## Brief overview of key findings

Gender equality is one of TU Darmstadt's key objectives, the goals of which include increasing the percentage of female professors as well as recruiting women for STEM subjects and academic careers. In other areas, too, such as technical training occupations, numbers are supposed to be increased.

The annual Gender Data Report is prepared and continually developed by the Strategic Controlling Unit in close cooperation with the team in the Gender Equality Office. It provides an overview of how various key gender equality figures have developed at TU Darmstadt. In addition, at several points, the percentages for individuals of nonGerman nationality are presented. Tables and graphic evaluations offer insights into the developments in the different status groups and sectors whilst the comparison with reference data throws light on the university's standing in the German higher education landscape.
This brief overview summarises the core findings of the 2022 Gender Data Report. The full version is only intended for internal use within TU Darmstadt. If you are not a member of TU Darmstadt but would be interested in the more detailed results of the report, you can contact the staff in Directorate I, Strategic Controlling, at stratcontrol@zv.tu-darmstadt.de.

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## Gender Data Report 2022: Brief Overview of Key Findings

## Introduction

In the last 15 years, the percentage of women at all qualification levels at TU Darmstadt has increased. Short-term fluctuations and temporary trend reversals were usually the result of changes in the relative sizes of departments with differing percentages of women. A new feature of this year's Gender Data Report are the particulars for the share of doctoral candidates, early-career researchers as well as assistant and tenure-track professors.

## Students

Since 2007, the number of students at TU Darmstadt has risen from just under 15,000 to currently 24,985 . Up to 2017, with slight fluctuations, the figure for women was approx. 29 percent. Since 2019, it has reached a constant peak of 32 percent. The share of individuals of non-German nationality is currently 22 percent.

In 2021, the share of women on the Master's courses was 32 percent. It was slightly higher amongst those who completed their schooling outside of Germany (37\%) than amongst those who completed their schooling in Germany (31\%), whereby there are very clear subject-related differences: In the Department of Law and Economics, the share of foreign female students is almost twice as high as that of those who completed their schooling in Germany; in the Department of Computer Science, it is almost three times higher and in the Department of Electrical Engineering and Information Technology, it is more than four times higher.


## First-semester undergraduates

In the period 2007 to 2021, there are pronounced fluctuations in the number of new female undergraduates. The highest figure of 5,000 new undergraduates was reached in 2011. Partly due to the Covid pandemic, approx. 3,500 new students started at TU Darmstadt in 2021. With fluctuations, the share of new female students taking undergraduate courses in the last 15 years has risen by approx. five percentage points and is currently approx. 34 percent. Peaks were reached in 2021 for the share of individuals who completed their schooling outside of Germany at approx. 11 percent and for those of non-German nationality at about 16 percent.


## Graduates (Diplom/Master's)

The number of students graduating reflects the concomitant fluctuations in first-year student numbers. The share of women graduating in the last 15 years has varied between 29 percent and 34 percent and has remained constant at just under 33 percent since 2020.

Clear subject-related differences can be observed: Whilst the percentage of women in several departments is well above 50 percent, in other departments it does not exceed 20 percent. The share of those of non-German nationality and of those who completed their schooling outside of Germany are almost synchronous at 20 percent and 18 percent respectively.


## Doctoral candidates

The relatively new official statistics on doctoral candidates were evaluated for the first time this year. In absolute terms, the number of doctoral candidates at TU Darmstadt has dropped by seven percentage points in comparison with 2019 to currently 2,288 . The share of women is 28 percent and varies according to subject: in the last three years, significant increases have been registered in mathematics and architecture whilst numbers have fallen in the social sciences and history as well as biology. Nevertheless, the share of women in these disciplines is still high at approx. 50 percent. The proportion of doctoral candidates of non-German nationality is 18 percent.

## Doctorates

Since 2007, the share of women completing doctorates at TU Darmstadt has ranged from 20 percent to 30 percent. In 2021, it was 24 percent. The strong variations in the proportion of female doctoral candidates according to department is reflected in the doctorates completed. At over 50 percent, the share of doctorates completed by women in the social sciences, history, the humanities, biology and architecture is significantly higher than in other disciplines. The proportion of individuals of non-German nationality who complete a doctorate at TU Darmstadt has gradually increased slightly and, in 2021, was 21 percent.


## Early career researchers (R3)

This very first evaluation of early career researchers at TU Darmstadt includes all the leaders of the BMBF, Helmholtz Association and Emmy Noether Programme junior research groups as well as Athene Young Investigators and ERC Starting Grantees. In the last three years, the absolute figures for early career researchers at TU Darmstadt have increased from 23 to 28 . Currently, the share of women is 25 percent and the share of individuals of nonGerman nationality is 21 percent.

## Academic staff

Women's representation on the academic staff of all departments and central facilities at TU Darmstadt is currently 26 percent and has grown by three percentage points in comparison with 2019. There is a particularly high percentage of women in the humanities (63\%) as well as the social sciences and history (49\%). In comparison with 2019, the overall share of individuals of non-German nationality on the academic staff of TU Darmstadt has gone up by five percentage points and is now 23 percent. At 45 percent and 37 percent respectively, the share is particularly large in the material sciences/geosciences and in computer science.

A closer look at the academic staff with and without doctorates in the various departments at TU Darmstadt reveals that the percentage of women with doctorates has increased by four percentage points in comparison with 2019 and is now 25 percent. With reference to the academic staff who do not hold a doctorate, the figure has increased in the last three years by three percentage points to currently 26 percent. There are only three departments in which the proportion of female academic staff who hold doctorates is greater than the proportion who do not. Special mention should be made of electrical engineering and information technology in which the share of women on the academic staff who hold doctorates is more than twice the amount of those who do not.

## Assistant and tenure-track professors

With a figure of 29 assistant and tenure-track professors at TU Darmstadt, the share in 2021 has more than doubled in comparison with 2019. The proportion of women increased by more than five percentage points to 38 percent. In computer science in particular, four new assistant and tenure-track professorships have been established and all have been filled with women. At 21 percent, the share of assistant and tenure-track professors of non-German nationality has also grown significantly by 13 percentage points in the last three years.


## Professors

Currently, 71 female professors (including assistant and junior professors) are employed at TU Darmstadt, equating to a new peak value of 22 percent. Out of a total of 324 professors, 34 do not hold a German nationality, a share of just under 11 percent. In the social science and history departments as well as in architecture, women account for more than 50 percent of professors. The share of female professors in the humanities, civil and environmental engineering as well as computer science has developed well in the last three years. The share of professors of nonGerman nationality at TU Darmstadt is approx. 10 percent. Especially in the social sciences and history as well as in the humanities it has increased by more than seven percentage points in the last three years.


## Academic career stages

At TU Darmstadt, just as at other German universities, during the entire course of acquiring academic qualifications, the share of women drops from the first undergraduate semester to tenured professorship. One exception at TU Darmstadt are assistant and tenure-track professors, amongst whom the share of women is higher than the number of doctorates completed. Whilst the proportion of women between the first undergraduate semester (35\%) and graduation (32\%) only dropped slightly in 2021, a clear drop of eight percentage points occurred between graduation and doctorate. The tenure-track professorships introduced in 2018 contribute significantly to a marked increase in the share of women at this qualification stage which roughly reaches the same level as for first-year undergraduate students. Despite the increase in the proportion of women professors in the last four years, the share of women at this qualification stage falls severely. With a share of 20 percent in 2021, only every fifth professorship at TU Darmstadt was held by a woman.


## Trainees

In recent years, the number of trainees at TU Darmstadt has fallen and is currently 138. However, in 2022, a new peak was reached for the number of female trainees at 46 , which equates to 33 percent. With a share of 70 percent, "Administration and Libraries" is a training field that is particularly popular amongst women whilst the share of women in the commercial-technical field and IT is significantly lower. At 11 percent, yet another new record was achieved in the figures for trainees of non-German nationality. In this case, however, the percentage differences between training fields are much less pronounced, and there has been growth in all fields in the last three years.


## Administrative and technical staff (ATM)

The proportion of women on the administrative and technical staff in the departments, the central services, and the University administration at TU Darmstadt is currently 56 percent. In most departments, the share of women exceeds 50 percent; in no department is it lower than 40 percent. In the central services, the figure for women is 47 percent, in the University administration it is 61 percent. The share of administrative and technical staff of nonGerman nationality at TU Darmstadt is five percent. Both in the departments of social sciences and history as well as in civil and environmental engineering, the administrative and technical staff are particularly international with a share of over ten percent.

## Appointment procedures

In 2021, 41 percent of new appointments at TU Darmstadt went to women, a slight drop in comparison with the previous year. The absolute figures for newly-appointed female professors increased, however, from five to seven. The share of women reviewed and those on appointment shortlists has increased to 31 percent and 29 percent respectively. In 2021, only one ad personam appointment was conducted for a female professor, which equates to a share of 13 percent. TU Darmstadt's target of awarding at least one third of new appointments to women has been achieved every year since 2018.

## Committees and leadership roles

In the person of the president, one woman sits on the Executive Board, a share of 14 percent. The share of women leading the directorates is 25 percent; for the directorial units it is 72 percent. All six of the university's staff units are headed by women whilst the figure for the central services is 50 percent. Currently, only two out of 39 Deans' Offices are led by women. Female directors are in charge of eight out of 13 departments at TU Darmstadt. On the departmental councils the proportion of women varied considerably in 2022 according to status group: the share of women among the student representatives was 48 percent whilst parity was achieved amongst the representatives of the academic staff. The share of women amongst the representatives of the administrative-technical staff is 68 percent. Amongst professors, every fifth seat on the departmental council is held by a female professor.


## Comparison with TU9 and nationwide benchmarks

A comparison with other German universities of women's representation in the various phases of acquiring academic qualifications in the departments or disciplines at TU Darmstadt makes it possible to rank the results presented above in the German university landscape. The share of women in nearly all disciplines drops between the first undergraduate semester and professorship level. This negative trend is known as a leaky pipeline. Depending on subject, however, there is little, or a very great, difference in the proportion of women between the first undergraduate semester and professorship level.

In the civil and environmental engineering sciences at TU Darmstadt, the figures for the share of women at all academic career stages are better than the comparative benchmarks. On the other hand, the share of women in mathematics, biology and mechanical engineering at TU Darmstadt is lower than the reference values across the board. In the other subjects, however, no uniform picture emerges. In economics, politics, psychology, education, physics, chemistry, materials science as well as electrical engineering and information technology the share of women at TU Darmstadt and the benchmark universities is similar. In computer science and sociology, the reference values tend to reveal a leaky pipeline whilst the proportion of women amongst doctoral candidates and professors at TU Darmstadt increases significantly. In architecture and sports science, too, the benchmarks show a significant drop in the share of women between the first undergraduate semester and professorship whilst at TU Darmstadt the share of women in architecture remains almost constant at all academic career stages; in sports science, it even increases continuously up to doctoral level. In the geosciences, on the other hand, TU Darmstadt has a leaky pipeline whilst the reference values reveal a significant increase in the share of women at doctoral level. In history, a mixed picture emerges both in the reference values and at TU Darmstadt; the share of women at the various academic career stages ranges from 35 percent to 65 percent.

## Conclusions

The Gender Data Report 2022 shows that, in the long term, women's representation in most status groups at TU Darmstadt is developing positively. This year, too, in various areas, new records were reached or reiterated. Despite this, in many areas of the university women are still under-represented. It is therefore necessary to continue efforts to ensure that the positive trend in increasing women's representation continues in the coming years. This starts with treating one another in a respectful, non-discriminatory fashion, continues with a range of equality measures and opportunities for university members as well as various actions to recruit women at all academic career stages. Examples include actively recruiting women professors and personally addressing qualified female students. The Gender Data Report showcases success stories and, within the university, serves as a guideline for highlighting further fields of action.

