Technische
Universität Braunschweig

Decentralised Equality Plan of the Department of Mechanical Engineering

## Equal Opportunities 2020

This document also functions as the
Statement of the Department of Mechanical Engineering (Department 4) on TU
Braunschweig's Final Report on the DFG's Research-Oriented Standards on Gender Equality 2013.

## Preliminary remarks

The Department of Mechanical Engineering is committed to providing equal opportunities in the sciences and supports the implementation of the equality directive as it is set out in §3, sect. 3 NHG (Lower Saxony Higher Education Act). For this reason, the Department of Mechanical Engineering has developed this Decentralised Equality Plan, which also serves as the department's statement on the Final Report on the DFG's Research-Oriented Standards on Gender Equality. This Decentralised Equality Plan is a department-specific supplement to the university's Central Equality Plan. It will form part of TU Braunschweig's Final Report on the DFG's Research-Oriented Standards on Gender Equality.

The targets for gender relations set forth in this Decentralised Equality Plan - as well as in all the other decentralized equality plans and in the Central Equality Plan - are to be met by 2020. This timing was defined to enable significant changes, in particular in the area of professorships: comparatively few new appointments are scheduled for the period from 2013 to 2016, but starting in 2017, a larger number of professorial positions will become vacant at TU Braunschweig.

The Department of Mechanical Engineering is committed to the following targets (Section 1) and measures (Section 2) in the areas structural basis of equality (Section 2.1), closing the gap of underrepresentation (Section 2.2), becoming a family-friendly university (Section 2.3), and the incorporation of gender into research, teaching and administration (Section 2.4).

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## 1. Targets for 2020

| Qualification level | Actual figure, 2012 | Target for 2020 |
| :--- | :--- | :--- |
| Entering female students | $10 \%$ | $15 \%$ |
| Current female students | $12 \%$ | $15 \%$ |
| New female graduates | $16.5 \%$ | $18 \%$ |
| Female doctoral graduates | $11 \%$ | $15 \%$ |
| Female habilitation ${ }^{2}$ graduates | $0 \%$ | $\mathrm{~N} / \mathrm{A}^{*}$ |
| Female junior professors | $0 \%$ | $25 \%$ |
| Female professors (total) | $6.6 \%$ | $13.3 \%$ |
| Female C4/W3 ${ }^{3}$ professors | $4.16 \%$ | $8.3 \%$ |
| Women in executive <br> positions at the <br> departmental level | $0 \%$ | $25 \%$ |

* Due to the very low number of habilitations in 2011 and 2012 (when no candidates, male or female, completed a habilitation), it is impossible to set a target for this.


## 2. List of measures

The following measures are intended to ensure that equality and family-friendliness become integral parts of the organisational culture in the Department of Mechanical Engineering, and that the set targets are met.

### 2.1 Structural anchoring of gender equality

In the interest of the advancement of equal opportunities, gender equality will be anchored in our department's structure.

### 2.1.1 Responsibility at the executive level

Equal opportunities are a value that should be upheld by each and every member of the Department of Mechanical Engineering, with the department's leadership bearing special responsibility for ensuring this value is put into practice.

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### 2.1.2 Equality and Family Working Group and Annual Meeting

The Dean of the Department of Mechanical Engineering takes part in the Equality and Family Working Group (AG Gleichstellung und Familie) and the Equality and Family Annual Meeting (Jour Fixe Gleichstellung und Familie). The Working Group comprises the deans of the university's departments, the heads of the administrative units, the chairperson of the "TUBSundFamiliee.V." association, the Family Office representative, the Dual Career Couples Service representative, the chairperson of the Gender Equality Commission as well as the Equal Opportunities Officer. The purpose of the Working Group is to coordinate activities relating to gender equality and family-friendliness in order to achieve synergies. It meets once every summer semester. The Equality and Family Annual Meeting is attended by the Working Group and TU Braunschweig's President. It takes place once every winter semester.

### 2.1.3 Decentralised Equal Opportunities Officers

Department 4's Decentralised Equal Opportunities Officers have a say in all of the department's staffing and appointment procedures. The Department of Mechanical Engineering provides the Decentralised Equal Opportunities Officers with compensation as detailed in the President's Recommendation of July 30, 2008.

### 2.1.4 Gender assessments

The Department 4 regularly reports gender relations on all qualification levels in its statistics. It practices gender assessments, a top-down management process to ensure the achievement of gender equality.

### 2.2 Closing the gap of underrepresentation

At the Department of Mechanical Engineering, women are underrepresented at all qualification levels. The department is taking steps to rectify this underrepresentation and to increase the proportion of women in all areas on a lasting basis.

### 2.2.1 Recruiting and supporting female secondary school students

To get female secondary school students interested in engineering and technical degree programmes - preferably at TU Braunschweig - the Department of Mechanical Engineering sponsors a number of projects. For example, " $\boldsymbol{\pi}$ nut", natural sciences and technology work placements for female secondary students (Praktika in Naturwisschenschaft und Technik), is a department-wide project allowing female secondary school students to complete their mandatory work placements or a voluntary internship during the school holidays at one of the 19 participating institutes within the Department of Mechanical Engineering. The department also plans to offer special support for female early entrance students.

Department 4 is also involved in female secondary school student projects coordinated by the Equal Opportunities Office. In the "Mentoring for Female Secondary School Students" (Mentoring für Schülerinnen) project, female secondary school students in Years 10-13 are paired with a student mentor from a STEM subject for one semester, receiving insights into both the subject and everyday university life. In the "Niedersachsen-Technikum" programme, secondary school graduates complete a six-month placement with a company in the region, spending one day a week at TU Braunschweig. They attend regular lectures and can earn credits that will be recognised in their subsequent degree programmes. In 2012, 13 of 14 participants chose mechanical engineering as their main focus. The department's institutes have shown great initiative for the annual Future Day event and, since 2012, in the "Female Secondary School Students Meet Female Engineers" (Schülerinnen treffen Ingenieurinnen) programme organised by the VDI (Association of German Engineers).

### 2.2.2 Supporting female students

At the Department of Mechanical Engineering, programmes dedicated to the explicit promotion of women have met with little enthusiasm in the past. Given this experience, the department prefers to participate in projects organised by the Equal Opportunities Office instead of developing its own gender-specific schemes. For example, Department 4 takes part in "fiMINT", "Femtec" and "Mentoring for Female Students" (Mentoring für Studentinnnen). The
interdepartmental "MentorING" programme pairs students with experienced professional mentors in science and industry and is open to students of both sexes. The programme's coordinator pays special attention to all female participants to ensure that any discriminatory mechanisms are not enabled or reinforced. She therefore maintains close contact not only with HR managers at companies in the region, but also with a network of equal opportunities officers and gender equality departments, for example at Volkswagen in Wolfsburg, Salzgitter and Braunschweig, and at the PTB (German Metrology Institute).

In addition, Department 4's professors regularly urge suitable female graduates to consider continuing on to the doctorate level.

### 2.2.3 Support for female doctoral students

The doctoral programmes at Department 4 give special attention to the promotion of women. Important starting points are the department-specific programme for doctoral students (Structured Doctorate, Strukturiertes Doktorat) and the Mechanical Engineering Graduate Forum (Graduierten-Forum Maschinenbau).

In October 2010, a course entitled "Career Planning for Female Doctoral Students" (Karriereplanung für Doktorandinnen) was offered. On Equal Pay Day in March 2012, the Graduate Forum and fiMINT partnered up to hold a workshop for women and a panel discussion on salary negotiations, both of which were well received by female doctoral candidates. The department also supports the "proNET" project developed by the Department of Life Sciences which investigates gender-specific differences in networking behaviours. Participation in this project earns students credits towards a Structured Doctorate.

In the long run, the topic of gender equality will be better incorporated into the Structured Doctorate, with the course "Managerial Competencies: Managing Gender and Diversity" (Führungskompetenz: Gender \& Diversity managen) becoming part of the mandatory programme for doctoral students as of the 2013 summer semester. A similar course has already been added to the summer school catalogue of the Coordinated Research Centre 880 (High Lift for Future Civil Aircraft). Further courses pertaining to gender and diversity are also in the works at the CRC 880.

In addition, Department 4's professors regularly urge suitable female candidates who have completed their doctorates to consider continuing on to the habilitation level.

### 2.2.4 Support for female habilitation candidates

In 2011 and 2012, no habilitations were completed at the Department of Mechanical Engineering. We are taking various steps to inspire doctoral candidates to embark on scientific careers. A series of "fireside chats" (Kamingespräche) has been initiated for female doctoral candidates, where they can meet with female engineering professors to speak about the implications of a scientific career.

### 2.3 Family-friendly university

The Department of Mechanical Engineering actively advocates for a balance between family life and studying for its students, or between family life and work for its technical, administrative and scientific staff. Both parents and family care-givers are considered to be people with family responsibilities.

### 2.3.1 Supporting research assistants on parental leave

Research assistants on parental leave receive special support. To facilitate the continuation of their research, they can apply to the department's administration for either student assistant hours or financial aid to purchase a notebook computer.

### 2.3.2 Flexible childcare

The Department of Mechanical Engineering actively advocates for flexible childcare, and it was at our department's initiative that flexible childcare has been expanded at TU Braunschweig. Besides Department 4, Departments 1, 3 and 5 and the central administration contribute to its financing.

### 2.3.3 Family-friendly infrastructure

The Department of Mechanical Engineering supports the creation of a family-friendly infrastructure. At the Research Airport (Institute of Flight Guidance), a parent-and-child room has already been created. At the moment, a survey is under way to determine the childcare situation at the Research Airport. The results will be used to formulate needs for the purposes of future infrastructure planning at TU Braunschweig.

### 2.3.4 "Family-friendly University" audit

The Department of Mechanical Engineering advocates for our continued development towards being a truly family-friendly university. It regularly takes part in the audit process of the same name.

### 2.4 Incorporation of gender into research, teaching and administration

Department 4 strives to intensify the inclusion of gender into research, teaching and administration.

### 2.4.1 Maria-Goeppert-Mayer Professorship: Gender, Technology and Mobility

To promote gender research in the engineering sciences, the Department of Mechanical Engineering will be creating an MGM Professorship entitled "Gender, Technology and Mobility" (Gender, Technik und Mobilität) for a period of four years to begin, after which the possibility of permanent adoption will be assessed.

### 2.4.2 Gender and diversity as a communications and managerial skill

The Department of Mechanical Engineering supports the implementation of courses with a focus on gender and diversity (such as within the Graduates Forum and the CRC 880). It promotes courses that raise awareness of gender, diversity and family-friendliness, for HR managers and appointment committees.


[^0]:    ${ }^{1}$ Translator's note (TN): The DFG (Deutsche Forschungsgemeinschaft) is the central self-governing research funding organisation in Germany (source: http://www.dfg.de/en/dfg_profile/index.html).

[^1]:    ${ }^{2} \mathrm{TN}$ : A habilitation is a post-doctoral qualification and the prerequisite for obtaining a professorship in Germany.
    ${ }^{3} \mathrm{TN}$ : C4 and W 3 are the highest salary grades for university professors.

