

Facts & Figures

TU Delft at
a glance

Content

Portrait.....	4
Organisation	5
Strategy on one page	6
Delft University of Technology at a Glance.....	8
Education and Students	10
Online Education	12
Scientific Focus	18
TU Programmes	22
Delft Research-based Initiatives	26
TU Delft Institutes	28
Technology Transfer.....	32
TU Delft Alumni.....	38
Delft University Fund.....	40
Global Engagement & Partnerships	44
Research Facilities	50
History of the University.....	54
Rankings.....	56
TU Delft Dream Teams	58
The City of Delft.....	60



Portrait

TU Delft is the largest university of technology in the Netherlands and covers practically the entire spectrum of engineering sciences. An important characteristic of TU Delft is that we not only strive to be good *at* what we do but also that we want to be good *for* something. At Delft University of Technology, we aim for a balance between pursuing world-class academic excellence, providing high quality education and developing expert solutions for societal challenges.

Also key at TU Delft is the integration of research, education and innovation. Technical-scientific knowledge is a breeding ground for our education and innovation. Conversely, the interaction with students, companies and societal partners leads to new and unexpected research questions. Research, education and innovation inspire each other.

Vision

Delft University of Technology contributes to solving global challenges by educating new generations of socially responsible engineers and expanding the frontiers of the engineering sciences.

Mission

- We perform world-class research by combining science, engineering and design in a socially responsible manner. Thus, we advance and share the benefits of technology.
- We develop and enhance the expertise of tomorrow's engineering leaders and educate professional, high-level and responsible engineers throughout their careers.
- We help to develop and deliver technology-driven, innovative solutions to societal problems through collaborations with leading national and international partners whilst being firmly rooted in Delft.
- We continuously improve our collective effectiveness, performance and organisational resilience through the principles and practice of professionalism, collaboration and openness.

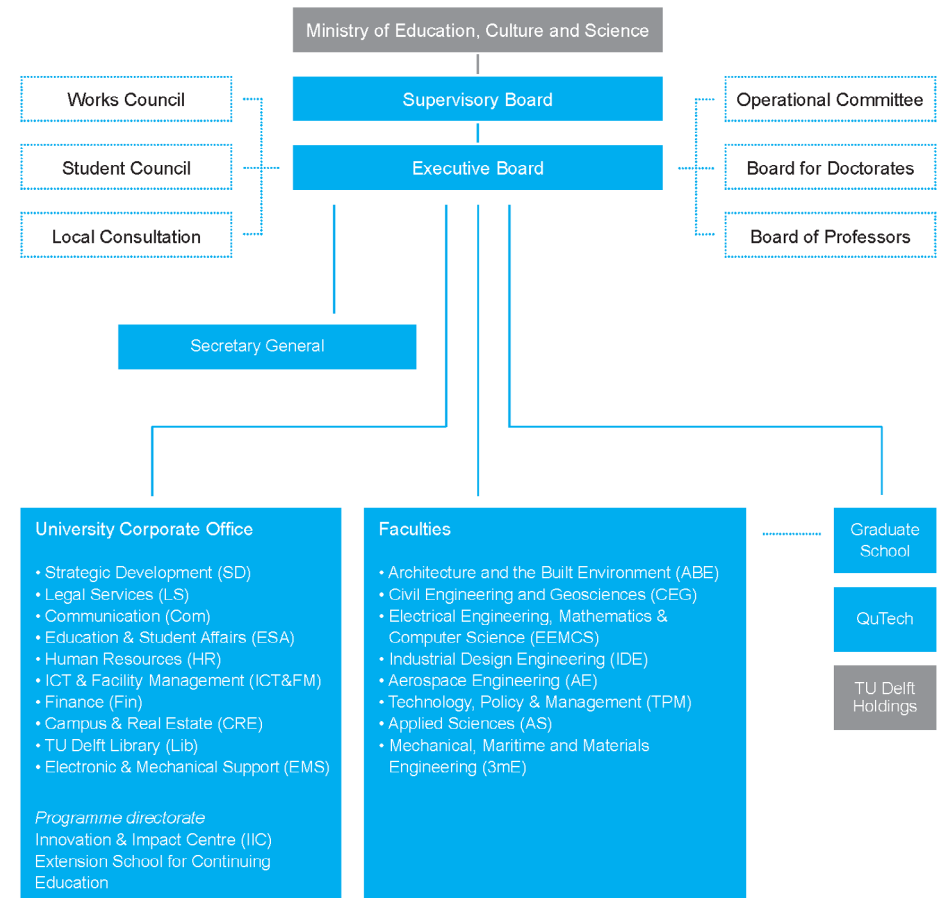
Values

- Diversity
- Integrity
- Respect
- Engagement
- Courage
- Trust

www.tudelft.nl/en/about-tu-delft/strategy/integrity-policy

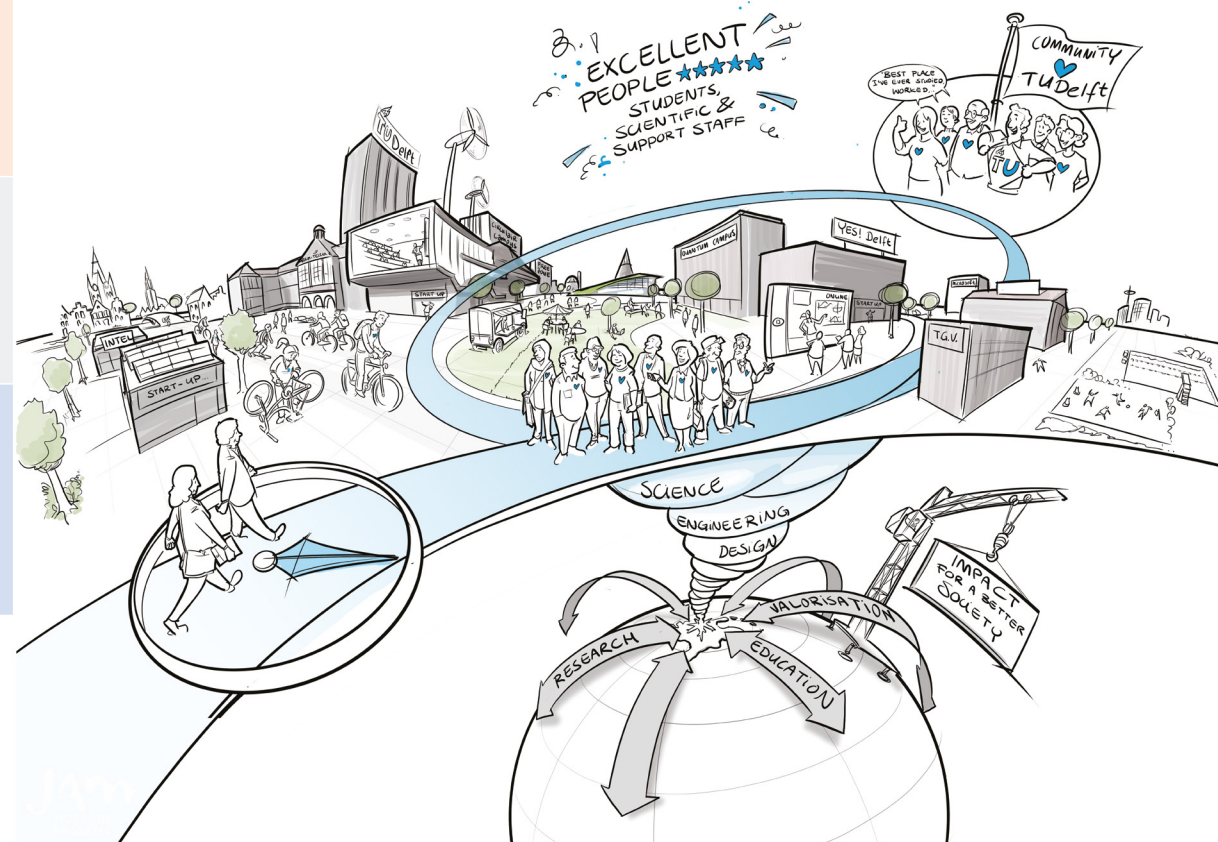


Organisation



Strategy on one page

	Excellence	Impact	Engagement	Openness
Students & Education	We strengthen our ambitious study culture that is characterised by substance, challenges and academic breadth.	We prepare students for solving societal challenges and educate tomorrow's responsible leaders in science, engineering, design and innovation.	We invest in lifelong learning, offering a relevant portfolio in a global environment.	We promote and facilitate Open Education. We strengthen online education.
Research & Innovation	We strive to increase the number of scientific focal points.	We make a significant contribution to the solution of societal challenges by combining science, technology and design in a responsible manner.	We promote outreach to the wider (local) public; we strengthen global engagement via joint research initiatives.	We promote and facilitate Open Science and Open Innovation. We increase the number of large-scale public-private partnerships.
People & Community	We challenge our students and staff to get the best out of themselves and provide them with the necessary support to do so.	We support students and staff members to co-create and deliver solutions to community concerns.	We create stronger engagement with our alumni and people from the surrounding area; together, we build a 'TU Delft community for life'.	We are convinced of the importance of diversity, as a cornerstone for innovation. We aim to integrate internationalisation in all our core activities.
Campus & Services	We develop excellent, user-friendly and efficient services.	We develop the campus as a multi-partner 'Living Lab' in which education, research and innovation contribute to solving societal challenges.	We gear our facilities and services to our aim to make a sustainable and responsible contribution to the region, the Netherlands and the world.	We develop our campus in such a way that we are more welcoming to interested people from the near surroundings.



Delft University of Technology at a Glance

Education	Bachelor	Master
Programmes	16	34
Student population	13,949	13,029
First year students at TU Delft	3,684	1,938
Diplomas (2020/2021)	2,826	3,983
Research	#	
Full professors (fte)	282	
Publications (scientific & professional)	6,982	
Promotions	431	
Valorisation	#	
Technostartups	18	
Patents in Portfolio	245	
Finances	M€	
Equity	494,9	
First income stream	618,6	
Second income stream	58,5	
Third income stream	147,6	

Personnel	fte	head-count
Faculty staff (full, associate and assistant professor)	1,190	
Other scientific staff	1,065	
Professional services	2,476	
PhD students (total)		3,003
out of which employed by TU Delft	1,617	
Total staff	6,351	

Diversity	International	Female
Full professors	29%	18%
Faculty staff (full, associate and assistant professor)	46%	27%
Other scientific staff	60%	28%
Professional services	8%	49%
PhD students (total)	69%	31%
Bachelor students	15%	30%
Master students	34%	31%

(Figures are based on 2021)

www.tudelft.nl/factsandfigures



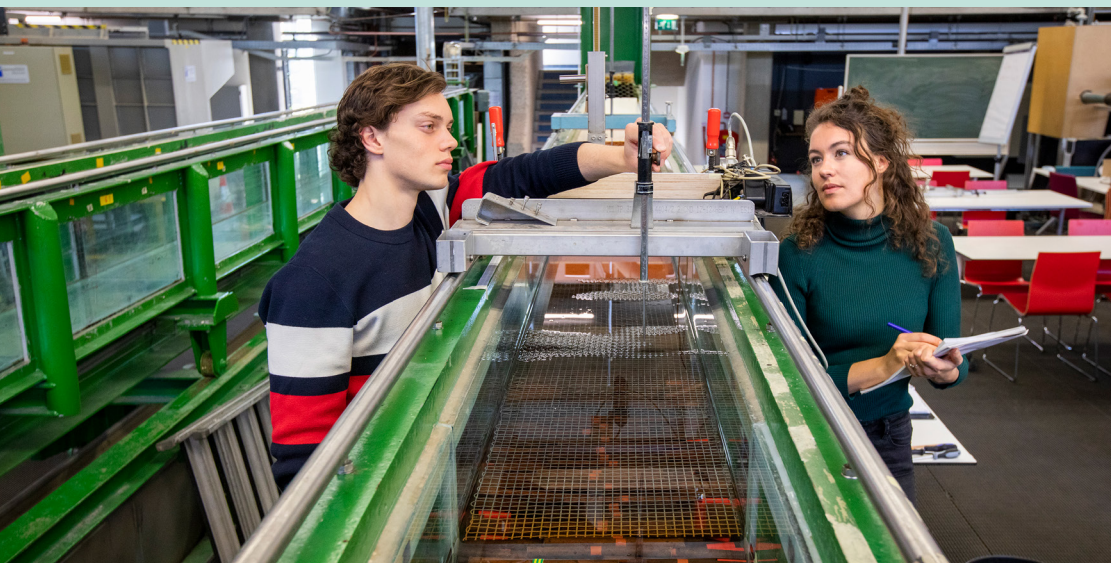
Faculties

- Aerospace Engineering (AE)
- Applied Sciences (AS)
- Architecture and the Built Environment (ABE)
- Civil Engineering and Geosciences (CEG)
- Electrical Engineering, Mathematics and Computer Science (EEMCS)
- Industrial Design Engineering (IDE)
- Mechanical, Maritime and Materials Engineering (3mE)
- Technology, Policy and Management (TPM)



Education and Students

- TU Delft has a portfolio of 16 BSc programmes (including four joint degrees), which cover the broad range of engineering disciplines.
- The University offers more than 30 MSc programmes, several of which are unique in the Netherlands.
- Some of these degree programmes are offered in conjunction with other higher education institutions, under the auspices of either the 4TU Federation (the collaborative venture of the four Dutch universities of technology) or our alliance with Leiden University and Erasmus University Rotterdam (LDE).
- Our MSc programmes are taught in English, as are our Applied Earth Sciences, Aerospace Engineering, Computer Science and Engineering and Nanobiology BSc programmes.
- TU Delft encourages ambitious students to participate in the Honours Programme Bachelor or Master: an extra-curricular programme designed to enrich the overall study experience.



Bachelor's

- Aerospace Engineering
- Applied Earth Sciences
- Applied Mathematics
- Applied Physics
- Architecture, Urbanism & Building Sciences
- Civil Engineering
- Clinical Technology (joint degree)
- Computer Science and Engineering
- Electrical Engineering
- Industrial Design
- Life Science and Technology (joint degree)
- Marine Technology
- Mechanical Engineering
- Molecular Science and Technology (joint degree)
- Nanobiology (joint degree)
- Systems Engineering, Policy Analysis & Management

Master's

- Aerospace Engineering
- Applied Earth Sciences
- Applied Mathematics
- Applied Physics
- Architecture, Urbanism & Building Sciences
- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Complex Systems Engineering and Management
- Computer Engineering
- Computer Science
- Construction Management and Engineering
- Design for Interaction
- Electrical Engineering
- Embedded Systems
- Engineering and Policy Analysis
- Geomatics
- Industrial Ecology (joint degree)
- Integrated Product Design
- Life Science and Technology
- Management of Technology
- Marine Technology
- Materials Science and Engineering
- Mechanical Engineering
- Metropolitan Analysis, Design and Engineering (joint degree)
- Nanobiology (joint degree)
- Offshore and Dredging Engineering
- Robotics
- Strategic Product Design
- Sustainable Energy Technology
- Systems and Control
- Technical Medicine (joint degree)
- Transport Infrastructure and Logistics

Postgraduate Programmes

- Designer in Bioprocess Engineering (PDEng, Professional Doctorate in Engineering)
- Chemical Product Design (PDEng)
- Civil and Environmental Engineering (PDEng)
- Process and Equipment Design (PDEng)
- The Berlage Post-master in Architecture and Urban Design

Online Education

The TU Delft Extension School for Continuing Education works with faculties and external partners to develop and offer online courses and short programs to equip people to solve today's global challenges. The portfolio (www.online-learning.tudelft.nl) prioritises a number of university-wide strategic themes. The key focus is delivering expert knowledge and applicable skills for lifelong learners and working professionals - whether they are looking to change career, broaden their skillset, or acquire further academic qualifications.

www.tudelft.nl/extension-school



AI and Cyber Security

Courses

- AI in Practice: Applying AI
- AI in Practice: Preparing for AI
- Automated Software Testing: Model and State-based Testing
- Automated Software Testing: Unit Testing, Coverage and Testability
- Big Data Strategies to Transform Your Business
- Cybersecurity for Managers and Executives: Taking the Lead
- Hello (Real) World with ROS - Robot Operating System
- Introduction to Functional Programming

for Big Data Processing

- Mind of the Universe: Robots in Society - Blessing or Curse?
- Taming Big Data Streams: Real-time Data Processing at Scale
- Unix Tools: Data, Software and Production Engineering

Programmes

- AI in Practice
- Automated Software Testing
- Big Data to Insights: Scalable Processing of Large Data Repositories & Streams



Energy Transition

Courses

- Aeroacoustics: Measurement Techniques
- Aeroacoustics: Noise Reduction Strategies for Mechanical Systems
- Designing a Climate Neutral World: An Introduction
- Dynamic Energy Modelling of Buildings: Thermal Simulation
- Energy Markets of Today
- Inclusive energy systems - Exploring Sustainable Energy for All
- Offshore Wind Farm Technology: Design, Installation and Operation
- Photovoltaic Material and Device Modeling
- Photovoltaic Systems Modeling
- Smart Grids: Modeling
- Smart Grids: The Basics
- Solar and Chemical Energy Conversions for Green Hydrogen
- Solar Energy
- Solar Energy Engineering: Comprehensive Exams
- Solar Energy: Integration of Photovoltaic Systems in Microgrids
- Solar Energy: Photovoltaic (PV) Energy Conversion
- Solar Energy: Photovoltaic (PV) Systems
- Solar Energy: Photovoltaic (PV) Technologies
- Sustainable Energy: Design A Renewable Future
- The Transition to the Decarbonised Economy of Tomorrow
- Towards Decarbonisation of the Building and Transport Sectors
- Understanding Nuclear Energy

- Virtual Lab: Large-Scale PV Systems with Hydrogen-Based Storage
- Virtual Lab: Light, Photovoltaic Cells and Modules
- Virtual Lab: Photovoltaic System and Electronic Components
- Virtual Lab: Small-Scale PV Systems with Electrical Storage

Programmes

- Aeroacoustics
- PV Modeling, Simulation and Analysis
- Smart Grids Integration and Modelling
- Solar and Chemical Energy Conversions for Green Hydrogen
- Solar Energy Engineering
- The Economics of Energy Transition
- Virtual Lab: Photovoltaic Conversion, Systems and Components



Future of Transportation

Courses

- Advanced Transport Phenomena
- Aeroelasticity
- Air Safety Investigation
- Aircraft Performance - Physics and Simulation
- Electric Cars: Business
- Electric Cars: Introduction
- Electric Cars: Policy
- Electric Cars: Technology
- Helicopter Performance, Stability and Control
- Introduction to Aeronautical Engineering
- Introduction to Aerospace Structures and Materials
- Modeling, Simulation and Application of Power and Propulsion Systems
- Railway Engineering: An Integral Ap-

- proach
- Railway Engineering: Capstone Project
- Railway Engineering: Performance over Time
- Railway Engineering: Real Time Operations
- Railway Engineering: Track and Train Interaction
- Road Safety
- Sustainable Aviation: The Route to Climate-Neutral Aviation
- Sustainable Urban Freight Transport: A Global Perspective
- The Basics of Transport Phenomena
- Urban Air Mobility

Programmes

- Electric Cars
- Railway Engineering



Medical Technology

Courses

- Biomedical Equipment: Repairing and Maintaining Biomedical Devices
- Design in Healthcare: Using Patient Journey Mapping
- Project MARCH: Behind the Technology of Robotic Exoskeletons

Programmes

- Product Design & Health



Quantum Computing

Courses

- Architecture, Algorithms, and Protocols of a Quantum Computer/Internet

- Fundamentals of Quantum Information
- Quantum Cryptography
- Quantum Internet and Computers: How Will They Change the World?
- The Hardware of a Quantum Computer
- Unravelling the Quantum Computer: An Amazing Feat of Engineering!

Programmes

- Quantum 101: Quantum Computing & Quantum Internet
- Quantum Computing



Skills for Engineers

Courses

- Advanced Credit Risk Management
- Business Model Implementation
- Business Model Testing
- Creative Problem Solving and Decision Making
- Culture Sensitive Design
- Dealing with Power: Discover Your Leadership Style & Influence Others
- Decision Making Under Uncertainty: Applying Structured Expert Judgment
- Decision Making Under Uncertainty: Intro to Structured Expert Judgment
- Design Leadership and Innovation
- Effective Decision Making: Dealing with Business Complexity
- Entrepreneurship for Global Challenges in Emerging Markets
- Ethical Dilemmas in Professional Engineering
- Framing Your Communication to Inspire and Convince
- How to Design a Successful Business Model

- Multidisciplinary Research Methods for Engineers
- Multi-stakeholder Strategies: Analysis for Winning Coalitions
- Product Design: The Delft Design Approach
- Project Finance: Funding Projects Successfully
- Project Management of Engineering Projects: Preparing for Success
- Project Management: Mastering Complexity
- Responsible Innovation: Building Tomorrow's Responsible Firms
- Responsible Innovation: Ethics, Safety and Technology
- The Value of Business Models Programmes
- Business Model Innovation
- Engineering Project Management: Mastering Project Complexity
- Engineering Project Management: Project Financing
- Leadership Essentials for Engineers



Sustainable Cities

Courses

- Advanced Zero-Energy Design: Validate Building's Energy Performance
- Beyond Engineering: Building with Nature
- Building Inclusive Cities: Tackling Urban Inequality and Segregation
- Circular Building Products for a Sustainable Built Environment
- Circular Economy for a Sustainable Built Environment
- Circular Economy: An Introduction

- Circular Product Design Assessment
- Co-Creating Sustainable Cities
- Comfort and Health in Buildings
- Critical Raw Materials: Managing Resources for a Sustainable Future
- Design for Recycling of Electronics in a Circular Economy
- Drinking Water Treatment
- Efficient HVAC Systems
- Energy Demand in Buildings
- Energy Supply Systems for Buildings
- Engineering Design for a Circular Economy
- Engineering: Building with Nature
- Global Housing Design
- High-rate Anaerobic Wastewater Treatment
- Introduction to Water and Climate
- Managing Building Adaptation: a Sustainable Approach
- Nanofiltration and Reverse Osmosis in Water Treatment
- Nature Based Metropolitan Solutions
- (Re)Imagining Port Cities: Understanding Space, Society and Culture
- Rethink the City: New approaches to Global and Local Urban Challenges
- Room for Rivers: River basin Management in Times of Climate Change
- Spatial Circularity Strategies for Sustainable Regional Development
- Sustainable Packaging in a Circular Economy
- Sustainable Urban Development
- Urban Design for the Public Good: Dutch Urbanism
- Urban Sewage Treatment
- Waste Management and Critical Raw Materials
- Water Works: Activating Heritage for

Sustainable Development

- Zero Energy Design: an Approach to Make Your Building Sustainable

Programmes

- Buildings as Sustainable Energy Systems
- Inclusive and Sustainable Cities
- Water and Ports, Historic Cities and Landscapes
- Water Management



Specialty subjects

Courses

- Advanced Dynamics
- Aerobic Granular Sludge Technology for Wastewater Treatment
- Design of Lightweight Structures I: Composites & Metals
- Designing an Online Course - TU Delft style

- Fatigue of Structures & Materials
- Fiber Reinforced Polymer (FRP) Composites in Structural Engineering
- Forensic Engineering: Learning from Failures
- Industrial Biotechnology
- Linear Modeling (including FEM)
- Non-linear Modeling
- Observation Theory: Estimating the Unknown
- Open and Smart Government
- Pre-University Calculus
- Pre-University Physics
- Rotor and Wake Aerodynamics
- Smart Structures
- Teaching an Online Course
- The Next Generation of Infrastructure

Programmes

- Science and Engineering: Pre-University Calculus and Physics

Online education in numbers



3,358,552
enrolments



82,217
certificates



222
courses



26
programmes



200+
countries



10
innovation projects



32
awards



240
faculty staff

Scientific Focus



Civil Engineering and Geosciences

- Engineering Structures •
- Geoscience & Engineering •
- Geoscience & Remote Sensing •
- Hydraulic Engineering •
- Material, Mechanics, Management & Design •
- Transport & Planning •
- Water Management •



Technology, Policy and Management

- Engineering Systems & Services •
- Multi-Actor Systems •
- Values, Technology & Innovation •

Architecture and the Built Environment

- Architecture
- Architectural Engineering + Technology
- Management in the Built Environment
- Urbanism



Industrial Design Engineering

- Design Organisation and Strategy
- Human-Centered Design
- Sustainable Design Engineering





Aerospace Engineering

- Aerodynamics, Flight Performance and Propulsion & Wind Energy
- Aerospace Structures & Materials
- Control & Operations
- Space Engineering

Applied Sciences

- Bionanoscience
- Biotechnology
- Chemical Engineering
- Imaging Physics
- Quantum Nanoscience
- Radiation Science & Technology



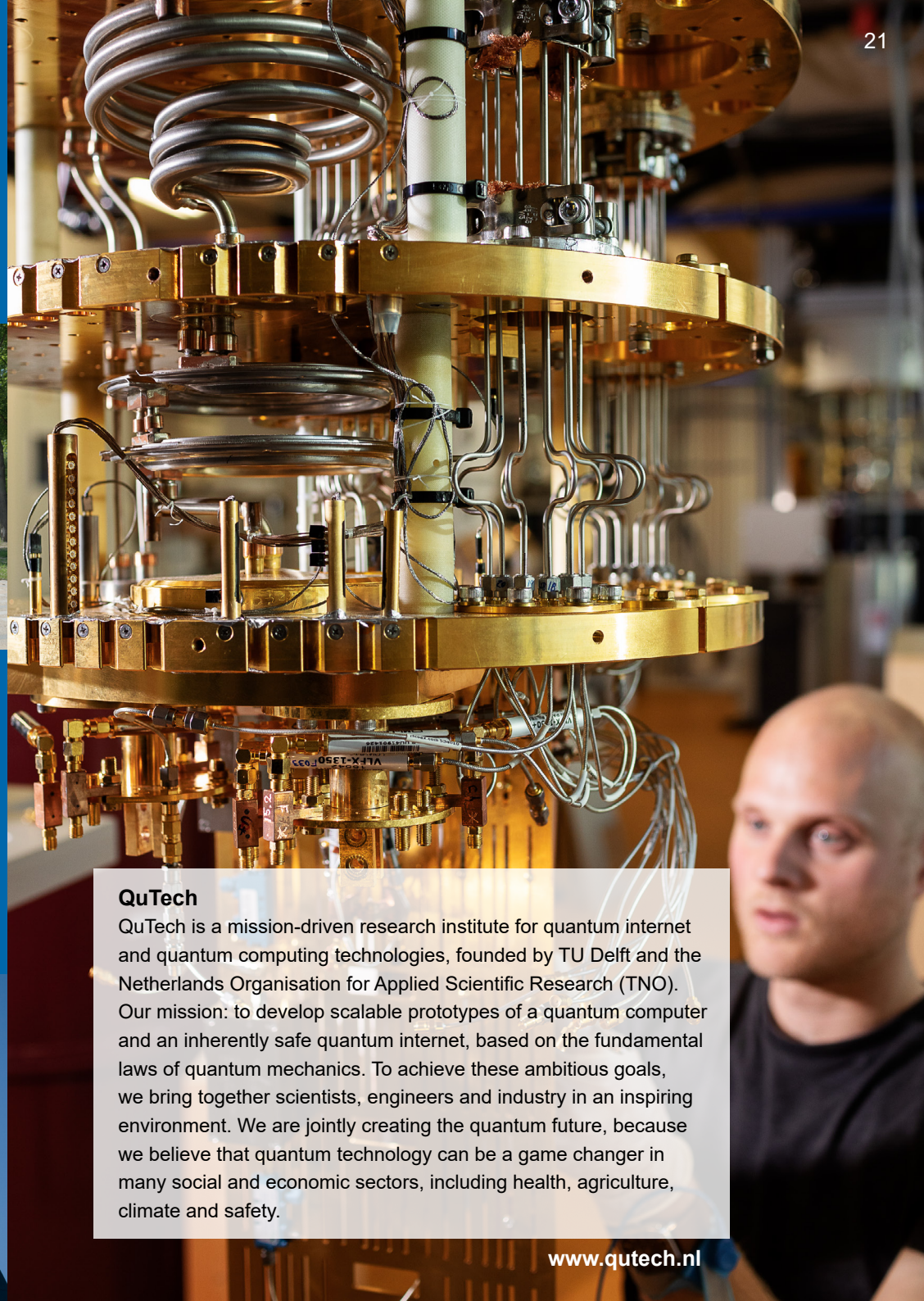
Mechanical, Maritime and Materials Engineering

- Biomechanical Engineering
- Cognitive Robotics
- Maritime & Transport Technology
- Materials Science & Engineering
- Precision & Micro-systems Engineering
- Process & Energy
- Systems & Control



Electrical Engineering, Mathematics and Computer Science

- Applied Mathematics
- Electrical Sustainable Energy
- Intelligent Systems
- Microelectronics
- Quantum & Computer Engineering
- Software Technology



QuTech

QuTech is a mission-driven research institute for quantum internet and quantum computing technologies, founded by TU Delft and the Netherlands Organisation for Applied Scientific Research (TNO). Our mission: to develop scalable prototypes of a quantum computer and an inherently safe quantum internet, based on the fundamental laws of quantum mechanics. To achieve these ambitious goals, we bring together scientists, engineers and industry in an inspiring environment. We are jointly creating the quantum future, because we believe that quantum technology can be a game changer in many social and economic sectors, including health, agriculture, climate and safety.

TU Programmes

TU Delft AI Initiative

AI, data and digitalisation are becoming increasingly important for solving major scientific and social issues. The TU Delft AI Initiative coordinates various activities and functions, providing a central platform for AI, data and digitalisation-related research, education and innovation. It facilitates the intensive collaboration of all eight TU Delft faculties with multiple partners and programmes. Since December 2020, Professor Geert-Jan Houben leads the TU Delft AI Initiative, as Pro Vice Rector Magnificus AI, Data & Digitalisation. TU Delft is the only Dutch university listed in the Nature 2020 Artificial Intelligence Top 100 Index.

TU Delft AI Initiative in figures:

- Budget for related education and research is being doubled to reach **€70 million** a year
- **24** Delft AI Labs mean an addition of **120** academics: **24** tenure track candidates and **96** PhD candidates
- \pm **700** academics are engaged in fundamental developments 'into AI' and an equally large and fast-growing group of \pm **700** academics are engaged 'with AI'
- Focus on **7** themes: AI for Energy & Sustainability; AI for Health & Care; AI for Port & Maritime; AI for Peace, Justice & Security; AI for Technological Industry; Human-Centred AI Systems; Machine Learning
- AI education is strongly embedded in **3** master tracks, **2** bachelor programmes, **3** minors, and numerous courses and modules focusing on AI, data and digitalisation in bachelor and master programmes across all **8** faculties.

www.tudelft.nl/ai



TU Delft Climate Action Programme

There is no doubt that the anthropogenic emissions of greenhouse gases are changing our living environment. Climate change is in our hands. We need to both work on limiting it as much as we can (mitigation), but we will also have to learn to adapt to new circumstances. TU Delft will harness its innovative powers to support the world-wide transition to non-fossil resources, and adaptation of the living environment to the consequences of global warming. The problem is complex and urgent – but we have no other choice than to be optimistic and use all of our capacity to face the challenge, through our education programs and our research.

The TU Delft vision on Climate Action is deeply founded in preceding decades of university wide climate action research. The goal of the Climate action programme is to build on current strengths and identify the areas where there is a need to strengthen our capacities to keep up our (inter)national reputation as climate action university. Professor Herman Russchenberg is Pro Vice Rector Magnificus Climate Action and scientific director of the programme.

TU Delft Climate Action programme in figures:

- Budget of €22 million allocated in 2021 for the coming 10 years to set up research and educational programmes
- We start from 4 themes we consider to be paramount for future Climate Action: Climate science, climate change mitigation, climate change adaptation, climate governance.
- Within these themes 16 new flagship programmes have been launched, meaning an upcoming addition of 16 tenure track candidates at 7 different faculties
- ± 100 of our academics are directly involved in the flagship programmes and ± 1000 academics are engaged in research activities on Climate & Energy







Delft Research- based Initiatives

The purpose of the TU Delft Research-based Initiatives (DRI's), established in 2009, is to contribute to solving societal challenges within four themes: Health, Energy, Global Development, and Deltas, Infrastructures & Mobility. The Initiatives engage with societal and industrial partners, and highlight innovative science, engineering and design. In addition to stimulating multidisciplinary research that is in line with (inter)national agendas, the initiatives also have a strong inspirational effect on students and education.

As from 2020, the DRI's are set on a new course. Now that they have laid a broad foundation for collaborative research at the TU Delft, they will build upon this base and concentrate on a selected number of promising focal areas.

Delft Research-based Initiatives

	Energy	Deltas, Infrastructures & Mobility	Health	Global
				
Objective	<ul style="list-style-type: none"> • Energy innovation for sustainable energy system 	<ul style="list-style-type: none"> • Vital Infrastructures for Water Safety and Smart Mobility 	<ul style="list-style-type: none"> • Focus expertise • Support talent • Connect 	<ul style="list-style-type: none"> • Science and Technology for Global Development
Research themes	<ul style="list-style-type: none"> • Energy efficiency in design, industry and the built environment • Wind and solar energy • Smart energy networks • (Chemical) storage • Geo-energy/heat 	<ul style="list-style-type: none"> • Future (proof) Built Environment and Urban Infrastructures • Deltas of the Future • Airport of the Future 	<ul style="list-style-type: none"> • Oncology Tech • Neurology Tech • Cardiology Tech • Integrated Technologies 	<ul style="list-style-type: none"> • Water • Urbanisation • Healthcare • Energy • Resilience

TU Delft Institutes

Within TU Delft, high-quality research capacity is clustered - either physically or virtually - into several University-wide institutes: the TU Delft Institutes.

This organisational structure helps to strengthen the scientific focus and to enlarge the critical mass. In this way TU Delft aims to enhance its external profile with a view to better positioning itself to join national and international consortia and networks, and to become more attractive to top scientific talent.



TU Delft Institutes running in 2021:

Name Institute	Focus	Start	Faculties
AgTech	<ul style="list-style-type: none"> • AI for optimizing the food production chains • Environmental resources: drought, heat, pests, frost • Autonomous control for precision horticulture 	2020	AE, CEG, EEMCS, TPM, 3mE
Bioengineering	<ul style="list-style-type: none"> • Biomass based products • Environmental bioengineering • Bioengineering for health 	2016	AS, CEG, EEMCS, 3mE, AE
Climate	<ul style="list-style-type: none"> • Urban Climate • Ice and Sea-level Change • Water Cycle • (Engineering the) Radiation Balance 	2012	CEG, EEMCS, TPM, AE, ABE (AS, 3mE)
Computational Science & Engineering (DSCE)	<ul style="list-style-type: none"> • Computational Fluid Dynamics • Mechanics and Structures • Solids • Socioeconomics & Life 	2016	EEMCS, CEG, AS, 3mE, AE, TBM
Design for Values (DDFV)	<ul style="list-style-type: none"> • Responsible innovation • Incorporation of values in technology by design • Resolving conflicts between values • Assessment of design for values 	2017	TPM, ABE, EEMCS, IDE, CEG
E-Refinery	<ul style="list-style-type: none"> • Sustainable chemicals and fuels • Electrochemical conversion of CO₂ and N₂ • Electrosynthetic materials, processes and systems • Hydrogen 	2020	AE, AS, EEMCS, TPM, 3mE
Optics Centre (DOC)	<ul style="list-style-type: none"> • Spectrometry • Imaging • Metrology 	2017	AS, 3mE, AE (partner: TNO)
PowerWeb Institute	<ul style="list-style-type: none"> • Integrated and intelligent energy systems • Electrical power infrastructure of the future • Energy system integration • Creating access to affordable reliable, sustainable and modern energy for all 	2019	EEMCS, AE, IDE, TPM, 3mE
Process Technology (DPTI)	<ul style="list-style-type: none"> • Food and Pharma • Energy • Water Processing • Solid and Fluid Mechanics 	2012	CEG, EEMCS, TPM, 3mE

Name Institute	Focus	Start	Faculties
Rail Institute	<ul style="list-style-type: none"> • Reducing the CO₂-and Energy • Footprint • Increasing capacity • Improving asset management 	2021	CEG, EEMCS, TPM, 3mE
Robotics	<ul style="list-style-type: none"> • Swarm robotics • Robots that work • Interactive robots 	2012	TPM, AE, IDE, EEMCS, 3mE, ABE
Safety & Security (DSyS)	<ul style="list-style-type: none"> • Integrating Cyber – Physical Safety & Security • Interdependency & Complexity in Safety & Security • Integrating approaches to Safety & Security 	2013	EEMCS, CEG, AS, TPM, AE
Space (DSI)	<ul style="list-style-type: none"> • Sensing from space • Space robotics • Distributed space systems 	2015	AE, AS, EEMCS, CEG, 3mE
Sports Engineering	<ul style="list-style-type: none"> • Aero- and hydrodynamics • Biomechanics, materials and human / material interaction • Measurement, feedback and simulation • Motivation • Sports infrastructures and facilities 	2014	3mE, IDE, AE, EEMCS, TPM
Transport	<ul style="list-style-type: none"> • Traffic Data Analysis and Modeling Laboratory • Freight transport and logistics • Cooperative, Coordinated and Automated Driving • Transport and Policy Behaviour • Active Modes & Urban Mobility 	2012	CEG, EEMCS, TPM, 3mE
Urban Energy	<ul style="list-style-type: none"> • Carbon free urban energy system • Climate neutral/positive buildings • Thermal Urban Energy systems 	2020	AE, CEG, EEMCS, ID, TPM, 3mE
Wind Energy (DUWIND)	<ul style="list-style-type: none"> • Energy Market integration • System Integration • Offshore Wind Farm design and asset management • Wind Turbine Design • Airborne Wind Energy 	2012	AE, CEG, EEMCS, 3mE, TPM

Technology Transfer

Valorisation concerns the creation of social and economic value based on scientific knowledge and skills. The TU Delft Valorisation Centre stimulates and facilitates technology transfer and provides the necessary support for TU Delft scientists and support staff. This includes supporting researchers in attracting funding for research projects, setting-up innovative R&D initiatives and coordinating these large-scale programmes and projects, the management and commercialisation of intellectual property, business development and establishing and maintaining long-term relationships with commercial partners.



National grant agreements

In 2021, TU Delft scored well within the NWO (Netherlands Organisation for Scientific Research) grants. Public-private partnerships are and will be even more important for TU Delft and the funding teams within the Valorisation Centre will continue to support that. There are different funding schemes to support public-private partnership, one of them is the Public Private Partnership Allowance of the Ministry of Economic Affairs.

NWO Innovative Research Incentives Scheme	24
Veni	16
Vidi	8
Vici	2
NWO Rubicon	4
NWO Gravitation Programme	3
NWO Perspective Programme	
coordinator	3
beneficiary	5
NWO Take Off	12
Phase I	12
Phase II	0
NWO Open Technology Programme (OTP)	9

EU Personal grants 2021

Starting ERC Grant	6
Consolidator ERC Grant	3
Advanced ERC Grant	2
MSCA-PF	8

European grant agreements

TU Delft scores very well on obtaining EU funding in the field of Excellent Science, such as funding from the European Research Council (ERC) and Marie Skłodowska Curie Actions (MSCA). Moreover, TU Delft has often won the coordinatorship of project consortia. Among other things, TU Delft coordinates the EU projects AndQC and FASTEN.

5 EU projects granted where TU Delft is coordinator

Acronims: BeCoM, CHEK, IGNITE, UPSIDE, NextSkins

Cooperation with companies

The collaboration with companies was further expanded in 2021, based on the realisation that we cannot find the answers to the major social issues alone. By connecting entrepreneurs, knowledge institutions, investors, government and the business community, a breeding ground for innovation is created. Different companies have similar innovation questions. By entering into a joint discussion and being open to learning together and sharing experiences and new knowledge, companies can accelerate innovation together with TU Delft and thus contribute to a better society.

In the field of technical entrepreneurial talent, X!LEAD has been set up, a trainee programme aimed at start-ups (entrepreneurial skills) and corporates (intrapreneurial skills) to strengthen and accelerate innovation. In the field of inspection and maintenance, the X!Maintenance programme has been set up to find technological solutions in the field of sensors, IoT, robotics and AI. Participating parties are the Port of Rotterdam Authority, VolkerWessels, Brunel and Nobian. In order to offer company employees the possibility of continuous long-time learning, there are now also a number of Executive education courses that TU Delft offers in addition to the entire online MOOC offer of the Extension School.

In addition, new, major collaborations were set up in 2021 with:
Shell on battery technology
DSM on protein transition
KLM, Schiphol and Airbus on sustainable flying

Entrepreneurship

Delft is one of the best places for entrepreneurship in the Netherlands. You can see this everywhere on campus: from the TU Delft Impact Contest to the D:DREAM teams to the countless spin-offs and start-ups that are settling in the incubator YES!Delft, RoboHouse, BK-Launch or at other locations near TU Delft Campus. The convergence with Erasmus University Rotterdam and Erasmus MC offers opportunities to further strengthen the (regional) innovation ecosystem.

Entrepreneurial students and successful alumni of TU Delft and Erasmus University Rotterdam jointly founded Graduate Entrepreneur in 2021, a structural partnership that offers start-ups and scale-ups, in addition to funding, a network and coaching. Next to that the Impact Studio was launched in 2021, a pre-incubator with the mission to support TU Delft students, academics and professionals in starting their own tech company. Impact Studio was set up by the Innovation & Impact Centre, in collaboration with the Delft Centre for Entrepreneurship.

Delft Enterprises

Delft Enterprises B.V. participates in innovative, early stage and technology based spin-off companies of TU Delft. The aim is to empower and speed up the development of these start-ups, as part of the ambition of the university to turn scientific knowledge into economic value.

Delft Enterprises 2021

New spin-offs in portfolio	3
Exits	3
Total spin-offs in DE portfolio	66
Total funding raised by portfolio companies in euro	>100,000,000

Intellectual Property 2021s

Announcement new findings	98
New submitted patents	69
Contracts closed	8
Patents commercialised	2
Total patents in portfolio	245



GBM Works is testing their innovative method of anchoring wind turbines almost noiselessly in the seabed. The new foundation method is tested last autumn on the Maasvlakte and the results are convincing. A water jet is used to liquefy the soil inside the tube. In combination with the vibration of the pile, the resistance is taken away and the monopile easily sinks into the soil.



TU Delft Experimental locations*

Fieldlabs	Valorisation programme Deltatechnologie & Water (VPdelta)	Programme that creates fieldlabs where start-ups, scale-ups, SMEs, students and scientists test, improve and demonstrate concepts
	RoboHouse	Future of Work Fieldlab for Advanced Cognitive Robotics
	Proeftuin op de Noordzee	Offshore test site for the maritime sector
	Fieldlab Unmanned Valley Valkenburg	Test Centre for Unmanned Innovation
	SAM XL	The Innovation Accelerator for the Advanced Manufacturing Industry, Technology Suppliers and Research (Smart Advanced Manufacturing XL)
	MICD	The Mobility Innovation Centre Delft (MICD) stimulates innovation in mobility, where innovations can be tested, evaluated and further developed.
	Do IoT Fieldlab	An open platform focused on developing and using 5G that offers researchers, large and small businesses, start-ups and students the opportunity to develop accessible new 5G applications
	Digicampus	The place where government, market, scientists and citizens design and create tomorrow's public services
	RHIA	A collaboration with Rotterdam The Hague Airport to develop, test and implement novel technology at the airport
	UPPS	The possibility to collect 3D data and subject it to extensive analyses, to study parametric design techniques and flexible production techniques and ultimately also to evaluate the ultra-personalized products and processes in a lab setting
Living Labs	Medical Delta	Real-life experimental environments for the health care sector
	The Green Village	Living Lab for the acceleration of sustainable innovations
Public-private innovation clusters:	QuTech	QuTech is the advanced research centre for Quantum Computing and Quantum Internet, founded by TU Delft and the Netherlands Organisation for Applied Scientific Research (TNO)
	Amsterdam Institute for Advanced Metropolitan Solutions (AMS institute)	Institute that uses the city of Amsterdam as a living lab for integrated metropolitan solutions
	HollandPTC	HollandPTC is an independent outpatient centre in Delft that provides proton therapy to patients. The centre was jointly established by Erasmus MC, LUMC and TU Delft.

* TU Delft Research Labs not included

TU Delft Alumni



TU Delft for Life

TU Delft is very proud of its alumni community of 105,000 engineers. We engage with almost 75% of our alumni and keep them up-to-date on the latest development at their alma mater via email newsletters, the Delft Outlook magazine, national and international events, social media and the online community 'TU Delft for Life'. To stimulate lifelong learning, they are offered a discount on the online courses at TU Delft online courses, furthermore we provide them a Lifelong Library pass.

We welcomed 3,741 MSc graduates (63% of them Dutch) and 338 PhD graduates (24% of them Dutch) to the alumni community last year (November 2020 – October 2021).



International communities

Most of our alumni live in the Netherlands, but around 25% live abroad and for them, TU Delft organises international alumni gatherings. Due to COVID we organised only online events. Some of them were co-organised with the other technical universities in the Netherlands (under the flag DEAN: Dutch Engineers Alumni Network). Over 200 alumni, both national as international, volunteer via the central department Alumni Relations for TU Delft and contribute in for example organising (local) events or support students as a coach or mentor.

Top 10 Countries where alumni live*

The Netherlands	94,530
USA	3,083
Germany	2,851
United Kingdom	2,294
Belgium	1,949
Spain	1,774
Italy	1,577
China	1,268
France	1,261
Switzerland	987

Top 10 Employers where alumni work

ASML	1,083
Shell	1,046
TNO	772
Royal Haskoning DHV	716
Philips	459
ING	266
Rabobank	254
Deloitte	236
TU Eindhoven	223
McKinsey & Company	170
Airbus	169

Source: LinkedIn, October 2021

* alumni in China are not included, since they do not use LinkedIn

Stay involved

We organised over 20 online events, more than 1,500 alumni joined these events. Their average age was 43 years old, with 50 different nationalities. During the second edition of the TU Delft for Life | Xperience Week, five inspiring online events were hosted with the themes Digital Society, Climate Action, Health & Care, Energy Transition and Urbanisation & Mobility. We welcomed 25 guests, of which 20 scientists like Prof. Geert-Jan Houben, Prof. Andy van den Dobbelen, Prof. Miro Zeman and Prof. Bas Jonkman.

Delft University Fund

Team up with excellence

TU Delft is teeming with talent. That talent is driven by passion for technology and the ambition to make a difference in the world. Delft University Fund supports TU Delft by contributing to research, education and talent development. With the help of alumni, staff, foundations and companies interested in science, the Fund does everything possible to help students and scientists to excel and make an impact on society.



Tech for Health | Better care thanks to Delft technology

With the Tech for Health campaign, the university shined a spotlight on its research innovations that contribute to the improvement of healthcare, especially in countries like The Netherlands. This research often involves collaboration with medical institutes such as Erasmus MC in Rotterdam and LUMC in Leiden. TU Delft alumni were invited to meet the scientists behind this exciting research and to contribute to their important work. More than 1050 alumni made a financial contribution.

Delft health research in the spotlight

About 30% of all research at TU Delft is related to health and healthcare. We have been able to inform and inspire over 60,000 TU Delft alumni through the Tech for Health campaign. More than 1050 alumni made a financial contribution. Together with the donors of Delft University Fund, this has led to an amount of €175,364.

On November 2, during the Medical Delta Conference 2021, Joop Heijenrath, Treasurer Board Delft University Fund, presented this amount to Prof. Richard Goossens and David de Glint, board member of Medical Delta. They received the check on behalf of the seven scientists who participated in the Tech for Health campaign.

The Tech for Health campaign has been successfully completed. In addition to the received donations, the campaign created great exposure for TU Delft health research. The campaign also delivered new connections between scientists and alumni, and new contacts with a number of relevant companies and institutional funds.

TU Delft Best Graduate Award Ceremony 2021

Each year, Delft University Fund organizes the TU Delft Best Graduate Award Ceremony. This year, during the online ceremony on November 11th, eight recently graduated engineers presented their research and results of their excellent master thesis. Zhuo-ming Shia, graduate of the Faculty of Architecture and the Built Environment received the prestigious title TU Delft Best Graduate 2021. For his graduation research, Zhuo-Ming developed a socially responsible process for global housing design.

'A whole other level'

Prof. Rob Mudde, Vice Rector Magnificus/Vice President Education, and Chairman TU Delft Best Graduate Jury: *"What struck the jury most is how Zhuo-ming rethinks the role of the architect in order to solve the problems that arise from rapid global urbanisation. Much more than someone who tells others how to live through their designs, an architect should be an interpreter between the needs, wants and constrictions of all the stakeholders"*

involved in city housing. His approach shows how architects can take socially responsible housing design to a whole other level.”

Read more: <http://www.tudelft.nl/bestgraduate>

TU Delft Excellence Fund

“If we want Delft to remain among the best in the world, we need top scientists, because they attract talented students, researchers, grants and international companies,” says Menno Antal, TU Delft alumnus and initiator of TU Delft Excellence Fund. For this reason, TU Delft Excellence Fund was launched in 2019. And with success. This year sees the start of the fourth international top scientist at TU Delft who could be appointed with the help of the Excellence Fund. Fifty alumni and friends of TU Delft made this possible. As of November 2021, these Founders of the Excellence Fund have pledged M€3.6. TU Delft Excellence Fund supports TU Delft’s excellence strategy based on the three pillars of research, education and valorization, which together form the TU Delft ecosystem. Donors become members of the Delft Leaders Programme. In this way we work together on impact for a better society and we contribute to ensuring that Delft technology can remain an important engine of the Dutch economy. Read more: <http://www.universiteitsfondsdelft.nl/excellencefund>

Graduate Entrepreneur Fund

Entrepreneurship is one of the most important drivers for social impact. TU Delft and Erasmus University Rotterdam understand this like no other. While Delft contributes to a better society with technology and innovation, Rotterdam is known for its unique entrepreneurial mentality to seize business opportunities.

In April this year, students and alumni from both universities launched Graduate Entrepreneur, a platform boosting a start-up ecosystem which unites existing initiatives in Delft and Rotterdam. Part of this ecosystem is the Graduate Entrepreneur Fund, which consists of a Pre-Seed Fund and a Seed Fund.

Delft University Fund and Erasmus Trust Fund are working together to give substance to the Pre-seed Fund with donations from alumni. This fund has now invested in six companies and about two new investments are added every month. Young entrepreneurs with a good business plan can turn to the Pre-Seed Fund for capital, coaching by experienced entrepreneurs and building an attractive network. The Seed Fund focuses on investments in the most promising start-ups.

According to the press release dated November 9, 2021, the aforementioned funds have already raised €21 million since the launch of the Graduate Entrepreneur platform. The amount was raised by alumni from TU Delft, Erasmus University Rotterdam, Erasmus MC and third parties. As of November, 22 alumni and Friends of TU Delft have committed themselves to the Pre-Seed Fund. Read more: www.universiteitsfondsdelft.nl/GEF

Max Mulder | Professor of Excellence 2021

On Monday 6 September, Delft University Fund awarded Max Mulder the title of Professor of Excellence 2021. Mulder is Professor of Control & Simulation in the Department of Control & Operations at the Faculty of Aerospace Engineering (AE). The prestigious Professor of Excellence Award has been awarded annually by Delft University Fund since 1994. Max Mulder was nominated by Prof. Henri Werij (Dean of the Faculty of AE), colleagues from his field, the study association VSV ‘Leonardo da Vinci’ and former Master’s students and doctoral candidates.

A Professor of Excellence is someone who excels in both research and education, and who knows how to inspire and motivate the next generation of Delft engineers. Recipients of the award are reckoned among the top of TU Delft. Professors of Excellence are not elected on the basis of yield figures or impact scores, nor are they selected top-down. You can only receive this honorary title on the recommendation of your colleagues and your students, who consider you to be their ‘Leermeester’.

Prof. van Keulen, Chairman Professor of Excellence Award 2021: “Professor Mulder receives the Professor of Excellence Award for his remarkable contribution to teaching, research and the university. The jury considers Professor Mulder to be a true Professor of Excellence, a consummate professional with outstanding research qualities who also excels in every aspect of coaching students, doctoral candidates and colleagues. Read more: <https://universiteitsfondsdelft.nl/professorofexcellence>

Check all activities of Delft University Fund on: <https://www.tudelft.nl/en/delft-university-fund>



Global Engagement & Partnerships



Negative emissions webinar

Strategic network membership in the Netherlands and Europe

4TU: Eindhoven University of Technology, Twente University, Wageningen University, TU Delft

LDE: Leiden University, TU Delft, Erasmus University Rotterdam

CESAER: 53 Universities of Technology in Europe

IDEA LEAGUE: ETH Zurich, RWTH Aachen, Chalmers University of Technology, Polytechnic Milan, TU Delft

EUA: European Universities Association

Convergence: Erasmus University Rotterdam, Erasmus Medical Center, TU Delft

Global Engagement

Partnerships are crucial for the TU Delft to develop innovative solutions for tackling today's global challenges and sustainable development goals (SDG) in both the regional and international context. The TU Delft's partnership portfolio includes worldwide academic and research institutions as well as (semi) governmental, NGO, health sector and business partners. Through participation in selective global alliances and networks, the TU Delft proactively seeks a position to influence and assures its visibility in global ecosystems of broad stakeholders focused on Global Impact.

The basis of research and education partnerships originates from carefully established 'bottom-up' faculty relations: personal contact in researcher-to-researcher networks where curiosity and focus bring together academics with matching expertises. Some of these TU Delft short and long term academic collaborations have grown into exclusive joint theme-based research-programme initiatives in Europe and

beyond. The 2021 context and its uncertainties mean that our global engagement efforts remain flexible, forward-looking and aware of global security. Above all, though, the focus is on supporting TU Delft faculty to deliver socially responsible research in worldwide networks.

To actively support academics in strengthening and broadening their collaborations into long-term relations, as well as to encourage an explicit focus on strategic geographies, the TU Delft has embarked on a more focused Global Engagement and Partnership approach. Between 2018-2024, the TU Delft aims to strengthen its relations with a select number of worldwide strategic university partners. In addition, the TU Delft supports selective scientific collaboration with partners in Brazil, Greater China and India. Through the Delft Global Initiative, the university supports science and technology for global development and impact in Sub Saharan Africa and South-East Asia.

Regional partnerships

Beyond global, regional partnerships activities are beneficial for our national community and ultimately also for the wider world, think of the current Convergence of TU Delft, Erasmus University Rotterdam and Erasmus MC which is focused on the current complex societal challenges. From climate change to urbanization, sustainability, digitization and sustainability of healthcare, societal challenges require groundbreaking scientific insights. To achieve this, close cooperation across the boundaries of disciplines and institutions is necessary. TU Delft, Erasmus University and Erasmus MC therefore decided in December 2019 to systematically expand and intensify the existing partnerships between the three institutions under the heading of "Convergence". Within the collaboration, knowledge and expertise in the fields of alpha, beta, gamma, medical and technical sciences converge. Three different themes initially form the pillars of the Convergence, namely Resilient Delta, Health & Technology and AI, Data & Digitization.

An Inspiring Campus

TU DELFT
CAMPUS

TU Delft Campus – a next-level innovation ecosystem on a vibrant campus

We believe that multi-party collaborations are essential to create impact for a better society. TU Delft Campus connects academics, students, entrepreneurs, investors and businesses to create a next-level innovation ecosystem for radical innovations. In doing so, a strong and vibrant physical community is essential and therefore we will endeavor to create an attractive 'living campus' – an innovative learning and working environment that stimulates and facilitates encounters, interaction and innovation.

We constantly improve our campus site to provide the best facilities at all times. We want to do this in a responsible manner, and are firmly committed to the principles of sustainability, safety and security. Examples are the energy neutral PULSE building (2018) and under development is the ECHO building (expected: 2022). Especially equipped for state-of-the-art education. Another example is The Green Village – a living lab to jointly develop sustainable solutions. We ensure that the campus is an attractive place to work, live and visit.



Field labs and innovation clusters

To attract and facilitate scientific talent, conduct ground-breaking research and train new generations of engineers, TU Delft heavily relies upon excellent research facilities. We use our campus as a living lab where we connect science with society in intensive collaborations with other research institutes and business partners. Our field labs and innovation clusters around specific themes such as quantum (QuTech) and robotics (RoboHouse) are hotspots for co-innovation. The high density of these hotspots is what sets apart TU Delft Campus within the international research landscape.

Start-up communities

TU Delft has traditionally been an entrepreneurial university, resulting in many start-ups and spin-offs. Incubator YES!Delft is part of TU Delft Campus and leading in Europe. The incubator is home to a large number of innovative high-tech startups, offers tailored programmes and has produced over 200 young companies since its inception. In addition to our incubator, TU Delft Campus offers various start-up communities with start-ups linked to specific domains: RoboValley, the Aerospace Innovation Hub and Quantum Delft.



Research Facilities



Aerospace Engineering

- Aeroplane Hangar
- Cessna Citation II Jet Aircraft
- Cleanroom for Satellite Building
- Flight Arena 'Cyberzoo'
- Flight Simulator Simona
- Micro Air Vehicle Laboratory
- Propulsion Lab
- Structures & Materials Lab
- Wind Tunnels (Low and High Speed Tunnels)

Applied Sciences

- Chemical Labs
- Fermentation Labs
- Molecular biology Labs
- Bioprocess Pilot Facility
- Imaging Facility
- Advanced Imaging Labs
- Laser Labs
- Cleanrooms
- Nuclear Research Reactor, incl. Neutron and Positron Beam-line Instruments and Irradiation Facilities

Architecture and the Built Environment

- Bucky Lab
- Glas Lab
- Heritage & Technology Laboratory
- Lab of Generative Systems and Sciences (Genesis)
- Laboratory for Additive Manufacturing in Architecture (LAMA)
- Robotic Building Lab
- SenseLab
- Virtual Reality VR-Lab

Civil Engineering and Geosciences

- Cloud Lab
- Geodesy/GNSS Lab
- DiTT-Lab
- Smart Vehicle Lab
- Research Lab Automated Driving Delft
- Drones for Traffic and Geological Research
- CT Scanner
- High Pressure & Temperature Facilities
- Geo-technical Centrifuge
- Macro Lab
- Micro Lab
- Biohazard 1 Wastewater Treatment Lab (ML1 lab)
- Water Engineering Experimental and Analytical Lab (e.g. GC, IC, HPLC, Water Isotopes)
- Flooms for Waves, Currents and Sediment Transport
- Jetski Mobile Platform for Coastal Fieldwork
- Urban Mobility Observatory
- Ruisdael Observatory for atmospheric research

Electrical Engineering, Mathematics and Computer Science

- Else Kooi Lab, Cleanroom for Microsystems
- Electrical Sustainable Power Lab
- INSYGHTLab for Computer Vision, Interactive Intelligence and Visualisation
- DUCAT Antenna Measurement Chamber
- Earl McCune lab
- Photovoltaics Laboratory
- Radar Labs with PARSAX and MECEWI Radars and the Radar Facilities TARA and IDRA
- Social Data Lab
- Tellegen Hall

Mechanical, Maritime and Material Engineering

- AGV-Lab
- Cavitation Tunnel
- Cleanroom for Micro/Nano Engineering Lab
- Delft Lab for Neuromuscular Control
- Driving and Racing Simulator Labs
- EEG-lab
- Fluid Mechanics Lab
- Flume Tank and 2 Towing Tanks
- Fuel Cell Lab
- Graphene and Thin Film Deposition Lab
- Hexamove/-pod
- Materials Lab
- Mechatronics Lab
- Networked Embedded Robotics Lab
- Optics Labs
- Perfect Reactors Lab
- Process Technology Lab
- Robotics Lab
- Wind Energy Mechatronics Lab

Industrial Design Engineering

- Applied Labs
- Connected Everyday Lab
- Emerging Materials Lab
- Foundational Labs
- ID-StudioLab
- Model making and Machine Lab
- Perceptual Intelligence Lab
- Physical and Ergonomics Lab
- Product Evaluation Lab

Technology, Policy and Management

- Centre for Urban Science and Policy lab
- Cybersecurity Lab
- Delta Futures lab
- Gamelab
- Health Policy Evaluation
- Participatory Systems lab
- Participatory Value Evaluation lab
- Social Complexity of Climate Change lab
- TPM AI Lab
- TPM Energy Transition lab
- TPM Resilience lab



History of the University

Royal Academy

On 8 January 1842, King Willem II founded the 'Royal Academy for the education of civilian engineers, to serve both nation and industry, and of apprentices for trade'. The academy also educated civil servants for the colonies and revenue officers for the Dutch East Indies.



1842-1864

1864-1905



Polytechnic School

An Act was passed on 2 May 1863 imposing regulations on technical education as well as bringing it under the influence of the rules applying to secondary education. Then, on 20 June 1864, a Royal Decree was issued ordering the Royal Academy in Delft to be disbanded to make way for a new 'Polytechnic School'. The school went on to educate architects and engineers in the fields of civil engineering, ship-building, mechanical engineering and mining.

Institute of Technology

On 22 May 1905, an Act was passed acknowledging the academic level of the Polytechnic School's technical education and it became a Technische Hogeschool, or Institute of Technology. Queen Wilhelmina attended the Institute's official opening ceremony on 10 July 1905. The Institute's first Rector Magnificus was the Professor of Hydraulic Engineering ir. J. Kraus. The Institute was granted corporate rights by an Act passed on 7 June 1956.



1905-1986

1986-present

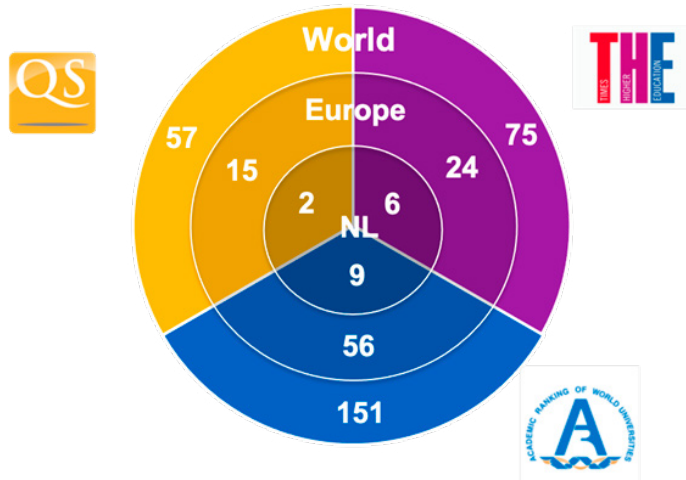


Delft University of Technology

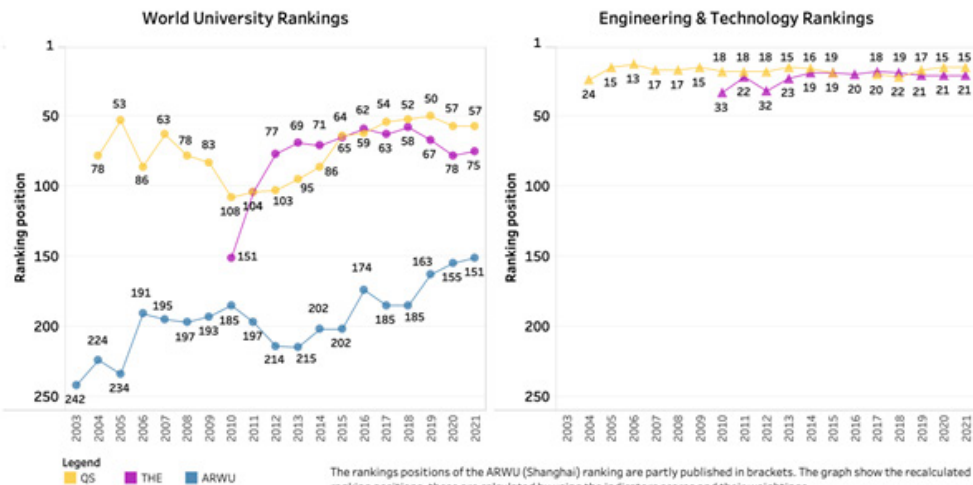
An Act which took effect on 1 September 1986 officially transformed the Institute of Technology into Delft University of Technology, abbreviated to TU Delft from the Dutch name *Technische Universiteit Delft*.

Rankings

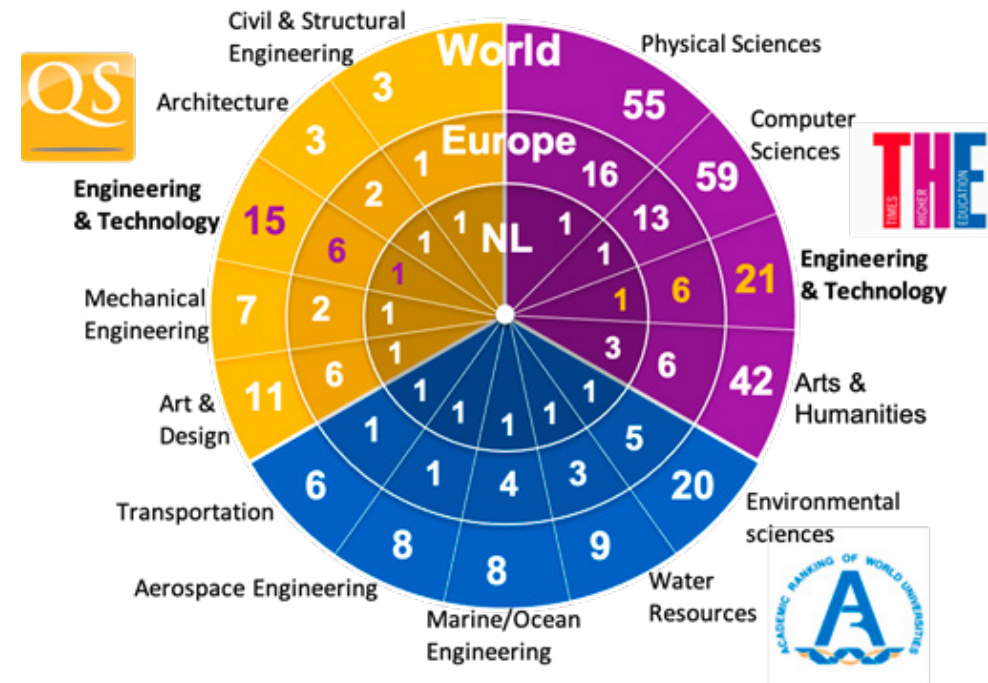
Position TU Delft in World University Rankings



Trends in QS, THE and ARWU Rankings



Position TU Delft in Subject Rankings



TU Delft in various rankings

Ranking organisation	Edition	Focus	World	Europe	NL
Times Higher Education	2021	Reputation ranking top 100	50	13	1
Times Higher Education	2021	Most international universities in the world	12	8	1
MOOCLab	2021	Rankings based on MOOC provision	17	4	1
Times Higher Education	2021	Impact: Industry, innovation, and infrastructure	1	1	1
Times Higher Education	2021	Global University Employability Ranking	76	30	2
Quacquarelli Symonds	2022	Graduate Employability Ranking	39	7	1

TU Delft | Dream Teams

Living the D:DREAM, it is not just a job for just any student team. Only the chosen teams receive the status of 'TU Delft | Dream Team'. But what is a TU Delft | Dream Team exactly and what does D:DREAM stand for? D:DREAM stands for 'Delft: Dream Realisation of Extremely Advanced Machines'. Those machines can be anything actually, from an exoskeleton to a hydrogen-electric race boat. They are for instance characterised by their extreme energy efficiency, being powered by sustainable energy or by their technical novelty.

The D:DREAM Hall, the building on campus that never sleeps, forms most teams' headquarters. The multidisciplinary teams in here work hard to perform only the outstanding at the end of the year. They show the world that, with their approach, boundaries can be pushed far. The students are driven, a little bit stubborn, but also realistic. During the year, they learn to use their strengths and to bypass the pitfalls. This turns the team members into outstanding engineers. Notably is that they are solely responsible for all tasks,

from team management to the design and production of their inventions. They do it all themselves, at the TU Delft | Dream Hall, where dreams become reality.

Delft Hyperloop:

The Delft Hyperloop designs and builds a hyperloop pod, a high speed transport system in a vacuum tube, and competes in a Hyperloop Pod Competition.

Eco-Runner:

The Eco-Runner team builds a super-efficient hydrogen powered vehicle and participates in the Shell Ecomarathon.

Project MARCH:

Project MARCH develops an exoskeleton for paraplegics. With this exoskeleton, they compete in the Cybathlon Experience, a race with different obstacles for exoskeletons.

Hydro Motion Team:

The Hydro Motion Team develops a hydro-powered boat with which they participate in the Monaco Energy Boat Challenge.

Epoch:

The Epoch team participate in various online competitions in the field of artificial intelligence



The City of Delft

City of Delft statistics

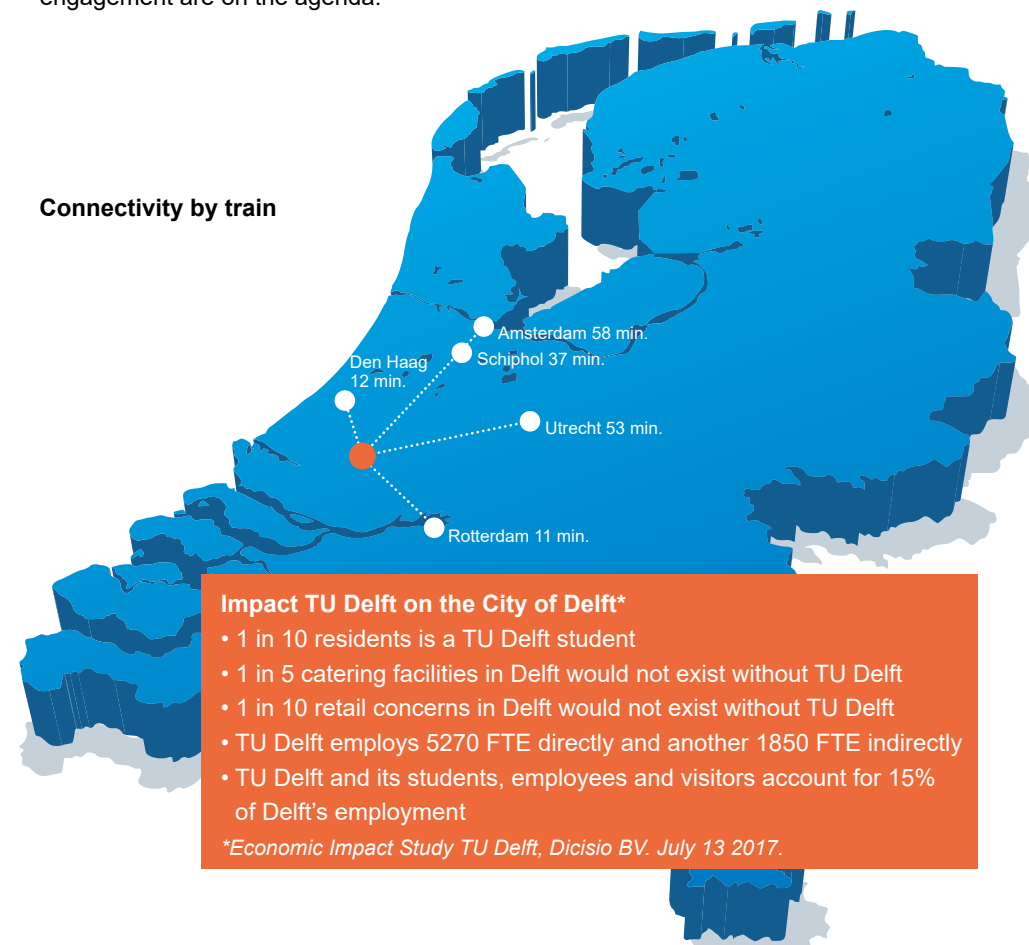
Square kilometres: 24
Population: 103,595
Catering establishments: 341



Delft is a historical city that was established in the 13th century with a rich history including the world-famous Delft Blue china, celebrated painters such as Johannes Vermeer and scientists such as the inventor of the microscope Antoni van Leeuwenhoek. Delft's slogan is: 'Delft, creating history'. The city of Delft is strategically located at the heart of the Dutch knowledge economy and is within easy reach of the TU Delft campus by bike or public transport. The close connection between the city and the University brings together the best of both worlds.

Over the past two decades, Delft has rapidly transformed from an industrial centre into a hub for the Dutch knowledge economy. But Delft is also constantly looking to the future to ensure the city remains vibrant and prosperous. The university and companies based in Delft play an important role in this mission. The University and the city work more and more together in order to become a strong team in the battle for brains. Internationalisation, accessibility of the campus, estate management, attractiveness for students, researchers and tech companies to come and stay in Delft as well as community engagement are on the agenda.

Connectivity by train



Impact TU Delft on the City of Delft*

- 1 in 10 residents is a TU Delft student
- 1 in 5 catering facilities in Delft would not exist without TU Delft
- 1 in 10 retail concerns in Delft would not exist without TU Delft
- TU Delft employs 5270 FTE directly and another 1850 FTE indirectly
- TU Delft and its students, employees and visitors account for 15% of Delft's employment

*Economic Impact Study TU Delft, Dicio BV. July 13 2017.



Facts & Figures 2021-2022

Colophon:

Production

TU Delft, Department Communication

Text and Figures

Okie Stael
(Strategic Development, TU Delft)

Design and Layout

Josje Smulders (Communication)

Printer

Edauw & Johannissen

© TU Delft

These Facts & Figures are also available on
our website www.tudelft.nl/factsandfigures

