into the future.

This institutional plan can therefore largely be seen as the result of many university-wide reflections, discussions and consultations over the last three years. It does not provide a detailed roadmap. Like a compass, its objective is to broadly set the

organisation’s course and is therefore limited to the “why” and “what” questions. To that end, the Strategic Agenda 2024-2030 presents a selection of priorities and, within those priorities, sheds light on a number of strategic initiatives that will be worked out in more detail in sub-plans over the coming period. These priorities and initiatives serve to keep the TU Delft ecosystem alive and relevant for the long term. The agenda will be regularly reviewed in terms of applicability and validity as part of the existing planning and evaluation (P&E) cycle.

The Executive Board has asked a broad spectrum of internal stakeholders in the latter half of 2023 whether they identify and agree with the outlined course for the coming years. A lot of this input has found its way into the final version of the institutional plan.

The Executive Board explicitly emphasises the crucial importance of social safety in developing a dynamic and well-functioning organisation.

It is imperative that everyone at TU Delft feels safe and supported in their social environment. TU Delft’s core values serve as important guidelines for how we want to treat each other. Actively promoting an inclusive working environment and ensuring everyone’s well-being, health and personal development are – and will always remain – among the university’s key priorities. This not only calls for continued attention at all administrative levels and in every layer of

management within the institution, each and every individual must always also be conscious of the impact that their own behaviour has on others and respect one another's values. These guiding principles are also implemented strategically in the areas of talent recruitment and retention, as well as education and learning.¹

Although a large number of TU Delft's ambitions are expressed in this institutional plan, many other initiatives within TU Delft have not been included. We would like to emphasise that the ongoing efforts of all members in the TU Delft community are recognised and valued. These individual and collective endeavours, motivated by our guiding statement 'Impact for a Sustainable Society', form the backbone of our university's success.

Some of the strategic ambitions take up a lot of people's (spare) time and energy, on top of an already full workload. The Executive Board is aware of the tensions that exist between some of these ambitions and the (additional) workload this can create, and has every intention of managing these challenges by striking a good balance between pursuing ambitions and acknowledging what is feasible in practice. In addition, a precondition for implementing this institutional plan is the assurance of sufficient financial resources.

As the Board, we actively bear responsibility for protecting the aforementioned balance and for meeting necessary conditions during the implementation of this plan.



Prof.dr.ir. Tim van der Hagen
Rector Magnificus &
President of the Executive Board



Prof.dr. Rob F. Mudde
Vice Rector Magnificus



Drs. Marien van der Meer
Vice President of Operations



Vision

TU Delft contributes to solving complex and urgent societal challenges through the education of highly qualified engineers who are creative, innovative and responsible, by pushing the boundaries of technical sciences, by developing innovative applications, and by fostering entrepreneurship.

Mission

We conduct research at a world-class level by combining groundbreaking science, pioneering technologies and human-centred designs in a socially responsible manner. This enables us to make a real impact towards building a sustainable society.

We educate people to prepare them for a career as professional, highly qualified and reputable engineers, and develop and enhance the expertise of technical leaders throughout their careers.

We develop technology-based innovations for some of our society's biggest challenges. We encourage entrepreneurship and proactively interact with leading national and international institutions, companies and societal partners, while also keeping our close ties to the Delft region.

We continuously work towards improving our collective effectiveness, performance and organisational resilience by applying the following values as our guiding principles.

Values

Diversity
Integrity
Respect
Engagement
Courage
Trust

1

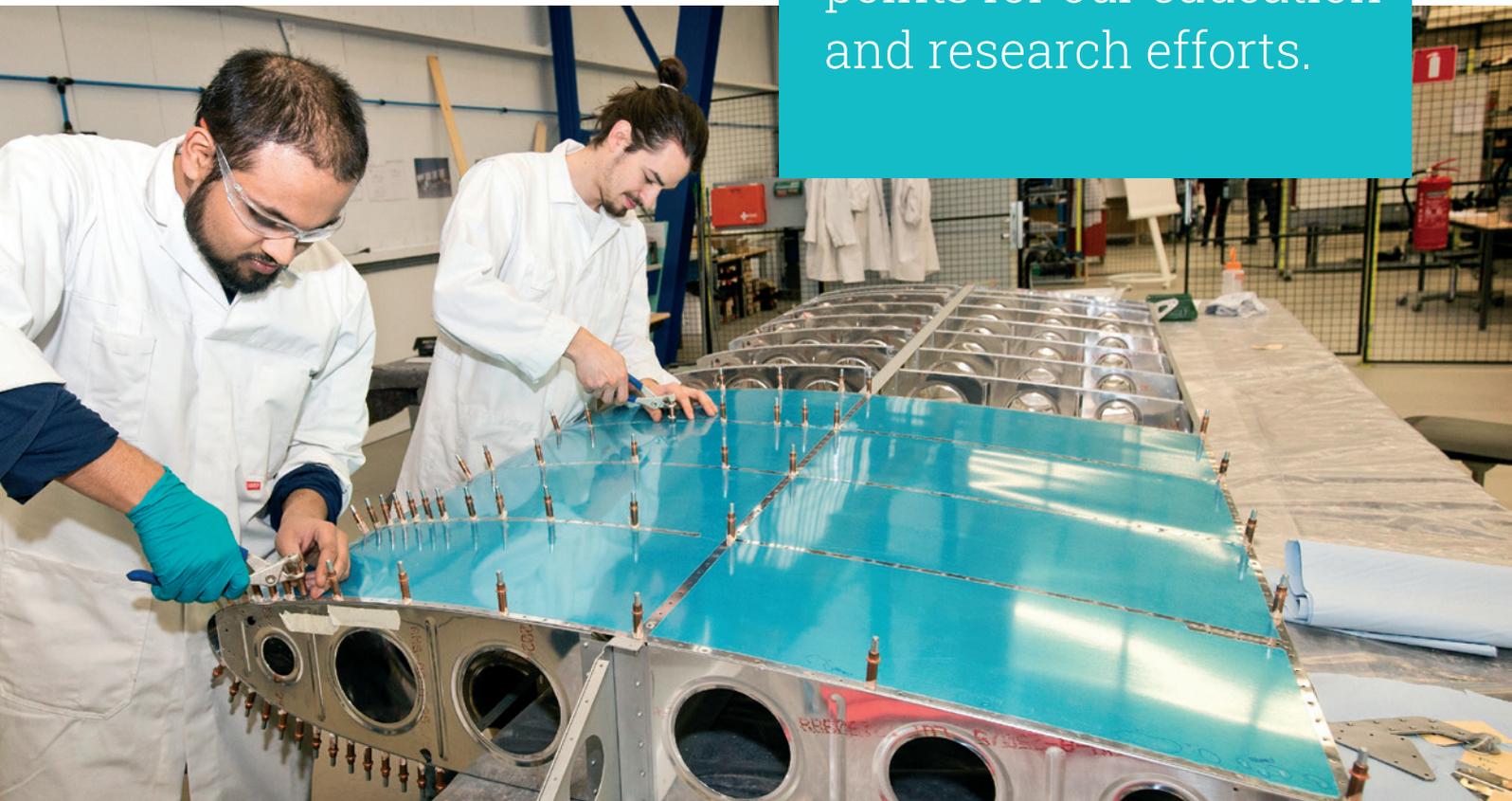
Strategic perspective

The mission, vision and values of TU Delft are the framework for outlining our strategic horizon for the coming years. TU Delft has been pushing the boundaries of technical innovation for more than 180 years. Ever since its foundation in 1842, the university has continuously served the interest of Dutch society. TU Delft is today known around the world as a prominent university of technology that boasts an impressive technical-scientific and innovative capacity, as well as clear-sighted societal relevance.

The reputation of TU Delft rests on the individual and collective achievements of many generations of researchers, designers, lecturers, and countless students who have become 'Delft engineers', as well as the colleagues who provide the professional support to facilitate and sustain the organisation's primary processes. The rich heritage that has been acquired over the university's many years of existence will continue to be cherished in the future.

TU Delft has the clear aim to continue offering a comprehensive and high-quality spectrum of disciplines, research and education in engineering sciences, while maintaining our unique research and education facilities. We want to hold on to our position as an incubator for pioneering and responsible technical-scientific solutions to today's major societal challenges.

We want to be a university where science, engineering and design are dominant vantage points for our education and research efforts.



TU Delft endeavours to be a university that enters into broad partnerships with businesses, institutions and institutes. We find it important that we are appreciated for our outstanding engineers and as an innovative collaborative partner because of our far-reaching knowledge that we have gained through curiosity- and utility-driven research. This means, we are a university that is a breeding ground for new business activity and makes a significant and recognised contribution to a sustainable society through education and research. Given the university's clear ambitions on sustainability, this activity is not merely aimed at developing new and innovative technologies, but also at making better sustainable use of existing technological insights.

We want to be a university where science, engineering and design are dominant vantage points for our education and research efforts. We aim for our researchers and students to work and think from the perspective that collaborating closely with non-technical disciplines can produce even better solutions to today's complex and pressing societal challenges, using our strong disciplines as the starting point. TU Delft will continue to make use of the intrinsic strong ties between education and research going forward, allowing us to realise our ambition to be a global innovative engineering education leader. The continuous influx and involvement of both students and staff is key in achieving this, and TU Delft strives to achieve valuable diversity and a balance between Dutch and international students and staff within the university community.

TU Delft offers a broad spectrum of engineering sciences. We train a substantial proportion of engineering students in the Netherlands. Our aim is to substantially expand the TU Delft study programme offering by 2030, with innovative engineering courses

at locations in Rotterdam, The Hague and Amsterdam, all firmly embedded in the quality foundation of Delft.

We provide students with ample space and opportunity for personal fulfilment and professional development. Delft has a rich culture of student and study associations, dream teams and student teams, student societies and student clubs. This culture helps develop the soft skills that are necessary for Delft engineers to make an impact for a sustainable society. Nourishing this rich student culture is actively facilitated by TU Delft. The premise in doing so is that it should always be feasible to complete one's studies at our university within the official education period of five years. Provided students spend their time wisely, we give them the opportunity to realise their ambitions over a longer period (such as a BSc in 4 years, and an MSc in 2.5 years), with the freedom to make personal choices. TU Delft endorses the importance of broad academic and personal development in a socially safe environment.

TU Delft aims to be an inspiring, diverse and inclusive institution where the best researchers and the most motivated students from all over the world choose to come to develop their talents, and also an institution which is seen as an attractive organisation to professional facilitating staff.

To that end, TU Delft aims to at least maintain the already very high international performance levels and to further improve in certain areas, thereby seeking a healthy balance between workload and ambition. This enables TU Delft to continue to position itself as a world-class university that stands at the centre of society, across the entire board in education, research and innovation. A university that sees the growing urgency as an important responsibility to contribute even more to the realisation of complex societal transitions.

2

Dynamic context

The environment of TU Delft has transformed dramatically from relative stability and predictability before 2020, to one of the most disruptive and uncertain eras in recent history. To safeguard TU Delft's future resilience, it is crucial that we are able to understand these shifts and plot an effective course. Outlined in this chapter are some of the developments that already affect the university today and will continue to do so in the years to come.²



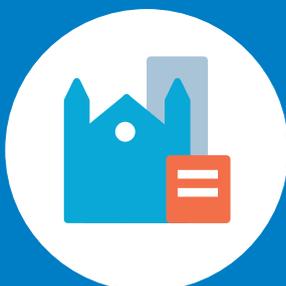
Climate change

Identifying and mitigating the effects of climate change and climate adaptation are pressing challenges in society, which have a clear impact on our planet. Important measures in answering these challenges include reducing the carbon footprint and promoting circularity. They cover various system transitions in sectors such as energy, mobility and transport, construction, recycling and resource extraction, impacting both education and research, such as the Climate Action programme, as well as the university's physical environment.



Deep Tech innovation

Rapid developments in areas like artificial intelligence, quantum computing, synthetic biology, and biotechnology, offer all kinds of opportunities for society. These developments can help answer many complex societal challenges, and can also have a major impact on (the design of) education and research, as the TU Delft AI Initiative has revealed. Developments in the deep tech sector raise further ethical questions about how to safeguard our public values such as privacy, justice, humanity and autonomy. Many of these questions – and their answers – transcend just one discipline.



National political environment

Changes in the societal environment have a profound impact on the position and priorities of Dutch educational institutions. Discussions on matters such as the internationalisation of education, student taxation and selection, and the (level of) funding of educational institutions, including universities, are strongly influenced by a changing political environment. For educational institutions, these discussions bring with them major uncertainties in the long term.



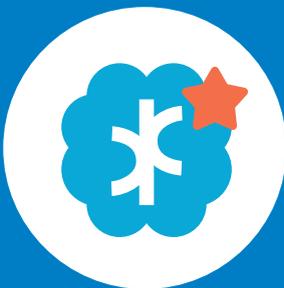
Geopolitical developments

Armed conflicts in different parts of the world and tensions in the global balance of power are leading to a reorientation of international cooperation on knowledge transfer and knowledge migration, among other things, as well as a stronger focus on knowledge security. Increasing frictions between the US and European countries, and China, have made it abundantly clear that Europe and the Netherlands are dependent on global distribution channels and are vulnerable to external raw material supplies.



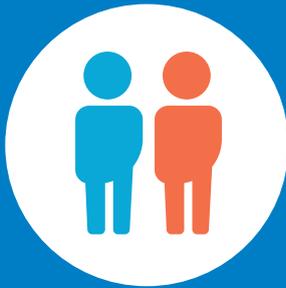
European cooperation

Europe's potential in education, research and innovation is gaining increasing political attention and strategic importance within the European Union, as evidenced by the Open Strategic Autonomy initiative. A real chance exists that, in light of recent geopolitical developments, the tenth EU Framework Programme for Research and Innovation will be structured differently.



Talent race

Attracting and retaining talented scientific and professional facilitating staff is expected to remain one of our bigger challenges. Universities around the world are competing with each other to attract academic talent. The tight national labour market is a structural challenge and is making it particularly difficult to fill specialist vacancies for professional facilitating staff. Furthermore, the aforementioned geopolitical developments are only adding to that challenge.



Societal polarisation

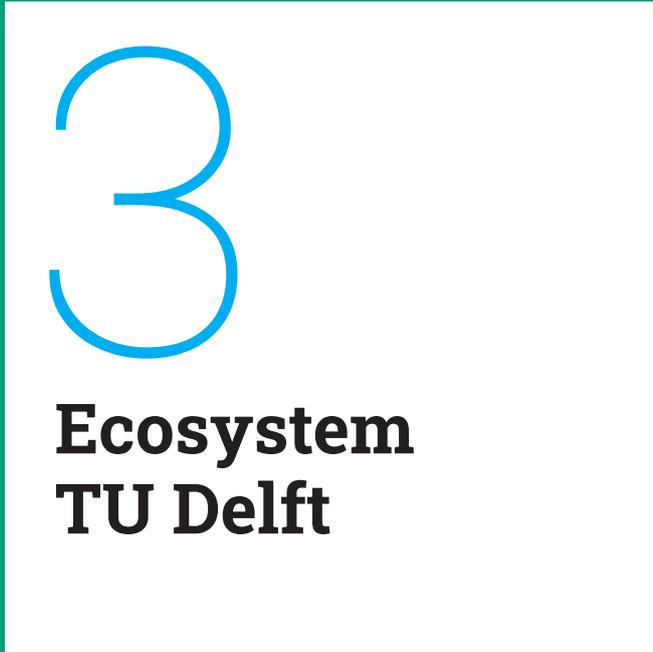
During the course of the COVID-19 pandemic, people began showing more polarised views on science. Where the trust in science increased in many parts of society, distrust grew elsewhere; manifested in threats against academics, among other things. As a university, it is important to take this societal undercurrent into account, while also protecting the interests and safety of our academic staff.



Intergenerational relations

The number of Dutch people aged over 65 is rising, while the birth rate in the Netherlands is falling. The steady ageing of our population is increasing the pressure on our society's infrastructure. Moreover, the urgency to make a positive, sustainable impact on the living environment is rising within society, especially driven by younger generations. This leads to a growing awareness on key values such as integrity, diversity, inclusion and equality. Different generations bring different values, levels of technological know-how, and expectations to the workplace.

This selection illustrates the increasingly complex and volatile environment in which TU Delft has to position itself and move forward. Events such as the COVID-19 pandemic, various armed conflicts, and rapid developments in the deep tech sector, are just some examples that can change the assumptions and priorities of any strategic plan. Developments within the Netherlands also have a major effect on TU Delft's position and priorities. In order to better prepare for what the future holds, it is imperative that the university strengthens its resilience and adaptability.



TU Delft is a complex knowledge ecosystem. All elements in this system are interconnected and together they contribute to the vitality of the whole. The strength of the system lies in the quality of interactions between different aspects, such as:

1

A talented and diverse student population

Attracting creative and motivated young people who come from different backgrounds, with a deep-seated interest in engineering and who are willing to tackle societal challenges; this is the basis for a vibrant community with a rich student culture.

2

Outstanding quality and a diverse composition of academic staff

Being able to appeal to scientific talent from all walks of life is a prerequisite for achieving high-quality education, research and innovation.

3

Expert and effective facilitating staff

The staff forms a duality with the primary processes. The interactions between members of the professional facilitating staff, academic staff and students are essential elements in the day-to-day operation of the university ecosystem.

4

Active alumni community

Having an active alumni community is of great value to the university. Alumni are an indispensable link to society and, with their numerous connections, they are the organisation's "eyes and ears" at home and abroad.

5

Inspiring leadership, well-being and socially safe organisation

Creating an environment that enables free and respectful exchange of ideas, based on mutual trust and where both individual and organisational interests are paramount, is essential for a thriving ecosystem.

6

High educational and research ambitions, and strong innovation potential

The drive to push boundaries through cutting-edge research and to inspire students and give them access to new insights creates an intellectually stimulating environment and also provides a breeding ground for innovation and entrepreneurship.

7

Broad portfolio of disciplines and strong scientific profile

Having a broad portfolio of science, engineering and design disciplines forms the basis for a strong scientific profile and is conducive to both interdisciplinary collaboration and the development of fundamental knowledge.

8

Powerful (inter)national presence and collaboration

Proactive cooperation with (inter)national peer institutions, civil society organisations, and businesses fosters diversity within the entire university community, enhances the quality of education and research, and contributes to increasing the university's impact.

9

Sustainable campus and high-quality infrastructure

Sustainable design of the spatial environment contributes to the well-being, safety and health of all campus users. Good-quality (digital) infrastructure for education, research and innovation attracts scientific talent, increases effectiveness and accessibility, and boosts ambitious scientific goals. The campus also acts as a living lab, which aligns with the principle that TU Delft is a campus university.

Raising these aspects to the highest possible quality level and keeping them there, is a prerequisite for the TU Delft ecosystem to be flexible and future-proof, and to keep fulfilling its societal mission.

Each and every individual contributes to maintaining this ecosystem. The university is proud of its diversity among students and staff, who together form the close-knit international TU Delft community. By continuously investing in personal connections, new opportunities arise for academic and personal knowledge transfer, ensuring we remain in touch with each other and stay on our toes. The mutual support in this community acts as a valuable safety net that everyone can rely on, which in turn enhances the organisational resilience. Our community is connected to its environment in numerous ways, as highlighted in the outline of the context in which the university operates. Exactly what impact these – and other – developments (will) have on the Delft ecosystem cannot be pinpointed in general terms. This requires active monitoring of the environment and concrete translation into relevant aspects of TU Delft's policies.

However, it should be clear that additional attention is needed in certain areas. There is growing concern about the (lasting) effects of the COVID-19 pandemic, for instance the observation of a knowledge discrepancy in science subjects among incoming students. Another aspect of focus regards the still unknown effects of the changing political landscape on the future of the Dutch tertiary education system. Among other things, this could affect the financing of the system, the possible capping of the influx of foreign knowledge workers and students, and the binding study recommendations. Challenges such as the ongoing heavy workload for both staff and students, ensuring a safe working and study environment, and increasing diversity will also need our full attention in the coming years.



4

Strategic agenda

The Strategic Agenda TU Delft 2024-2030 sets out the priorities that TU Delft wants to realise over the next six years. These priorities have been formulated partly on the basis of the reflections and discussions over the past three years, and concern the following four priorities:

- **Expanding the scope**
- **Improving quality**
- **Broadening engagement**
- **Strengthening resilience**

The four priorities of this Strategic Agenda serve the purpose of further developing the TU Delft ecosystem. Expanding the scope, improving quality, broadening engagement and strengthening resilience are driven by a mindset that is broadly embedded in Delft's culture; facing complex challenges with a proactive and determined attitude, by both utilising our own resources and through strong, strategic partnerships.

Each priority consists of four strategic initiatives. These initiatives are aimed at achieving the vision and mission of TU Delft, and ensuring the university ecosystem remains thriving in the long term. The strategic initiatives partly depend on the dynamic context of the university. Concrete agendas and action plans will be assigned to them in the coming period.

Expanding the scope

As part of this priority, four initiatives are identified that expand the scope of the TU Delft ecosystem in different ways. The Contours 2030 strategic initiative aims to expand the university's range of study programmes by establishing one or more TU Delft locations in Rotterdam, and further developing existing university sites in The Hague and Amsterdam. At the same time, the necessity to manage the autonomous growth in the number of students on the Delft campus, while maintaining quality, remains a priority. TU Delft's Convergence alliance with Erasmus University and Erasmus MC focuses on the joint development of transdisciplinary education and research. Furthermore, the scope is being extended by proactively responding to the European and national initiative on Open Strategic Autonomy.

Contours 2030³

TU Delft is committed to making an even greater effort to help answer society's growing need for engineers. To realise the urgent societal transitions, more engineers are essential. This is where TU Delft sees enormous societal responsibility. The Contours 2030 strategy has been developed to flesh out this challenge over the next 10-15 years. New educational programmes and associated research will be developed on themes such as Climate & Energy Systems Engineering, Resilient Living Environment and Future of Health, which should be ready to start from 2026 and beyond. The university intends to base these new activities in Rotterdam. A TU Delft subsidiary site in Rotterdam will potentially grow into a full-service campus with a capacity of 10,000 students by 2040. The already existing university sites in The Hague and Amsterdam continue to grow through a targeted approach, taking into account their specific profiles.

The choice for branches in The Hague and Amsterdam is partly motivated by the substantive opportunities that these locations offer; this also applies to future facilities in Rotterdam. In several respects, they offer "living labs" environments that enrich the content of the academic programmes and related research. As a side effect of this choice, the university aims to substantially reduce the pressure on the campus location in Delft – and especially on the city of Delft. The objective is to shrink Delft's student population to 25,000 from 2026, while maintaining the quality of education and research. In building the student population in Rotterdam, the aim is to attract more diverse groups of students. This growth ambition, as we indicated earlier, demands a considerable amount of extra effort and energy from the TU Delft staff. It is therefore crucial to closely monitor workload management. Developing new activities in Rotterdam involves a systematic search for connections with the initiatives from the Convergence alliance, and options are also being explored to collaborate with colleges.

The objective is to shrink Delft's student population to 25,000 from 2026, while maintaining the quality of education and research.

The initiative will be implemented in stages, the first of which involves drafting a development plan for the next 5 years, including concrete recruitment plans. To achieve the goals of the Contours 2030 strategy, it is crucial that relevant governments and companies are willing to support this growth strategy through funding. TU Delft's current branches in The Hague and Amsterdam follow a path of coordinated growth. A 2024-2030 development plan is envisaged for both. It is important that the lessons learnt from these two branches are applied when developing activities in Rotterdam.

Autonomous growth⁴

The university's location in the city of Delft generally has a positive impact on the local economy, as well as on the appeal and vibrancy of the city. Students and staff also have the ability to play an important role in addressing local (technical) challenges.

A downside of a city location is that the growing population adds to the pressure on the city's ability to absorb newcomers. Many students and staff live in Delft, which has a significant effect on the municipality due to the city's size limitations. The university's growth exacerbates already existing bottlenecks, such as a shortage of housing, pressure on facilities, and nuisance in city neighbourhoods.

TU Delft is committed to making an even greater effort to help answer society's growing need for engineers.

TU Delft believes it has the important duty to address these challenges in cooperation with the municipality of Delft. The university considers 25,000 students in Delft to be a number that suits the city's character and capabilities⁵. As mentioned earlier, a component of the Contours 2030 strategy is making a real effort to reduce the number of TU Delft students in Delft down to 25,000 from 2026, while maintaining the quality of education and research. Even with 25,000 students, the university will continue to have a significant footprint inside the municipal boundaries. It is therefore essential to jointly develop concrete measures, to guarantee both the liveability for residents in Delft and the quality of the work environment for students and staff. In doing so, every attempt must be made to optimally connect TU Delft's strengths to addressing local, societal challenges.

Measures in three areas are being considered. The first is increasing and diversifying campus use, for instance by extending the campus opening times, creating a more vibrant environment, and improving accessibility. The second involves building an



inter-connected community of students, staff and residents, for example by developing an appealing portfolio of activities that, on the one hand, contribute to the primary processes of TU Delft and, on the other, promote social well-being in a broad sense in the municipality of Delft. The third measure is to further strengthen the relationships at various levels between the municipal organisation and TU Delft. The premise here is that Delft remains our anchor point; the primary location of the university.

Convergence⁶

The Convergence Alliance between TU Delft, Erasmus University and Erasmus Medical Centre came into being in 2020. This alliance pursues a transformational form of scientific collaboration: convergence. In the process, different disciplines are substantively linked to one another, creating new educational and research programmes that are thematically oriented, which could lead to the emergence of new disciplines. Taking this approach is an essential step forward, as it helps to address *wicked problems* in several areas, such as climate change, sustainability, tenability of the healthcare system, urbanisation, and artificial intelligence, data and digitalisation.

The focus of this collaboration is in line with TU Delft's own vision and mission, and is complementary to the Contours 2030 strategy. To structure this cooperation and integrate it across the three institutions, a Convergence Strategy 2024-2030 is currently being drawn up. This strategy will identify the impact of transformational education and research and establish principles for a robust governance and support arrangement. One of the main benefits is to ensure the scientific staff participating in this alliance have an effective operational framework.

Besides the Convergence Alliance, TU Delft also participates in Medical Delta and in the LDE and

4TU cooperative partnerships. TU Delft considers these collaborations as very valuable and is committed to continuing them in the future.

Open Strategic Autonomy⁷

The COVID-19 pandemic, armed conflicts in different parts of the world, and geopolitical tensions have led to shifts in investment programmes at European and national levels, whereby focus and resources are pointed more towards promoting Open Strategic Autonomy.

This concept refers to the European Union's capability to decide on its own when, where and how, and in cooperation with which partners, to act in strategic policy areas. The aim, in cooperation with like-minded democratic countries, is to avoid unilateral dependencies and reduce strategic risks for European countries. Within all this, the emphasis is mainly put on (new) technologies, energy, raw materials, and talent. Governments have clear plans for the coming years to invest significantly in a broad spectrum of critical technologies, including artificial intelligence, robotics, critical raw materials, biotechnology, cybersecurity, hydrogen, power grids and storage, micro-electronics and quantum computing. Open Strategic Autonomy is expected to be one of the guiding principles for Horizon Europe and its successor, the tenth EU Framework Programme for Research and Innovation.

The advisory report *Navigating Open Strategic Autonomy – Opportunities for the Delft University of Technology* serves as a frame of reference for TU Delft to contribute substantially to these European and national efforts in the years to come. TU Delft is well positioned for this, and these upcoming technologies offer the university new opportunities, not only for research and innovation, but also for the demand for engineers and the supply in the field of Lifelong Learning.

Improving quality

The strategic initiatives within this priority have a shared focus on the continuous improvement of quality at TU Delft. Attracting and retaining talent in all areas and disciplines of the university, facilitating an inclusive working environment, and developing leadership competencies, remain essential objectives.

Recognition and rewards is aimed at striking a good balance that enhances the quality of education and research at the university, requiring a broad range of disciplines and working methodologies. There is also a need to further strengthen the service provision in terms of impact and innovation. And finally, implementing the vision on education will further improve the quality of education, within an inclusive learning environment.

Recruiting and retaining talent in an inclusive work environment⁸

TU Delft expects the international race for scientific staff to become even more competitive in the years to come. Moreover, the university is already faced with considerable challenges in recruiting professional facilitating staff for mostly specialised posts, which in some cases also puts pressure on the support of primary processes. It is clear that the demand for scientific and professional talent exceeds supply. With the university being just one of many players in this economic playing field, attracting and retaining scientific talent and skilled professionals is extremely demanding on the organisation.

As TU Delft wants to be seen internationally as an employer of choice, it is important to be able to present a distinctive as well as an attractive offer compared to other potential employers. To achieve this, it is imperative that TU Delft can provide a work environment where everyone is enabled to excel in their field, both for academic positions and professional facilitating staff. This not only requires excellent facilities, but also an inspiring organisational culture, robust development opportunities, and attractive career paths with good employment benefits.

Actively facilitating an inclusive working environment, with explicit attention to workload and safe interaction, is and will remain an area of continuous focus, as indicated in the foreword of this institutional plan. The management of TU Delft has an important responsibility in the recruitment, retention and development of talent. Plans are in place to review the current Human Resources Agenda TU Delft 2018-2024, in the light of current internal and external developments. Attention will also be paid to leadership.

Actively facilitating an inclusive working environment, with explicit attention to workload and safe interaction, is and will remain an area of continuous focus.

Recognition and rewards⁹

TU Delft wants to hold on to the international recognition it receives for its excellent quality of education and research. The efforts and achievements of academic staff are still largely assessed internationally on quantitative factors, such as the number of published articles, citations, or through the H-index.

TU Delft sees this as an undesirable reality of today's scientific system and believes it is important to broaden the methods for determining academic quality and impact. This requires a greater balance in valuing and recognising the broad spectrum of scientific activities and accomplishments of academics, whereby the focus can possibly also lie on societal and public engagement. Outstanding achievements in research, education and innovation are often the result of team efforts, but assessing such achievements often still focuses too much on the individual researcher.

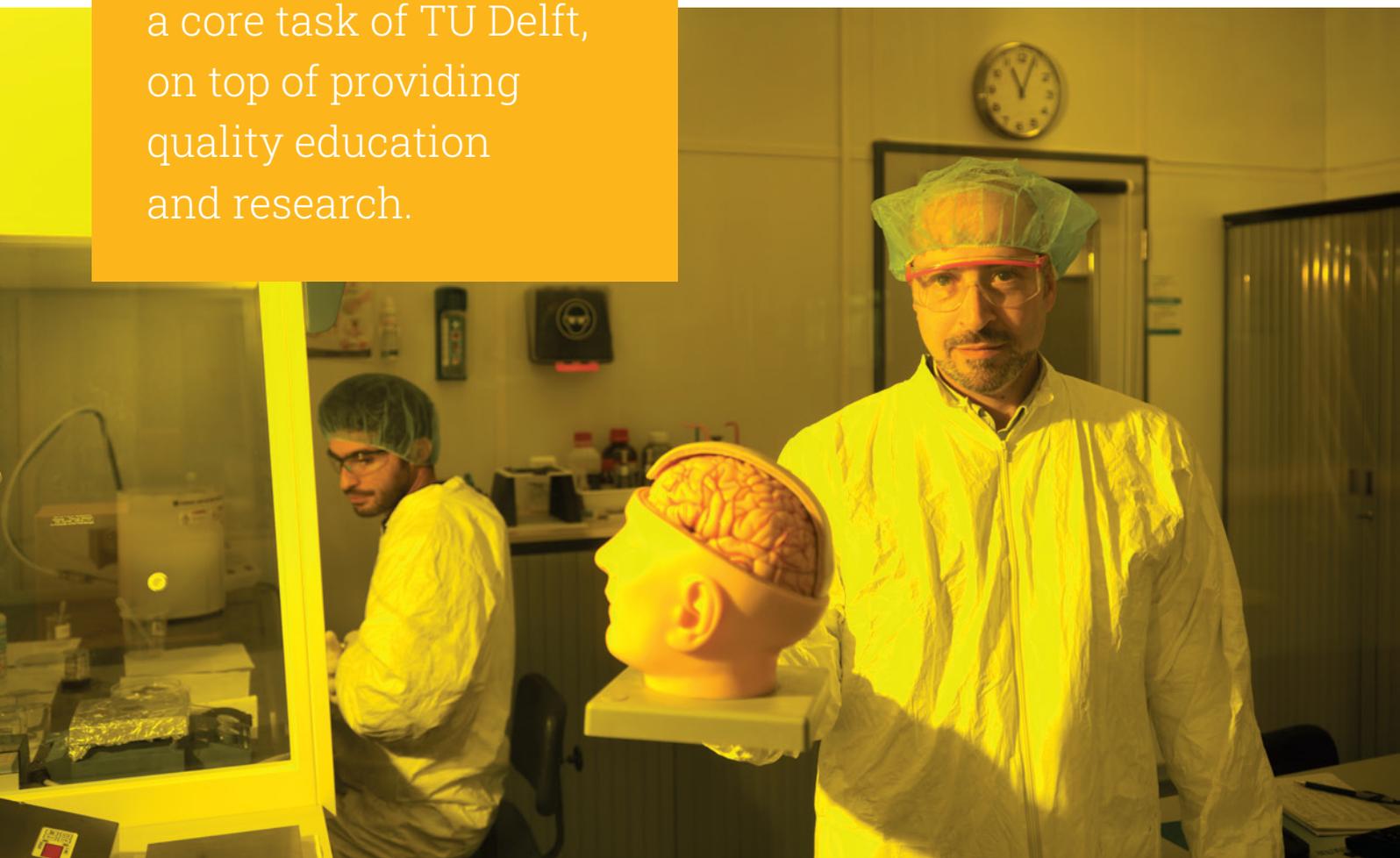
Over the next few years, TU Delft will work closely with other Dutch universities and research funders on a new method of assessing the quality and impact of research and education. Changing the current situation is a long-term process that can only be carried out jointly by universities. With that goal in mind, TU Delft has joined the national “Room for everyone’s talent in practice” roadmap (In Dutch: *Ruimte voor ieders talent in de praktijk*)

and its programme structure, and the international Declaration on Research Assessment (DORA). The TU Delft Perspective on Recognition and Rewards will be updated and brought in line with national frameworks in the coming period, thereby providing practical frameworks for recognising and rewarding team efforts. In addition, the Academic Career Track (ACT) will be reviewed and further developed.

Transferring and applying knowledge for the benefit of the economy and society is a core task of TU Delft, on top of providing quality education and research.

Innovation and impact¹⁰

Transferring and applying knowledge for the benefit of the economy and society is a core task of TU Delft, on top of providing quality education and research. Impact and innovation with a focus on developing new business and societal impact find their basis mainly in the research conducted at the university.



The further promotion of entrepreneurial education and facilitating start-ups continue to be among TU Delft's main pillars. Acquiring additional funds for research is also of great importance, both from (inter)national research funders and through contract research. It is essential that current and upcoming scientific talent at TU Delft has access to sufficient funding opportunities for personalised research. Large-scale research initiatives, such as those within Convergence, or activities that are taking shape in the framework of Contours 2030 or in other partnerships such as LDE and 4TU, offer relevant starting points to that end.

Another important objective is increasing the number of public-private partnerships, which are essential in attracting innovative institutions and companies to the TU Delft campus and developing field labs. Stakeholders such as Innovation District Delft and Bedrijvenkring Schieoevers – as well as the Municipality of Delft and the Province of South Holland – certainly play a key role.

It is imperative that the strategic framework for these activities, the Valorisation Agenda TU Delft 2020 is updated in the light of current developments inside and outside the university. As an important precondition for the innovation and impact strategy, TU Delft actively communicates its societal position and economic interests through targeted public affairs, enabling the university to share its input on policy developments at an early stage among relevant stakeholders.

Innovative education and an inclusive learning environment¹¹

The vision on education places personal growth and development at the very centre, both for students and for educational and professional facilitating staff, offering room for everyone's personal profile and background. As a result, not all education can be fully pre-planned or programmed.

Over the course of time, more room should be created for in-depth interaction, so that teachers and students can shape education together.

This vision builds on TU Delft's leading position in *engineering education* and underpins the education of critically thinking and analytically strong engineers of TU Delft. The vision contributes to the personal growth and development of these engineers, for instance by encouraging proactive learning, carrying responsibility, resilience and (self)reflection. The innovative educational practice being developed focuses on combining state-of-the-art scientific theory with practical applications and the use of (digital) adaptive teaching methods to stimulate active learning. This calls for feasible study programmes that are designed in accordance with the duty of care. In all forms of educational innovation, the focus on differentiation in form and delivery of education is evident. Making (effective) use of educational facilities and technologies can only be considered meaningful in relation to the quality of education. This goes hand in hand with the continuous professionalisation of teachers, professional facilitating staff and education facilities. Further efforts are made to train students in interdisciplinary and transdisciplinary learning, applying acquired knowledge and skills, and promoting collaboration. Non-technical disciplines should also be included. Finally, students are brought into contact with the context of their future professional practice.

The aim is to strengthen the inclusive nature of education at TU Delft by applying the concept of Open Education. This will also increase the university's societal impact.

Broadening engagement

The strategic initiatives within this priority are aimed at broadening the engagement of various stakeholders in TU Delft. Civic engagement aims to further strengthen the connection between TU Delft and the regional environment. Other important initiatives include TU Delft's presence and visibility within international university networks, the promotion of international cooperation and the international exchange of both students and staff. The Lifelong Learning strategy broadens the university's educational offering by providing education that is relevant during the entire course of one's career. The Open Science initiative also aims to broaden the involvement of academics and citizens worldwide in conducting research.

Regional civic engagement¹²

The growing presence of TU Delft has further increased the necessity of strong connections with local, regional and national stakeholders. The university endeavours to structurally integrate developing and maintaining these connections into the organisation under the heading of “civic engagement”.

Civic engagement allows the university to give more meaning to and have a greater impact on its immediate environment, and not simply fulfil its primary processes. The university is also regarded as a societal partner in the respective university location and surrounding region. TU Delft has the task to actively give shape to this societal role. To that end, the university is currently drafting a Civic Engagement Agenda for the period 2024-2030. Elements of the agenda include setting up a programme to further strengthen ties between TU Delft and regional partners, embedding community engagement in ongoing processes, increasing the involvement of a broad (local) public in research projects (e.g. through ‘citizen science’), and making the campus location(s) more accessible to a broader public. Ideas may include using TU Delft research, education and student projects in resolving local societal challenges. Efforts can also be made to cooperate more closely with colleges and alumni.

Above all, civic engagement provides scope to intensify collaborations with other educational institutions in the region, giving young people more opportunities to study. TU Delft sees this as a contribution to reducing social inequality and also as an opportunity to tailor education better to the needs, wants and motivations of future students, regardless of the education level. At the heart of everything is the fulfilment of society’s need for highly educated people with a technical background. TU Delft’s innovation mission also extends to national policy.

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International presence¹³

TU Delft is constantly strengthening its international presence. Virtually all of the university’s operational processes have an international dimension. To be able to maintain and strengthen its leading position, TU Delft has every intention to maintain its identity as an internationally composed community. Given the vast size of this playing field, the key is to define institutional policies on international affairs.

For the period 2024-2030, the focus is on further developing participation in relevant international networks and strengthening existing international partnerships. Research partnerships are important – if not vital – for the access to talent, exchange of ideas and utilisation of research facilities. These interactions should take place in a safe and well-thought-out manner. This also applies to the international dimension of education, such as exchange programmes and joint master’s study programmes.

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TU Delft remains committed to participating in a selected number of international networks, such as IDEA League, ENHANCE, CESAER and EUA. The aim is to cooperate substantively, represent the university's interests and, where possible, influence relevant international agendas. TU Delft is also broadening its involvement outside Europe, for example in Brazil and India, and in regions such as Africa and Southeast Asia. Successful efforts are underway to build and strengthen capacity and international partnerships in order to advance the



UN SDGs. This gives TU Delft more clout to play an important part in the various international agendas. Plans are in place to develop a work programme on International Affairs in the coming period.

What's more, the current programme on knowledge security – given the current geopolitical developments – is being updated and fortified. The strategic frameworks indicated by the government are leading in this.

Lifelong Learning¹⁴

Lifelong Learning (LLL) is an important educational task of TU Delft. Offering education to (working) adults is considered part of the societal mission of public educational institutions. This strategy also responds to international trends in relation to LLL.

The activities of TU Delft in this area are being further scaled up through activities that tie in with the university's research. It is important that LLL also has a positive impact on initial education. The high-quality educational offering resulting from it, is primarily aimed at professionals who wish to deepen their knowledge and skills in engineering sciences, with a substantive focus on urgent societal transitions. Four societal themes take centre stage: Health & Care, Digital Society, Resilient Cities & Mobility, and Climate & Energy. The faculties are leading in fleshing out these themes, taking into account the profiles of the various TU Delft locations.

The LLL strategy is based on the experience and expertise gained from the Extension School, among others.

Open Science¹⁵

TU Delft holds a prominent position in Open Science and Open Education and envisions to expand in those areas. The TU Delft Open Science programme includes four Open Science initiatives (Open Publishing, FAIR Data & Software, Civic Engagement, Open Hardware), in addition to three Open Education initiatives (Open Educational Resources, Open Pedagogy, Open Learning Systems).

The programme responds to important developments in society and within TU Delft. Core values include equity, privacy, safety and security. Important preconditions to these values are legal aspects, recognition and rewards, and knowledge security. TU Delft sees Open Science as a valuable means of contributing to a just society and an open research and education culture. The aim here is to operate as openly as possible and as closed as necessary. The Recognition and Rewards policy allows new positions that have been created as a result of this programme to be recognised as fully fledged scientific positions. Researchers who work according to responsible 'open' methods are thus also given the appreciation they deserve.

The coming period will be dedicated to implementing the newly established strategic TU Delft Open Science programme for the years 2024-2028, which is an extension to the successful first programme.

Strengthening resilience

The four strategic initiatives within this priority focus on reinforcing the organisation's resilience to various challenges. Streamlining the interplay of the professional facilitating staff with the various faculties strengthens the quality and resilience of services. This also applies to transforming TU Delft into a digital-driven organisation and converting the Delft campus to a sustainable living and working area. Both of these initiatives increase the appeal of the university for students, researchers and professional facilitating staff. Further efforts are being made to renew the strategy development within the university. The use of strategic foresight contributes to responding flexibly and adaptively to the complex and uncertain environment in which TU Delft finds itself.

High-quality business processes¹⁶

Organising an effective interplay of university services with the primary processes is crucial to achieving TU Delft's mission and vision. Here, the demand from the primary processes act as guidelines in the development of an appropriate and harmonised offer. University services comprise a broad spectrum of mainly business processes that make the primary processes possible.

Teams are continuously working together to build strong links between services and faculties. This is proceeding very well in many work areas. Nevertheless, constant attention should still be paid to closely aligning demand from faculties and the supply of services. The effectiveness of internal coordination and feedback mechanisms will therefore be reviewed in the coming period, with the aim of replacing processes where necessary, developing new processes or strengthening existing frameworks. It is also important to further broaden the involvement of internal stakeholders in the governance and management of the university. Developing an arrangement such as this increases the possibility to link the strategic, tactical and operational levels of governance with one another, while also promoting cooperation between university departments and faculties. Working from a user-centric perspective, harmonising and digitalising administrative processes and applying process management principles are essential to providing suitable services to parties who make use of these services.

Based on the governance principles that apply to the university departments, a multi-year plan for university services for the coming period is currently being developed, paying explicit attention to Enterprise Risk Management (ERM) and to the principles from the Environment, Society & Governance (ESG) framework. Finally, for the purpose of the (further) development of the subsidiary branches, a vision on the appropriate service delivery model will be drawn up.

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Digitalisation and data¹⁷

Digital technology is playing an ever greater role in TU Delft's primary processes. The use and development of these technologies has accelerated in recent years, partly in response to the COVID-19 pandemic and the explosive rise of AI. With that knowledge in mind, TU Delft is committed to achieving a digital transformation of the university, within the qualitative and financial preconditions it is also looking at the possibility of using European technologies.

This will be achieved through the Digital Strategy TU Delft 2023-2030 and should provide new opportunities and insights for education and research, as well as for students and staff. The ultimate goal is to create high-quality digital education and research facilities that focus on better enabling collaboration and connection.

Key foundations of the digital strategy are a modern technology landscape, cybersecurity,

privacy and data-driven working. Together, they support and help accelerate digital transformation. For the adoption of new ways of working, processes and technologies to be successful, it is important to also focus on digital leadership, which includes strengthening digital skills of employees, thinking in customer journeys and building a digital culture.

The campus should provide a welcoming, open, inclusive space for students, staff, businesses, guests and residents of the municipality of Delft.

High-quality, sustainable campus and infrastructure¹⁸

TU Delft is a campus university where the campus acts as a meeting place for students and staff. In addition to facilitating education, research and innovation, the physical space in which the university ecosystem is rooted should reflect the values and ambitions that TU Delft holds dear on sustainability. Accessibility, physical safety and a healthy living environment for all persons within TU Delft are other important pillars in this regard. As a university that has innovation and sustainability high on its agenda, TU Delft wants to clearly demonstrate how to accomplish such a complex task as making a campus more sustainable, and thus enable other organisations to learn from it. The sustainable campus acts as a living lab to



that end. The aim is to realise a carbon-neutral, bio-diverse and circular campus with a reduced footprint, with a greatly improved quality of life and use. Aspects other than sustainability are also taken into account in the campus redesign, with particular focus on the social dimension. The campus should provide a welcoming, open, inclusive space for students, staff, businesses, guests and residents of the municipality of Delft. An efficient and flexible layout of the campus environment and good accessibility of the campus on foot, by public transport, bicycle and car, are other important elements in the context of accommodating autonomous growth in Delft. A hybrid working environment is also facilitated, which allows for differentiation in the format, delivery and didactics of education.

The Campus Vision 2040, the Programme Plan for Sustainability and SMART Campus solutions are the starting points for developing a sustainable campus. Concrete renovation projects and new construction plans, including the required resources, are set out in a Campus Strategy and are based on the principles above. This sustainable approach is also aspired for current and future branches of TU Delft. Finally, in close consultation with relevant external stakeholders, TU Delft is exploring new ways to make traffic flows on and to the campus and university branches more sustainable.

Strategic Foresight¹⁹

The environment in which TU Delft operates is becoming increasingly complex. This means that the formulation of strategies and decisions in many parts of the university are taking place under conditions of uncertainty. In this rapidly changing, ambiguous, complex context, it is therefore essential for TU Delft to be better prepared for unforeseen circumstances.

TU Delft will use the coming years to develop a strategic foresight facility and will start working more systematically within the organisation with proven foresight tools, such as horizon scanning, scenario development and policy stress testing. In doing so, TU Delft joins innovative developments taking place at peer institutions including ETH Zurich, Manchester University, Imperial College and the National University of Singapore. Strategic foresight will be implemented according to the demand at different levels in the organisation.

A policy framework is being developed to further shape and integrate strategic foresight activities into the organisation. Elements of the framework include building centralised capacity with foresight experience, developing an internal network of strategic foresight practitioners, and selecting and applying foresight tools relevant to TU Delft. It is also being investigated how we can develop alignment with relevant academic expertise within the university. Finally, for quality assurance of this provision, structural links will be sought with organisations that have already delivered good results in this area.

Resilient community

The open social community that TU Delft is today, has been forged and driven forward by our core values and ambitions. This community is the basis for implementing the Strategic Agenda.

Safeguarding and promoting the notion that TU Delft is an open social and creative community is absolutely essential. This is all the more true since the environment to which TU Delft needs to relate is now far more complex, uncertain and changeable than we have seen in recent history.

The shared confidence in TU Delft's resilience and innovative capacity is an important quality and a motivating force.

TU Delft is a pluralistic society in miniature, as it were. This is not only reflected in the richly diverse composition of our university, but is also evident from the broad spectrum of opposing views, insights and conceptions on a wide range of topics.

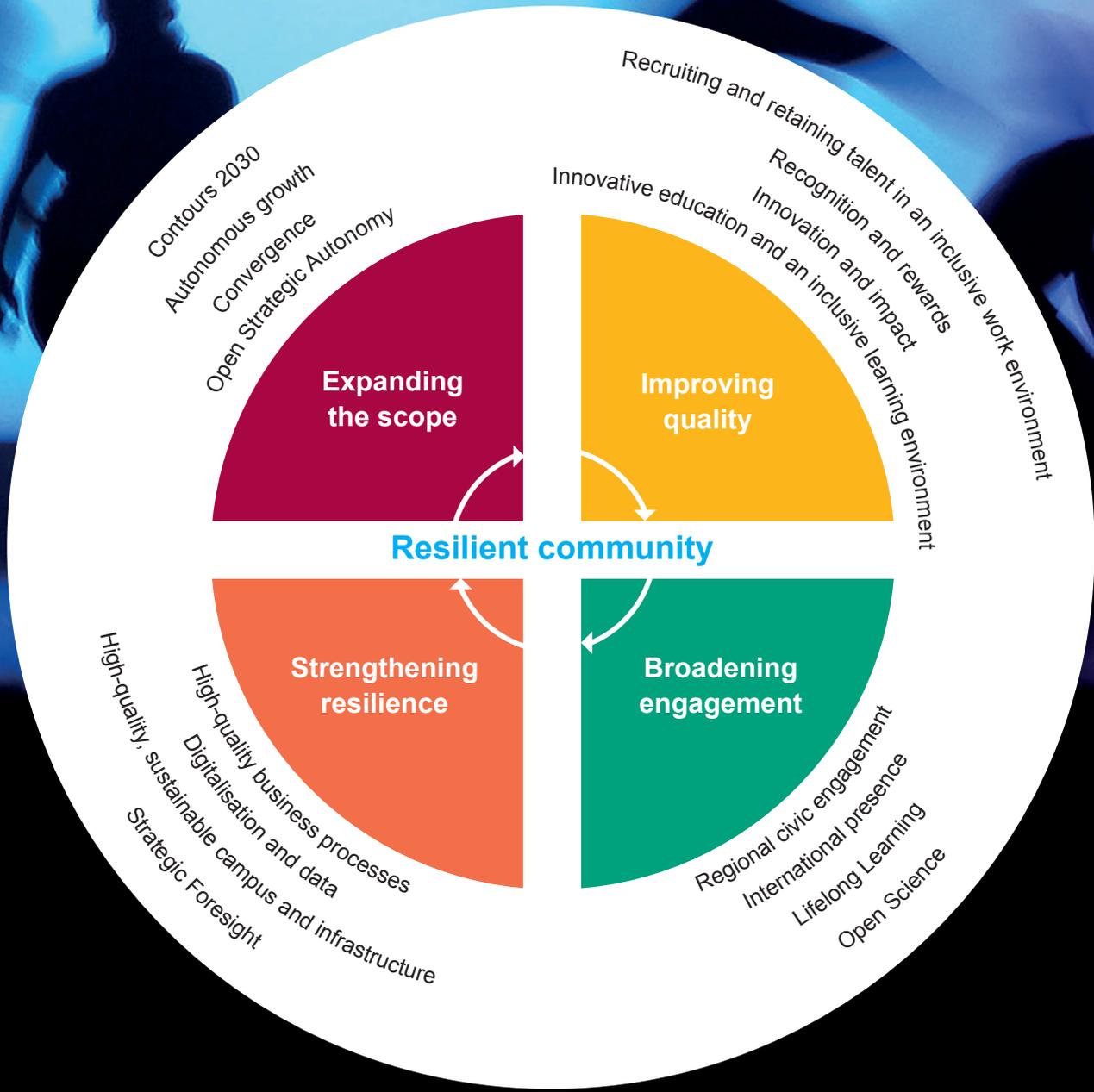
Being able to share our views in a socially safe environment is a necessary prerequisite. It is how a social community such as a university should in fact function, with new ideas and insights emerging at the intersection of views. Protecting and enhancing a biotope this valuable is more important today than ever before, with the TU Delft Code of Conduct as the leading principle.

We learnt from the COVID-19 pandemic how important and valuable it is to be able to fall back on the strength of the social community that TU Delft forms, both on the formal organisation and the social fabric of TU Delft in a broader sense, such as the supportive role that the social structures play within study and student associations, student houses, and dream teams, as well as other structures that students or staff feel closely connected to. These different structures contribute immensely to the open community we aim to be.

TU Delft sees an exemplary role for itself – together with other universities – in promoting and supporting this form of successful social organisation.

TU Delft is a university community with a dominant focus on the future and on developing solutions to pressing challenges. At the same time, however, it is at least as important as an organisation not to lose sight of the value and relevance of self-reflection.

There will always be a tension between what we aspire to as TU Delft and what reality dictates. This is precisely why it makes good sense to join hands in reflecting on this tense relationship in order to come as close as possible to our ambitions.



5

Implementation

The Strategic Agenda 2024-2030 is an important instrument to help realise the vision and mission of TU Delft. While a number of the strategic initiatives build on already existing activities, other topics are new. For all strategic initiatives, provisions on clear ownership are or will be established within the organisation.

The progress of the implementation and further development of the Strategic Agenda is regularly discussed by the Executive Board in periodic meetings with deans of the Faculties, and also with the Participation Bodies and the Supervisory Board. In the context of the planning and evaluation cycle, this agenda is one of the components of the Executive Board's spring and autumn consultations with the Faculties.

The strategic initiatives indicated in this document are being or have been further developed into concrete (sub)plans. These plans follow the usual decision-making procedures of the organisation and take into account the specific requirements set by, among others, the Participation Bodies. Agreeing to or approving this strategic agenda does not automatically mean also agreeing to specific (sub)plans that are still in development.

In view of concerns regarding the (additional) workload, the Executive Board, in consultation with the management units, will consider which activities require less priority in the coming years.

The agenda acts as a compass. Given the uncertainties that TU Delft needs to take into consideration, this approach provides the space and flexibility to adjust the agenda in the interim, if so required. Amendments to the agenda are made in consultation with the relevant bodies, such as relevant faculties, departments, and the Participation Bodies.

This Strategic Agenda is a forward-looking interpretation of TU Delft's vision and mission – and thus its strategic direction. TU Delft sees itself as a progressive academic community that collaborates with a diverse range of parties. As a leading national scientific institution, the university bears a responsibility to produce and guard public values, thus contributing to a sustainable, healthy and liveable future.²⁰



- 1 TU Delft Vision on Integrity 2018-2024, Terms of Reference Diversity & Inclusion TU Delft 2018-2024
- 2 Toekomstverkenning OCW (2023), UNL Kiezen voor kwaliteit in 2040 (2023), TU Delft Environmental Analysis (2023), M. Boxall, Connections & Impacts Revisited, 2023
- 3 EB decision Contours 2030 Strategy, 11 July 2023
- 4 EB decision Taskforce local accommodation autonomous growth, 25 April 2023
- 5 See also “Impact for a better society: TU Delft Strategic Framework 2018-2024”, page 16
- 6 Strategic Priorities TU Delft 2022-2024, Framework Agreement Convergence Alliance – Crossing boundaries – July 2021
- 7 Navigating Open Strategic Autonomy – Opportunities for the Delft University of Technology, 3 October 2023
- 8 Long-term HR Agenda 2018-2024 Impact for and with people
- 9 TU Delft Recognition & Rewards Perspective 2021-2024; EB decision Programme Recognition and Rewards second phase, 11.7.2023
- 10 Valorisation agenda TU Delft 2020
- 11 Strategic Priorities TU Delft 2022-2-4, Vision on Teaching and Learning 2030, February 2023
- 12 EB decision Pro Vice Rector Civic Engagement 2023, M. Boxall, Connections & Impacts Revisited 2023
- 13 EB decision Appointment of Pro Vice Rector International Affairs, 8 March 2022
- 14 EB decision LLL Strategy, 18 April 2023
- 15 EB decision TU Delft Strategic Plan Open Science 2024-2028
- 16 EB decision evaluation final report Temporary Management UD, 2 May 2023
- 17 Strategic Priorities TU Delft 2022-2024, EB decision Digital Strategy, 25 April 2023, decision no.: 2023.068; Terms of reference Programme Smart Campus, 30 May 2023
- 18 Strategic Priorities TU Delft 2022-2024, EB decision Sustainable TU Delft -Vision, Ambition and Action Plan, 25 January 2022, Campus innovation policy, 11 April 2023
- 19 EB decision Navigating Complexity – Strategic Foresight Initiative TU Delft, 9 May 2023
- 20 M. Boxall, Connections & Impacts Revisited 2023

