

TU/e Gender Equality Plan

Towards a more diverse, inclusive, and safe university

TU/e
EINDHOVEN UNIVERSITY OF TECHNOLOGY

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## 1 Motivation

In the Eindhoven University of Technology (TU/e) community of students and staff, we strive for diversity. A strong and welcoming community promotes inclusiveness, equality, and cooperation. Diversity adds to our success and pleasure in education and research. It broadens our research scope and enhances the quality of our education. TU/e has supported and continues to support the development of structures and targeted measures that enhance gender equality within its community. This is a strategic priority for TU/e for the coming years, as institutionalized in TU/e Strategy 2030 and the TU/e Institutional Plan 2020-2025.

As part of the European Commission Gender Equality Strategy 2020-2025, the European Commission is committed to promoting gender equality in research and innovation. This is alongside the well-established regulatory framework within the EU on gender equality which applies widely across the labor market including the research sector.

Because of the peculiarities of the research sector, specific action is needed to overcome persisting gender gaps. Many structural barriers to gender equality in research and innovation persist. These barriers within research have been typically addressed through:

- funding instruments such as Horizon 2020
- the European Research Area in collaboration with member countries and research organizations

The European Commission is now making institutional gender equality plans a precondition for securing funding from Horizon Europe, the framework program for research and innovation. The precondition is part of the plans drawn up by the European Commission for promoting gender equality (Gender Equality Strategy 2020-2025; Gender Equality in the European Research Area). From 2022, every legal entity (government body, research, or higher education institution) must have a gender equality plan in order to be eligible for funding from Horizon Europe.

As a participating research organization, Eindhoven University of Technology (TU/e) and its Executive Board (EB) have supported these strong actions as part of our own commitment towards gender equality within our academic community and in the wider academic environment it resides in. Over the last decade TU/e has developed many measures and activities to address gender equality: from raising awareness on gender equality, training opportunities and policy measures to ensure inclusive recruitment, career progression and decision making.

In this plan you can find the measures, activities and policies that have been developed and implemented to support our goals. It also includes planned initiatives for 2021 to 2025. We acknowledge that gender is always linked to other social categories, such as ethnicity, functional impairment, age, sexual orientation, and social class. This makes an intersectional approach necessary when making plans for gender equality. In the years to come TU/e will move towards a more intersectional approach.

## 2 Gender Equality as strategic priority

## TU/e strategy 2030 'Where people matter"

Eindhoven University of Technology is a community of scientists, supporting staff, students and partners. People are the heart and soul of TU/e, so it is of great importance to safeguard the distinctive Eindhoven atmosphere, creating a personal, welcoming and vibrant environment that enables individuals and groups to grow professionally and personally. Our students are outstandingly active in study and sports associations, showcasing their organizational and entrepreneurial skills and embodying our intrinsic urge to unite and collaborate
In the TU/e community of students and staff, we strive for diversity. A strong and welcoming community promotes inclusiveness, equality and cooperation. Diversity of nationality, gender, social background and cultural heritage adds to our success and pleasure in education and research. It broadens our research scope and enhances the quality of our education.

Source: TU/e Strategy 2030, pages 13 and 66

## Institutional plan 2020-2025

Main goal: We will have a diverse, international workforce, with a special focus on improving the gender balance in TU/e
Main objective: Establish an internationally attractive diverse and inclusive academic culture
TU/e is a university that embraces diversity of perspectives, students and staff. For education, this means that we strive for an international, diverse and inclusive learning environment, in which students can develop their personal learning paths. In the coming years, we will continue to work on the development of inclusive education, including a number of new programs.
Education and research are enriched by the presence of diversity in perspectives, and a diverse and inclusive working and learning environment ensures that our talent can be optimally utilized. In an inclusive organization, everyone can participate fully and on an equal footing in the organization and decision-making process. In the TU/e community, openness and cooperation are central, and diversity, inclusiveness and equality are a prerequisite. We want to be among the leading universities in science \& technology and make a valuable contribution to society. Society is diverse, and as science serves society it should also be diverse. In the TU/e community of students and staff, we therefore strive for diversity.
In July 2019 we announced to participate in the Irene Curie Fellowship program and only hire female scientific staff in order to restore our gender balance. In the upcoming years we will expand our policies in this field, develop an action plan, showcase examples and become a thought leader when it comes to restoring the gender balance, notably in technical universities.

Source: TU/e Institutional Plan 2020 - 2025, pages 20, 29 and 35

## 3 Three approaches to gender equality

In drawing up this gender equality plan, we are using the three interdisciplinary approaches to gender equality taken by policy makers, institutional administrators, and scientists and engineers over the past three decades as presented by Schiebinger \& Schraudner ${ }^{1}$.

These approaches include:

- fixing the numbers of women in science, medicine, and engineering.
- fixing research institutions by removing barriers and transforming structures.
- fixing knowledge by incorporating gender analysis into basic and applied research.

Gender policy can only be effective if these three paths are followed simultaneously: increasing diversity among students and staff will not be successful without a restructuring of institutes and without considering diversity in knowledge production and in the curriculum ${ }^{2}$.

### 3.1 Fixing the numbers

This first group of measures is aimed at increasing gender equality in terms of numbers: improving recruitment, advancement, and retention of women academics. Achieving greater visibility of women academics is also part of this process.

A lack of gender diversity in terms of numbers may indicate a lack of inclusivity, especially if the numbers show a pyramid construction (greater diversity at lower levels, but less diversity at high levels). Evidence of the 'leaky pipeline" ${ }^{3}$ or the glass ceiling provide starting points for targeted policies. Gender equality figures of all Dutch universities including TU/e are published annually by the Dutch Network of Women Professors.

### 3.1.1 Recruitment (students and staff)

## Gender targets

TU/e has set gender targets for women staff members until 2025, as these not only influence the hiring of women scientists, but they also address the retention. TU/e aims for at least:

- $35 \%$ assistant professors: this group is the breeding ground for development to higher ranks
- $30 \%$ associate professors
- $25 \%$ full professors

TU/e aims to increase the diversity of the student population to at least $30 \%$ women students as well as $30 \%$ international students.

## Women in leadership positions

The government considers it important for the (semi)public sector that the top management is diverse. At the request of the Minister for Education, Culture and Science, TU/e takes part in the annual survey on the balanced gender distribution of seats on the management and supervisory boards.

TU/e aims for at least $30 \%$ proportion of women in leadership positions. When recruiting candidates for positions in boards of departments and central services, a deliberate effort is made to achieve a balanced gender distribution. The proportion of women by job level and department is (periodically) measured. The top management actively promotes the importance of gender diversity and demonstrably steers towards achieving more gender diversity in the top, boards of departments and central services and organization.

[^0]
## Irène Curie Fellowship program

In July 2019, TU/e launched the Irène Curie Fellowship (ICF). This program is aimed at talented women who pursue an academic career in our European top research university. Diverse teams generate better problemsolving strategies and more creative ideas, they accelerate innovation for all. The Irène Curie fellows are role models for the next generation of women scientists.
With the Irène Curie Fellowship, TU/e contributes to the societal goal of promoting equal opportunities and a society in which everyone's abilities are utilized. The goal of the recruitment program for talented women scientists is that in 2024, 30 percent of TU/e's scientific staff should be women. An extensive intranet site has been built to inform all staff and students about the ambition, progress and impact of the Irène Curie Fellowship program.

## Gender neutral vacancy texts

The talent attraction team gives useful tips to hiring managers to make sure they keep the right candidates captivated and ensure gender neutrality in the job description.
These tips for gender neutral texts include:

- Start with describing the main challenge(s) of the position. Research shows that scientists are drawn primarily by the topic of science.
- Don't just describe the position, but also emphasize the embedding in the research group
- Make the societal relevance of the position visible: what am I contributing to?
- Make sure your job description is inclusive and appealing to all genders.


## Dual Career Opportunity program

TU/e offers a unique dual career program in collaboration with Expat Spouses Initiative. We reach out to accompanying partners to assist them in job search needs, even before we make a job offer and before candidates have accepted a position as assistant, associate, or full professor at TU/e. The partner will get useful information on the local Dutch labor market and job search techniques. By addressing dual career needs, we acknowledge the family situation of our candidates and aim to embed new hires and their families well in the Eindhoven region.

## Practices aimed at increasing diversity of student population

Survey investigating the motivation to choose an engineering study
Especially in the departments Electrical Engineering and Mechanical Engineering the percentage of women students is very low. TU/e requested an external research company to conduct a survey among Dutch women students and students from a migration background about their motivation to choose an engineering study or not. The results of this survey should provide actions to increase influx of women and students with a migration background at all TU/e programs.

## Gender scan Electrical Engineering study programs Dutch Universities

The goal of the project is to increase the influx of Dutch students who do not regularly choose to study electrical engineering at higher vocational education institutions (HBO) and universities (WO). A gender scan conducted by VHTO (Dutch national expert organization on girls/women and science/technology) will be carried out first. The scan analyses study programs on six topics:
A. Organization and policy
B. Choice counselling
C. Teaching and didactics
D. Practical and vocational orientation
E. Networking
F. Learning climate and culture

Should the results be useful for changes in the strategy, the pilot may be broadened to a university wide analysis.

## Outreach activities for a 'diverse' student population

Girls day
TU/e has planned to contribute in Girls day as of 2022, organized by VHTO each spring.
During Girls day, technical companies, (non-)governmental organizations, and research institutes open their doors for 10-15-year-old girls, in order to awaken/increase their interest in science, technology, engineering and mathematics (STEM).

## Summer festival: The new generation of a diverse student population

In Eindhoven the 'weet-ik-veel festival' takes place yearly. In collaboration with Brainport and the municipality Eindhoven, we will bring this festival to the TU/e campus in Summer 2022 and expand it in a way that it is (also) aimed at attracting future TU/e students.
With this summer festival TU/e wants to attract students from different socio-economic backgrounds and with a different ethnicity. Specifically, we want to give perspective to young people from underprivileged neighborhoods and/or with a migration background. By involving our own students to help at this festival they will learn about the importance of diversity and inclusion in an informal way.

During this week we will focus on the youth of Eindhoven between 12-15 years old and encourage them to explore a future in technological studies. In collaboration with the TU/e student teams, the Student Sports Centre Eindhoven and the help of the municipality, Eindhoven Library, Natlab and Stichting Woensel West we want to create a mixture of students participating from all diverse socio-economic backgrounds.

### 3.1.2 Advancement and retention

## Irène Curie fellows community building

Since January 2020, the Irène Curie Fellows organize informal bi-weekly ICF lunches with the aim to get to know one another better and to explore opportunities to collaborate. Each Irène Curie Fellow elaborates on her research. The Fellows also invite a guest to every session, in case of a TU/e guest to elaborate on university topics of interest to all Fellows, or in case of a guest from outside the university, such as Brainport or an industrial partner, to strengthen the embedding of the Irène Curie Fellows in the region.

## Mentoring

TU/e offers all assistant and associate professors the opportunity to make use of a mentoring program to stimulate their professional and personal development. In this way, an assistant or associate professor (the mentee) can exchange views on various topics they wish to discuss. The sparring partner in a mentoring program is an experienced associate or full professor (the mentor) who is committed to mentoring on a voluntary basis. There is also a mentoring program for support staff.

## Career development and coaching

TU/e offers TU/e employees a wide variety of services in the field of career counseling. Also customized coaching trajectories (internal as well as external) are possible.

## Training

TU/e offers a wide range of training possibilities for (female) academic staff. TU/e properly prepares and supports academics for performing managerial and organizational responsibilities. HRM Learning \& Development has developed trainings in the Scientific Staff Management Training Program that offer academics support on various levels in performing their managerial tasks. TU/e offers leadership trainings to Assistant Professors, Associate Professors, Professors and Directors.

Next to management trainings TU/e offers a training called Vision and Focus to give academic staff the opportunity to reflect on their work with a group of peers, to sharpen their vision on their research theme and research practice, while developing professional skills at the same time. The goal of the training is to build or strengthen the participants' academic profile in line with TU/e Strategy 2030.

### 3.1.3 Visibility

## Portraits Irène Curie fellows

The Irène Curie Fellows work in all departments of TU/e. They originate from very different fields and can be found in all ranks, from Assistant Professor to Full Professor. To give more visibility to our Irène Curie fellows, they are listed with individual profiles on our website.

## Grants and awards

The Marina van Damme grant aims to support talented women alumni who have graduated from Eindhoven University of Technology with a Master's degree, PDEng or PhD. The grant offers graduates extra support for the next step in their careers, or the opportunity to make a career change.

Other possibilities for grants for women scientists are listed on the website of the TU/e WISE-network.

The research support network is the knowledge network that supports researchers in finding external funding for their research and developing project proposals. They are also aware of funding schemes specifically for women researchers.

In 2021 TU/e will install a committee that aims to better position researchers in the right place at the right time, with the aim to maximize the chances to get awarded with awards or prizes and to be selected as member in leading networks/societies/academies to enhance the visibility of TU/e scientists in the diverse fields. This committee will enhance awareness in departments to nominate scientists of different genders

## Media

The launch of the Irène Curie Fellowship program generated a lot of national and international attention on many media platforms, such as tv, radio, print, online media and social media. It sparked the national and international discussion on gender equality in July 2019. Combined with the aim to be a thought leader in bringing gender balance to STEM universities, we monitor our presence on these media regarding our gender policy.

Moreover, we acknowledge the importance that women scientists are represented and given a voice in the dissemination of their research to the wider public. For this reason, we will start to monitor the media appearances (print, radio, television) of our scientists of different genders.

### 3.2 Fixing the institutions

The second group of measures is aimed at changing cultural and structural organizational processes that produce and sustain gender inequality.

Gender balance in academic ranks alone is not sufficient to create an inclusive and safe working environment. Measures for improving the numbers may be important, but they are ineffective if nothing is done about the structure and culture of the organization in question ${ }^{45}$. Then, the so-called 'revolving door effect' kicks in; organizations succeed at bringing in under-represented groups, but fail to keep them in. This makes it necessary to create an inclusive structure and culture for all employees.

### 3.2.1 Transparency and equal opportunities in career policy procedures

## Interdepartmental committees (IFCs)

The TU/e policy for academic staff 'Excellent People Attract Excellent People: the next generation’ enables new and current academic staff to shape and realize their career paths in a Development
Track. Interdepartmental Committees, as part of the decision-making process on individual scientific and

[^1]career development, further the quality of the academic performance and personal development evaluation and feedback. It increases the transparency and robustness of our evaluation methods and criteria, with specific attention to diversity and scientific domain characteristics. The members of the Interdepartmental Committees develop mutual, in-depth insights and expertise about evaluating, assessing, and guiding scientific talent.

## Principles of Conduct

TU/e aims to conduct ethically responsible and professional appointment and evaluation practices for scientific staff members. Such practices constitute the foundation for lasting excellence. The Principles of Conduct set out principles for appointment and assessment committees in order to assist their members who endeavor to apply "best practices" in the proactive search for, selection and assessment of candidates. The Principles define minimum standards that are to serve as the benchmark for conscientious actions.

## Women committee members in appointment and assessment committees (BAC's)

The guidelines and procedures of the BACs include a minimum number of women members and IFC members. A more diverse composition of the committee (especially during the discussion) leads to the incorporation of different perspectives and better decision making.

## Training Inclusive Selection and Assessment (de-bias)

Moments of selection and assessment are crucial when it comes to diversity and inclusion. Research shows that almost everyone has unconscious preferences, even those who have absolutely no intention of doing so. In this training attendees learn how to recognize 'mind bugs' with themselves and others, and which interventions and actions are possible.
The training has taken place in 2018 for all HR advisors and IFC members, in December 2019 for support staff (Management Teams). In January 2020 the training started for (associate) professors and is continued as an online training as of September 2020 due to Covid-19.
Next steps in 2022 will be to investigate which other groups of employees can benefit from this training (e.g., assistant professors).

## Equal Pay analysis

It is important for TU/e that men and women are equally rewarded for equal work. In 2020 TU/e asked an independent and experienced external agency to carry out data-driven research on to what extent TU/e rewards faculty of different genders equally for equal work. The analysis showed only a small difference in pay between men and women. This research will be repeated every 3 years.

## Mobility analysis

In 2021 TU/e followed up the equal pay research of 2020 to investigate whether there is a mobility gap between men and women, whether there are differences in starting positions \& pay, career progression speed, and promotions. This research has been carried out by the same external agency as in 2020. The outcome of the mobility analysis is planned for fall 2021.

### 3.2.2 Creating an inclusive learning environment for students

To create an inclusive learning environment, it is important to focus on the structure as well as culture. The structural aspects include distribution of tasks, availability of resources, and the physical environment. Cultural aspects include that people are treated fairly within a team or group, differences are valued, and everyone is involved in decision-making. ${ }^{6}$

## Practices aimed at creating an inclusive learning climate

 International classroom policyThe international atmosphere of the future field of work of our students is reflected in the international classroom and community at TU/e. The international classroom at TU/e is seen as an asset and enrichment,

[^2]offering students and staff a more diverse perspective on their disciplines, and insight into intercultural collaboration.

A specific policy on the International Classroom at TU/e has been developed which aims at the composition of the classroom and awareness among staff of cultural differences, including with respect to how people learn. Teachers will need to have the knowledge and tools to make sure that we take full benefit of the enriching characteristics of the international classroom. Learning goals concerning the international classroom could become a more explicit part of TU/e learning experiences and outcomes. The TU/e campus should be an international and intercultural environment in every way.

## EuroTeQ International Classroom

TU/e has the lead in implementing deliverables of the task group International Classroom within the EuroTeQ European Universities Alliance. Within this task the following deliverables are defined:

- Extracurricular Language courses open to all students planning physical mobility through the EuroTeQ Campus, and in the EuroTeQ Colliders to reach an A2 level of the respective local language.
- Development of shared guidelines, including principles and tools for non-discriminatory behavior and guidelines for inclusiveness.


## Study+

The Executive Board has adopted the policy document Study+ and the implementation plan 2020-2025 Study+. To support this policy TU/e has signed the Declaration of intent UN convention on the rights of persons with disabilities, thereby expressing the aims:

- "TU/e aims to be an inclusive educational institution, where every student participates on an equal basis with other students and every student feels welcome and accepted irrespective of background.
- TU/e will carry out activities in the field of education for the implementation of general accessibility.
- TU/e will connect objectives and activities in the field of education that link up with the approach of the Netherlands for the implementation of the Convention.
- TU/e will cooperate with others to share knowledge and to develop policy in which inclusion in education is enhanced and strengthened."


### 3.2.3 Leadership

Leadership is high on the strategic agenda of TU/e. TU/e focuses on personal leadership, team leadership and organizational leadership. A good, safe working and learning environment is created in which people feel welcome and motivated, can use their talents, are supported in their development, achieve results, are empowered and empower others. Leadership is an enabler for TU/e Strategy 2030 and is directly related to social safety, which will be addressed in 3.2.4.

## TU/e Vision on Leadership

In the recently developed TU/e Leadership vision document, four sets of values have been determined based on input of TU/e employees, scientific and support staff. These sets of values indicate how we want our leaders to behave towards us and how we should behave as leaders.
Our leadership behavior addresses the following principles:

1. Openness: We share knowledge and solve problems with the surrounding ecosystem in an open, transparent, and accessible way. We are open-minded and inclusive.
2. Trust: We want to lead and be led based on trust. This is the basis for an open and socially safe working environment.

[^3]3. Personal approach: We help people to find their personal path in developing their talent, to use that talent optimally in the team and support them to get the best out of themselves.
4. Collaboration: We encourage and support collaboration internally and externally.

## Strengthening Leadership

Leadership requires reflection on the execution of the role and self-awareness to help others in their development. Insight and skills are needed to demonstrate leadership in complex collaborative issues inherent in a university organization. By improving practical leadership skills, steps can be taken towards wellbeing within the TU/e community and the even better supervision of talent.

## Interventions

Leadership development will pay attention to:

- Creating awareness about the positive effects of a safe environment on the academic achievements and mental health of employees.
- Training and coaching on how to create safety in selection of people, leading people and working as a team. Expand the toolbox for leadership and be more flexible as a leader.
- Social learning options where people can learn from others who are in a comparable role (round table, peer-to-peer learning, etc.).
- Provide tools to make conversations on personal issues easier.


### 3.2.4 Social safety

In 2019, TU/e signed a joint statement of the Association of Universities in the Netherlands (VSNU) regarding social safety, thereby committing to providing a safe, open, and respectful working and learning environment for all our staff and students.

We have appointed confidential advisors at different institutional levels, whose work is based on the code of conduct of the national confidential advisors association (Landelijke Vereniging van Vertrouwenspersonen, LVV). By conducting periodical research into social safety, we identify possible patterns among the reports that confidential advisors receive. Together with the results of employee satisfaction surveys, we determine what measures need to be taken to ensure a safe working and learning environment for our entire community.

## What is social safety?

Social safety in the workplace is knowing and feeling protected against undesirable behavior and the threat of danger as a result of human actions in or in relation to the university (Working Conditions Act). This form of social safety falls within the domain of psychosocial workload. In practice the concept covers a broad range of aspects: it also includes elements concerning the (digital) environment and culture (TU/e). It is not only limited to the employees within the university but also concerns students and guests who study at and visit the TU/e campus.

For a workplace to be socially safe, the culture needs to allow for making mistakes on an individual level and the organization needs to learn from its mistakes at an organizational level.

## Creating a culture where people can make mistakes

A culture in which people find it important to learn from mistakes, deviations and ideas for improvement is called a Just Culture ${ }^{8}$. In such a culture, there is social safety, and experimenting with new behavior is encouraged and rewarded. When a team is socially safe, team members feel accepted and treated with dignity and respect ${ }^{9}$. Things that contribute to social safety are autonomy, ownership and trust and connectedness.

[^4]Opposite to a Just Culture is a Blame Culture or a Fear Culture: when a team member feels that reporting a risk could cause problems, for example through negative reactions and disapproval, this person does not experience the team as socially safe ${ }^{10}$. A Just Culture is closely connected to the learning organization. An organization that welcomes the opportunity to learn from its mistakes will become a socially safe workplace, supporting employees to optimize their contribution to the organization as a whole.

## Three approach routes for a socially safe environment

Three routes have been defined for the first necessary actions. A number of these actions have already been initiated or realized, while others have yet to start.

1. Cultural
2. Procedural
3. Learning \& Dialogue

Social safety requires continuous attention and is also under development. The action plans are not static but can be adjusted in the interim. We consider all 3 routes as equally important.

## Route 1: Cultural - Agree on values, norms, and codes for unambiguous behavior

A broad group of our TU/e community was invited to identify and summarize all the core values in one central value statement that would provide an overview of our core values on one page, referring to all existing codes. This TU/e value statement developed in 2020 in co-creation with several stakeholders, is agreed upon by the Diversity Committee, the Ethical Review Board, the Central Committee Integrity, and approved the Executive Board and has been published on the website in September 2021.

New codes of conduct will be developed when needed, such as codes of conduct for the umbrella student associations (FSE, Scala, Compositum).

## Route 2: Procedural - Develop a solid care landscape and clear rules and procedures

We encourage our students and staff to speak up and express concerns about undesirable behavior (including gender-based violence and sexual harassment), irregularities, and scientific integrity. We strive for an academic culture without fear of punishment or unfair treatment for raising such concerns yet understand it is sometimes difficult to speak up. Therefore, there is the necessity for a solid care landscape and clear rules and procedures.

## Escalation ladder

TU/e encourages everyone to first discuss an undesirable situation with the person it concerns. If that is not possible, discussion with the supervisor (for students: teacher) is the next step. If that is not possible either, staff can turn to an HR advisor (for students: student advisor) for advice, or they can get directly in contact with one of the confidential advisors or other professionals within the care landscape like the ombudsperson, the PhD counselor, the company welfare worker, etc.

Next to the professionals, TU/e makes use of an anonymous reporting system, SpeakUp, as of July 2021. The tool can eliminate barriers to report misconduct.

## Procedures and committees

On a national level there are the National 'FUWA' committee, the National Review Committee redeployment efforts and the National Committee on Educational Integrity to turn to in case of a complaint, dilemma or problem. At TU/e we have amongst others:

- Confidential advisors \& complaints procedure Inappropriate Behavior
- Confidential advisor \& complaints procedure Scientific Integrity
- Regulations for reporting irregularities
- TU/e Central Integrity Committee

[^5]- TU/e Ethical Review Board (Research)
- Disputes committee
- Complaints and disputes desk of Education and Student Affairs (ESA) for students

Next to internal codes of conduct, house rules and regulations there are also external laws and regulations within which we act such as the Working Conditions Act, the Higher Education Act (WHW), the Collective Labor Agreement Dutch Universities (CAO NU), the Dutch Civil Code (BW), Health and the Safety Catalogue Psychosocial Workload VSNU. A sanction policy will be developed.

## Strengthening cooperation in the care landscape (HR advice, secretaries a.o.)

We will provide HR advisors with tools to better deal with reports of misconduct. Also, secretaries will receive additional information on how to find other professionals and how to make referrals to professionals.

## Flowchart Social Safety

To make sure that every staff member or student can find their way in the care landscape one flowchart for employees and one flowchart for students are developed. These charts will be a clear guideline or pathfinder for all employees and students and will be published at the TU/e Social Safety webpage. It will include links to other already existing webpages with more information on advisors, counselors, committees, regulations etc.

## Information campaign

At the start of the new academic year 2021-2022 an information campaign will be held, online and on campus, to create awareness on the topic of social safety. The campaign will inform staff and students about the care landscape and where to find the correct information. In addition to the campaign in September 2021, there will be a focus on social safety throughout the year.

## Route 3: Learning \& Dialogue

To establish a cultural change we offer various learning interventions. These can consist of trainings, workshops, and dialogue sessions.

## Training

The Active Bystander Training teaches attendees how to challenge the kind of unacceptable behavior that has become normalized and how to bring about change. This training was organized in October 2020 by WISEnetwork and will be organized again in October 2021 during the Diversity Week.
Another example is the training Inclusive Assessment and Selection where attendees learn about their own 'mind bugs' (see 3.2 fixing the research institutions).

## Dialogue

Dialogue takes place through events like the Diversity Week, by discussing dilemmas in dialogue sessions, by attending a film or a theater play and have discussion afterwards. But dialogue can also happen within a team or on an individual basis, e.g., by discussing social safety issues within one's group, at team meetings or at the annual reviews.

In January 2020, the well-attended play - \#MeToo at Academia: The Learning Curve - addressed bullying, intimidation, sexual harassment and other inappropriate behavior in the workplace, and the impact this has on people. Afterwards there was a panel discussion and dialogue with the audience.

At the departments of Applied Physics and Electrical Engineering, a pilot will start amongst new PhD students in 2021. Under guidance of a coach the students can talk in a safe environment with peers and will also discuss issues or dilemmas with respect to social safety and the role of an active bystander.

In early 2022, the theater play Mindlab will enable further dialogue and cultural change on social safety. In cocreation with the theater company director, Daphne Goudsmit, and prof. Aukje Nauta (https://factorvijf.eu/), we will draft a plan to get and keep the dialogue alive and constructive.

## Management accountability cycle

Social safety already is on the agenda of the Executive Board. It will be included twice a year on the strategic meetings between Executive Board and Departments Boards to make them more aware of the importance of social safety and to act upon it. Management and supervisors play a significant role and are accountable for creating a safe work and learning environment at our campus.

## Employee participation (labor unions, University Council)

Social Safety is a recurring theme on the agenda of the employee participation bodies since medio 2020. Consultation takes place on a regular basis and advice is sought from the employee participation bodies on ad-hoc topics.

Next to the formal employee participation the Chief Diversity Officer, Student Diversity Officer, HRM and ESA have regular meetings with representatives of the various networks e.g., Compass, WISE-network and PLURAL (formal Black Lives Matter group). The Student Diversity Officer has also regular meetings with the boards of the student associations.

### 3.2.5 D\&l initiatives and networks

In addition to codes of conduct, regulations and (complaint) committees, the TU/e also has many other initiatives and networks that are intensively involved in and committed to equal treatment of employees and students such as:

## Diversity Week

Since 2020, TU/e organizes a yearly Diversity Week in October for all TU/e employees and students. The second Diversity Week will take place October 4-11, 2021. October 11 is International Coming Out Day with special attention for the LGBTQ+ community.

## Diversity Fund

Since 2019, students and staff can apply for funding of D\&I projects through the TU/e Diversity Fund. The aim is to involve students and staff to come up with projects and activities that stimulate diversity and inclusion. Each year the best five ideas will get grants up to 5000 euros.

## Women in Science Eindhoven (WISE) Network

WISE Network is a network for women scientific staff at TU/e. Supported by the Executive Board, the network was founded in March 2007. WISE Network pursues the following objectives:

- facilitating networking among women researchers at TU/e.
- organizing activities, e.g., for professional and personal development.
- increasing the awareness of opportunities for women scientists.
- advising the Executive Board of the University and other relevant committees on request and on the initiative of the network.
- fostering contacts with other organizations promoting women in science; • being a role model for (prospective) women students.


## Beyond Eindhoven

Beyond Eindhoven aims to provide guidance and support for women students in the Eindhoven region. In collaboration with Fe+male Tech Heroes two events for women (and men) students will be organized in 2021 and 2022 with the aim to inspire and meet young women role models from the Brainport area.

## Compass

Compass is a fully inclusive community for LGBTQ+ members as well as straight (cis) friends. They celebrate diversity by actively expanding their circle of like-minded people. Their events are open to all but centered around LGBTQ+ themes.

## Cosmos

Cultural association Cosmos aims to provide a safe and friendly environment for the international students at TU/e. They strongly promote mutual integration of Dutch and international students in Eindhoven by organizing a variety of internationally oriented events. They provide a voice for international students within the TU/e community on all issues related to student life on campus.

## Tint

Life questions association Tint hosts events with the focus on meeting new people, learning from others and gaining new insights and life skills.

### 3.2.6 Conditions of employment

## Pregnancy and maternity leave

In connection with child birth, TU/e has pregnancy leave and maternity leave regulations. An employee is entitled to a total leave of 16 weeks for pregnancy and childbirth. Leave can be adjusted according to personal needs (flexible pregnancy leave). The employment contract can be extended with the amount of maternity leave taken at the request of the employee.

## Birth leave

Within the framework of the Extra Parental Leave Act (WIEG), employees are entitled to a maximum of one working week of paid birth leave. As of 1 July 2020, parents are also entitled to five working weeks of additional unpaid birth leave. The additional birth leave amounts to a minimum of one week and a maximum of five times the weekly working hours.

## Parental leave (paid and unpaid)

As of 2009, it is possible to claim a 26 -week parental leave. The employment contract can be extended with the amount of parental leave taken at the request of the employee.

## Childcare at TU/e campus

There is a daycare on the TU/e campus: Korein TU/e. Korein offers daycare for children up to the age of four.

### 3.3 Fixing the knowledge

The third group of measures focuses on making knowledge production and dissemination (research and education) inclusive.

Academic studies point to the exclusion of groups and perspectives from the content of research. Studies show that failure to acknowledge gender differences when setting up and carrying out a research project can lead to costly errors. For example, cardiovascular diseases are the leading cause of death among women in Europe, but for years the phenomenon was only researched in relation to men ${ }^{11}$. When social groups structurally have limited access to science, this affects the production of knowledge. Reflecting on how knowledge production in one's own field is affected by such processes of exclusion should be a core feature of all academic practice. This also applies to the educational practice: the gender dimension should be better integrated in the education curriculum ${ }^{12}$.

### 3.3.1 Diversity and Inclusion in education

Research shows that the emphasis in the D\&I policy of universities is primarily on the unbalanced gender relations and less on the culture and of the organization and the less visible differences and forms of
inequality ${ }^{13}$. There are, however, "many elements that influence the social position of students and lecturers and the extent to which they perceive the institution as inclusive. This could lead, for example, to lecturers attributing too easily to cultural differences their rigid social dealings with students with autism in combination with a migrant background - while ignoring their needs." ${ }^{14}$

Most universities, including TU/e, have a D\&I policy with many activities, but so far this is mainly focused on academic staff; much less attention is paid to diversity among students (in policy and in activities and associations) and professional staff and to D\&I in the domain of education and research. ${ }^{15}$ This paragraph provides an initial impetus for a coherent vision, with related objectives and an overview of existing activities in the field of 'Inclusive Engineering Education'.

## Evidence based D\&I engineering education

There is already a great deal of research on D\&I in universities. Also, several methods have already been developed to achieve more diverse and inclusive engineering education. ${ }^{16}$ Analogous to our evidence-based educational development, insights from research will be used in shaping TU/e policy on and understanding the requirements for D\&I education. In addition, we believe it is important to conduct research into the activities we undertake, to gain insight into which practices contribute to achieving our goals.

## Vision on inclusive engineering education

Student learning and performance is influenced by the inclusiveness of the environment in which education takes place ${ }^{17}$. Diversity offers enrichment in the community and in the learning process, enhances creativeness and innovation, and helps prepare students for the reality of their future working environment. We expect diversity to grow and aspire to offer all students a community that respects, appreciates, and fosters diversity, and an inclusive learning environment that helps all student to take ownership of their development and helps them to shape their own personalized learning path. This means that it will be easier for students with various backgrounds, circumstances and learner needs to find their way at TU/e.

## Goals

In line with the TU/e educational vision in which evidence-based educational development is central, TU/e will develop a research-driven policy on inclusive engineering education addressing and integrating D\&l in the educational curriculum, focusing on both visible differences (e.g., gender, age, and ethnicity) as well as invisible differences (e.g., personality, work experience and sexual orientation).

- In 2025, $80 \%$ of the Bachelor curriculum and $50 \%$ of the Master curriculum integrates D\&I in the material, in the learning activities and the personal and professional development of students.
- In 2030 our complete educational offer integrates D\&I.


## Practices aimed at addressing and integrating D\&l in the educational curriculum

## Bachelor College and Graduate School: personalized learning paths

In our Bachelor College and Graduate School students are stimulated to choose the pathway and challenges that will help them become the engineer they want to be. TU/e will coach them in this process and will safeguard that the path they choose can lead them to an engineering degree. Student ownership of their trajectory and the partnership between student and staff are essential elements of this process. The student population will become more diverse and will have different learning needs and different ways of approaching their education. A more flexible and modular system will make TU/e a community in which a variety of learners (both full-time and part-time students) can find their way, enabling a personalized learning trajectory that is fitting to their personal circumstances and professional and educational experiences. Students are stimulated to take ownership of their development and learn to seek the knowledge and skills they need, and critically appraise the information they find. Shaping their own study path will help to create a mindset of life-long learning among students because during their time at TU/e, they learn to assess their own

[^6]development, learning preferences and learning needs. This will help them to complete their learning trajectory at TU/e, but it will also make them aware that learning never stops, and that they can apply the learning strategies and preferences they gained at TU/e throughout their professional career.

## Revision Bachelor College

In the revision of the Bachelor College in 2021-2022, explicit attention will be given to D\&l in the design of the education (material). As a first step, a revision of the goals of the Bachelor College was started, one of the goals is now: Provide inclusive education that is supportive, flexible, and responsive to the individual needs and priorities of each TU/e student. The revision of the Bachelor College will further elaborate on how we intend to achieve this goal. In the meantime, experience has been gained with, for example, a workshop on 'diversity in teams' for tutors of the basic subject Engineering Design and this appears to lead to very good results.

## Intercultural workshops 4TU.CEE

4TU.CEE is organizing workshops for (academic) teachers on intercultural group dynamics and culturally appropriate and effective feedback.

## Student evaluations on teaching

How to avoid that minority status, gender and discipline of the teacher has influence on the evaluations on teaching? In 2020 a working group has been formulated with members from ESA, HRM and the Diversity Committee to investigate the possibilities to minimize or even avoid bias in student evaluations. Outcome (advice) of the group is expected fall 2021.

### 3.3.2 Gender dimension in research

There is a need for measures focused on making knowledge production and dissemination inclusive. This group of measures has been implemented the least in diversity plans at Dutch universities

For the integration of the gender dimension in research and innovation the European Committee recommends the policy document "Gendered Innovations 2". This document includes refined methodologies on the integration of sex/gender-based analysis as well as intersectional analysis in research and innovation content. As examples serve 15 case studies in health, AI \& robotics, energy, etc.

With respect to increasing the gender dimension in research, three dimensions are seen to characterize the relationship between the issue of gender and science.
> Research by women: women participation in research must be encouraged
> Research for women: research must address women's needs
$>$ Research about women: research must be carried out to understand gender issues
By taking gender into account in research from the start, scientific staff question and consider gender norms and stereotypes, which allows a higher quality of research. This improves the relevance of innovation, knowledge and technology resulting from research at STEM universities.

An important field for TU/e is to tackle the problem of data bias in AI-related research projects. TU/e will start by raising awareness among its researchers and get inspiration from examples of the abovementioned "Gendered Innovations 2" policy document. Other interventions TU/e will investigate and might implement in 2022-2025 are e.g., organizing a workshop, together with other Eurotech universities, on sex and gender analysis for senior researchers, organizing a training on sex and gender in research and innovation in PhD and postdoc training programs.

## 4 Monitoring

In the monitoring phase, the process and progress are regularly evaluated. The findings from the monitoring phase make it possible to fine tune and improve any interventions that are made to achieve optimum results.

## Fixing the numbers

Numbers and percentages of e.g., women in scientific staff, women in higher positions, women in support staff and student distribution by gender, distribution of diplomas by gender are easily accessible through the TU/e data information system (BI-tool) and generate data over a period of 10 years. This data, together with the gender targets, is discussed regularly in the various bodies throughout the university.

Also, numbers and percentages of women new hires are available and will be used to monitor the success of the Irène Curie Fellowship. The intranet pages for the Irène Curie Fellowship provide Facts and Figures, containing the percentages of women faculty per department, percentages and numbers over the last 10 years, a benchmark with other Dutch universities, ranking of the Netherlands in Europe and the impact of the Irène Curie Fellowship program. The facts and figures are updated on a yearly basis. Furthermore, the impact of the program is part of the TU/e Annual Report 2020. The Annual Report (in Dutch) is made publicly available on the website.

TU/e takes part in an annual survey of the Dutch Network of Women Professors, that publishes the gender equality figures of all Dutch universities on a yearly basis.

Numbers and percentages of women who won grants, prizes or obtained research funding (Veni, Vidi, Vici, ERC) aren't available yet. In 2022 TU/e will start with taking these data into account.

TU/e uses a social media monitoring tool and monitors the number of times that our gender policy is mentioned in social media. Since the launch of the Irène Curie Fellowship program to date more than 15,000 messages were published with a potential outreach of 33.8 million. In national and international newspapers, tv and radio our gender policy was mentioned approximately 350 times since July 2019, with exposure in The Guardian, Science, Nature and the Frankfurter Allgemeine. We will continue to monitor our gender policy in the media.

Starting in 2022, TU/e will monitor media appearances of TU/e men and women scientists with the aim that women scientists are equally represented in the media and visible as experts in their field.

## Fixing the research institutions

## TU/e Annual Report

In the annual report, TU/e accounts publicly for its policy, achievements and financial results in performance and the financial results achieved. The report is part of the management cycle of the university. It contains a paragraph about Diversity \& Inclusion and reports figures on diversity.

## Employee Satisfaction Survey (MTO)

The TU/e intends to test employee satisfaction in Q1 2022 by means of an MTO among all TU/e employees, as part of a structural improvement cycle. The continuous increase of employee satisfaction will have an indirect effect on the effectiveness and quality of service of the TU/e (Quality of Service Performance) and on the learning capacity of the TU/e.

The research will be carried out by an external agency. In the MTO the components work experience and psychosocial workload from the RI\&E will be included. Planned themes in the MTO are work pressure/workstress, work experience, workload, work involvement/engagement, work happiness, internal support, sustainable employability, diversity, inclusion, and social safety.

## Registration of reports and complaints

Next to MTO TU/e will monitor Social Safety issues by registration of reports and complaints to the confidential advisors and complaint committees.

## Surveys

TU/e also makes use of the outcome of other surveys. Research by the Human Performance Group in 2019 and 2021 has been conducted to uncover the experience of diversity \& inclusion of TU/e employees, as well as of specific groups (women, internationals, various age and functions groups), as well as factors that may contribute to this experience, such as organizational demands (conflicts, non-transparent procedure) and resources (information, inclusive leadership) and hypothetical outcomes like exhaustion, work engagement and job performance. Results of this survey are discussed with various groups within TU/e and are used to develop interventions.

## 5 Governance

Gender equality at TU/e is part of other coherent themes like diversity \& inclusion, social safety, and leadership, which are all strategic topics and high on the TU/e agenda.
Gender is always linked to other social categories, such as ethnicity, functional impairment, age, sexual orientation, and social class. This makes an intersectional approach necessary when making plans for gender equality. TU/e is just at the beginning but is moving towards a more intersectional approach in the years to come.

Next to an intersectional approach, TU/e will focus in 2022 on a solid governance of diversity \& inclusion and social safety with clear goals, interventions and implementation plans with timelines, resources, and budget.

## Chief Diversity Officer (CDO)

Prof. Evangelia Demerouti, Professor at Human Performance Management, has been appointed Chief Diversity Officer with effect from September 2017 for 4 years and has been re-appointed in 2021 until 2025. She takes on the task of increasing diversity and inclusion at TU/e and is chair of the Diversity Committee.

Goals of Chief Diversity Officer within TU/e:

- Advise the Executive Board on how to increase diversity \& inclusion among employees within TU/e
- Develop a policy roadmap/plan on diversity \& inclusion
- Create a network of people that develop and implement effective interventions/actions to increase diversity \& inclusion
- Contribute to cultural change that embraces diversity \& inclusion
- Perform research on how to improve diversity \& inclusion within TU/e

Next to monitoring the diversity \& inclusion experience and the hypothetical predictors and outcomes within TU/e, scientific research is contacted on the effectiveness of the implemented interventions e.g., the Irène Curie Fellowship program, the training Inclusive Selection and Assessment, and the onboarding intervention. Linking research with policy development and implementation is a pre and proven condition for successful diversity \& inclusion in academia. Moreover, a good networking role of the CDO is another success factor.

## Student Diversity Officer (SDO)

As of June 2020, Lara Hofstra is appointed as Student Diversity Officer. She takes on the task of increasing diversity and inclusion at TU/e with a focus on students. Since this role was new for TU/e, the SDO started with an inventory in the field of diversity \& inclusion and wellbeing with students. Together with the policy advisor for student wellbeing, a plan will be drawn for 2022 and beyond catering to the specific needs of the different study associations.

## Policy advisors HRM and ESA

At the departments of HRM and ESA policy advisors are appointed for the topics of diversity \& inclusion and social safety. The policy advisor provides strategic advice to various target groups such as the Management Teams HRM and ESA, the Executive Board, the University Consultative Council, the Managing Directors Council, HRM/ESA colleagues, etc. The policy advisor develops and implements strategic policies in cooperation with relevant stakeholders based on the organization's strategic objectives, leads and/or coordinates processes and policy themes, represents TU/e on issues in external partnerships, translates political and social signals and developments into strategic, tactical, and operational objectives and establishes links between the various policy programs and ensures the cohesion of all components.

## Diversity Committee

The Diversity Committee TU/e submits proposals to the Executive Board concerning (policy) measures to stimulate Diversity and Gender Equality at the University. Moreover, the committee has the following tasks:

- To review the University's performance and progress in promoting diversity.
- To support the University in meeting the diversity and gender-related targets in its Strategic Plan.
- To evaluate the impact and promote the sharing of University-wide good practice initiatives in diversity and gender equality.
- To develop a TU/e-wide vision on diversity and inclusion and a plan of priorities for further action.

In fall 2021 the diversity committee will be considering an improved governance structure. The diversity committee will make a plan for 2022 and further, under a new name: D\&I committee. This plan will be drafted in collaboration with current committee members and other stakeholders, and will address the governance, resources, and decision-making procedures within TU/e when it comes to D\&I related matters. A rough idea is to have a core D\&I committee and to form different working groups with employees and students, university wide, for the various subjects that D\&I is rich in. Main topics, which can also be subdivided, amongst others:

- Gender equality and intersectionality
- D\&I - HR policies and procedures (recruitment/retention/career perspectives/pay)
- D\&I and student life
- Social safety
- Gender dimension in research
- D\&I in education
- D\&I events and D\&I fund

The working groups will develop ideas to be discussed in the quarterly D\&I committee. If adopted the plans will be part of the yearly D\&I initiatives, budgeted, discussed, and decided on twice a year with the Executive Board and the involved director (e.g., Director HRM or Director ESA).

## Ambassadors D\&I and social safety

In shaping the new governance for 2022, a structure will also be sought in which each department will have one or two ambassadors who will be the point of contact and linking pin from decentralized to centralized policy and interventions and vice versa. An example is the already existing Diversity Task Force of the Department of Mathematics and Computer Science, in which members from all employment levels are represented.

Discussion on gender equality in the Executive Board and University Consultative Council (UCC)
The topic of gender equality and women talent in scientific staff is discussed twice a year in the Executive Board and UCC. This topic entails:

- Departmental action plans for reaching the gender targets
- Recruitment of women talent
- Retention of women talent
- Analyses of possible gender gaps in starting position, pay, promotions and career progression


## Communication

The Gender Equality Plan will be published internally and externally on the TU/e website. Furthermore, it will be shared with all staff and students in internal newsletters.

## 6 Mandatory GEP requirements of European Commission

The following table indicates the actions of TU/e related to the specific requirements of the European Commission. Furthermore, it shows where in the documents these actions can be found.

| Mandatory GEP process requirements | TU/e Gender Equality Plan - Actions |
| :---: | :---: |
| Public document |  |
| Signed by top management | Formal document signed by the Executive Board of the university |
| Published on the institution's website | Diversity and Inclusion |
| Disseminated through institution | As a first step the GEP will be disseminated across various stakeholder groups and meetings within TU/e, and as well published in the 'Strategy update' and the 'People at work' newsletter. |
| Dedicated resources |  |
| Funding for gender equality positions or teams | 5. Governance, page 20 <br> - Chief Diversity Officer (CDO), Student Diversity Officer (SDO), Policy advisors HRM and ESA |
| Reserved time for others to work on gender equality | 5. Governance, page 20 <br> - Diversity Committee |
| Data collection and monitoring |  |
| Data on sex or gender of staff across roles and leadership | 4. Monitoring, page 18 <br> - TU/e data information system (BI-tool) |
| Annual reports and evaluation of progress and outcomes | Annual Report <br> Appendix 1 Facts and Figures Irène Curie Fellowship program, page 24 |
| Training and capacity building |  |
| Whole organization engagement | 3.2.3 Leadership, page 10 <br> 3.2.5 D\& initiatives \& networks, page 14 |
| Tackle gender biases of people and decisions | 3.2.1 Transparency and equal opportunities in career policy procedures, page 8 <br> - Training Inclusive Selection and Assessment (debias) <br> - Women committee members in appointment and assessment committees |
| Joint action on specific topics | 3.2.5 D\& initiatives \& networks, page 14 |
| Work-life balance and organizational culture | 3.2.6 Conditions of employment, page 15 <br> 3.1.2 Advancement and retention, Irène Curie Fellowship program (ICF), page 7 |
| TU/e Gender Equality Plan | Date Page <br> 23 September 2021 22 of 28 |

Gender balance in leadership and decisionmaking

Gender equality in recruitment and career progression

Integrating the gender dimension into research and teaching content

Measures against gender- based violence, including sexual harassment
3.2.1 Transparency and equal opportunities in career policy procedures, page 8
3.1.1 Recruitment, page 5
3.3 Fixing the knowledge, page 15
3.2.4 Social Safety, page 11

## Appendix 1 - Facts and Figures Irène Curie Fellowship program

With the Irène Curie Fellowship (ICF) program, TU/e aims to contribute to reducing the structural disadvantage of women in the labor market and to increase the gender balance in scientific positions.

## 1. Eligibility for the ICF program

In the revised ICF program, vacancies are only eligible for the ICF program if the share of female faculty is less than $35 \%$ for the specific function group in the specific department to which the vacancy applies (assistant, associate, or full professor). The percentage of female faculty is measured each year on September 1, and is defined as fte on payroll, using the BI-tool.

For 2021, the defined percentages for all departments and function groups are:

| Department | Total | Assistant <br> professor | Associate <br> professor | Full <br> professor |
| :--- | ---: | ---: | ---: | ---: |
| Applied Physics | $16,6 \%$ | $38,2 \%$ | $0,0 \%$ | $10,1 \%$ |
| Biomedical Engineering | $29,2 \%$ | $34,5 \%$ | $22,2 \%$ | $26,9 \%$ |
| Built Environment | $35,5 \%$ | $47,5 \%$ | $19,8 \%$ | $19,0 \%$ |
| Chemical Engineering \& Chemistry | $24,4 \%$ | $31,4 \%$ | $20,0 \%$ | $18,8 \%$ |
| Electrical Engineering | $13,9 \%$ | $18,2 \%$ | $6,4 \%$ | $12,0 \%$ |
| Industrial Design | $33,6 \%$ | $32,8 \%$ | $28,6 \%$ | $36,8 \%$ |
| Industrial Engineering \& Innovation Sciences | $41,8 \%$ | $48,1 \%$ | $33,3 \%$ | $33,1 \%$ |
| Mathematics \& Computer Science | $17,3 \%$ | $20,0 \%$ | $9,6 \%$ | $18,2 \%$ |
| Mechanical Engineering | $17,0 \%$ | $31,6 \%$ | $7,8 \%$ | $5,1 \%$ |

Source: BI tool

Highlighted are the function groups that have reached the tipping point of 35 . It may be assumed that gender diversity can be sustainably maintained in these groups.

## 2. Serious backlog of women in scientific positions

At TU/e, female students and scientists are seriously underrepresented. The graph and table in this paragraph show that, although numbers and percentages are increasing slowly, it was only until the end of 2020 that the percentages for female PhD students, postdocs and assistant professors rose above 30\%.


Female students and scientists in headcount:

| Year | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students | 1392 | 1532 | 1712 | 1973 | 2319 | 2592 | 2842 | 3089 | 3295 | 3562 |
| PhD | 223 | 212 | 210 | 222 | 235 | 238 | 256 | 259 | 303 | 343 |
| Postdoc | 51 | 44 | 40 | 42 | 42 | 39 | 47 | 61 | 66 | 84 |
| Assistant <br> professor | 55 | 45 | 52 | 57 | 68 | 76 | 81 | 85 | 87 | 114 |
| Associate <br> professor | 8 | 10 | 15 | 18 | 21 | 22 | 22 | 21 | 23 | 27 |
| Full professor | 11 | 12 | 14 | 15 | 17 | 20 | 23 | 28 | 35 | 39 |

[^7]In the Netherlands, the Dutch Network of Women Professors monitors the progress of women professors in Dutch universities each year. In 2020, TU/e was ranked second to last.


[^8]And in the European context, we must conclude that the Netherlands ranks well below the EU- 28 average of $23.7 \%$ with only $18.7 \%$ female staff in the highest academic ranks.


Evolution of the proportion (\%) of women among Grade A positions, 2013 vs. 2016
Source: She Figures 2018, European Commission

## 3. Impact of the ICF program

The relative proportion of women hired in 2020 was: $51 \%$ of associate professors; $33 \%$ of associate professors; and $38 \%$ of full professors. This led to an increase in the percentage of female academic staff from $23 \%$ in 2019 to $27 \%$ in 2020, where previous years had consistently seen an increase of only $1 \%$.

Recruited Scientific Staff since the start of the Irène Curie Fellowship program (July 2019 - December 2020)

|  | Assistant professor |  | Associate professor |  | Full professor |  | Total |  | Total \% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| Applied Physics | 2 |  |  |  | 1 |  | 3 |  | 100\% | 0\% |
| Biomedical Engineering | 4 |  |  |  |  |  | 4 |  | 100\% | 0\% |
| Built Environment | 6 | 5 |  | 1 |  |  | 6 | 6 | 50\% | 50\% |
| Chemical Engineering \& |  | 1 |  |  |  | 2 |  | 3 | 0\% | 100\% |
| Chemistry |  |  |  |  |  |  |  |  |  |  |
| Electrical Engineering | 6 | 11 |  | 3 |  | 4 | 6 | 18 | 25\% | 75\% |
| Industrial Design | 5 | 2 |  | 1 |  |  | 5 | 3 | 63\% | 38\% |
| Industrial Engineering \& Innovation Science | 13 | 5 | 1 |  | 1 | 1 | 15 | 6 | 71\% | 29\% |
| Mathematics \& Computer Science | 6 | 15 | 2 | 1 | 3 | 1 | 11 | 17 | 39\% | 61\% |
| Mechanical Engineering | 8 | 10 |  |  |  |  | 8 | 10 | 44\% | 56\% |
| Total | 52 | 49 | 3 | 6 | 5 | 8 | 60 | 63 | 49\% | 51\% |

## 4. Other measures

The ICF program is not the only measure to bring about a gender-balanced faculty composition. Other existing measures also contribute in a positive way to this objective and increase awareness of the implicit bias. These are the following measures:

- New targets until 2025 have been set to influence not only the recruitment but also the retention of female scientists. These targets are: $35 \%$ female assistant professors, $30 \%$ female associate professors and $25 \%$ female full professors.
- The topic of Female Talent within the Scientific Staff is discussed twice a year in the University Consultative Council (UCC) with the gender targets, recruitment and retention of female talent, and job tenure in scientific positions as fixed components.
- Once every three years a 'pay gap check' is carried out.
- For regular vacancies, the basic principle of equal suitability applies and at least one female and one male candidate are assessed by an appointment advisory committee.
- A Gender Equality Plan (GEP) is being developed and will be implemented in 2021.


[^0]:    1 Schiebinger, L. \& Schraudner, M., 2011, Interdisciplinary Approaches to Achieving Gendered Innovations in Science, Medicine, and Engineering
    ${ }^{2}$ Bonjour, Van den Brink \& Taartmans, 2019, Een diversity officer is niet genoeg
    ${ }^{3}$ Ysseldyk, R., Greenaway, K. H., Hassinger, E., Zutrauen, S., Lintz, J., Bhatia, M. P., Frye, M., Starkenburg, E., \& Tai, V. (2019). A Leak in the Academic Pipeline: Identity and Health Among Postdoctoral Women. Frontiers in psychology, 10, 1297.

[^1]:    ${ }^{4}$ Buitendijk, S., Curry, S., Maes, K. Equality, diversity and inclusion at universities: the power of a systemic approach, 2019
    ${ }^{5}$ Tauber, S. Undoing Gender in Academia: Personal Reflections on Equal Opportunity Schemes, 2020

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[^3]:    7 "Towards a leadership vision for TU/e"

[^4]:    ${ }^{8}$ Marx D., Patient Safety and the "Just Culture": A Primer for Health Care Executives, 2001.
    ${ }^{9}$ Zapf, D., \& Vartia, M. (2020). Prevention and treatment of workplace bullying: An overview. In S. V. Einarsen, H. Hoel, D. Zapf, \& C. L. Cooper (eds.). Bullying and harassment in the workplace: Theory, research, and practice (3rd ed., pp. 457-496). Boca Raton: CRC Press

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    ${ }^{15}$ Bonjour, Van den Brink \& Taartmans, 2019, Een diversity officer is niet genoeg
    ${ }^{16}$ https://xerte.uu.nl/play.php?template_id=1127\#page1
    ${ }^{17}$ Ambrose et al (2010) How learning works. San Francisco, CA: Jossey-Bass.

[^7]:    Source: BI tool

[^8]:    Source: Monitor Women Professors 2020, Dutch Network of Women Professors (LNVH)

