

TU Darmstadt Gender Data Report 2024

Brief overview of results



TECHNISCHE
UNIVERSITÄT
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Gender equality is a major challenge, especially at technical universities. The establishment and expansion of a culture and structure of equal opportunities and gender equality is the overarching goal of TU Darmstadt's gender equality efforts. Increasing the percentage of women in top positions and management in science as well as recruiting more women in Science, Technology, Engineering and Mathematics (STEM subjects) starts with recruiting female students and doctoral candidates and continues through the various career stages to professorships. By collecting and updating gender-specific data in the TU Darmstadt Gender Data Report over the last couple of years, the university has instituted a tool that allows us to strategically evaluate developments in the statistics relating to women. By way of an additional diversity aspect, we also consider at various points the percentage of individuals who do not hold German nationality. The TU Darmstadt Gender Data Report presents developments in the individual university departments over time and offers insights into the developments in the different status groups; the comparison between TU Darmstadt and other universities throws light on the university's standing in the German higher education landscape.

This brief overview summarises the core findings of the 2024 Gender Data Report. The full version is only available in German on the website of TU Darmstadt. If you are interested in the more detailed results of the report, please contact the staff in Directorate I, Unit Strategic Controlling (stratcontrol@zv.tu-darmstadt.de).

Gender Data Report 2024 - Imprint

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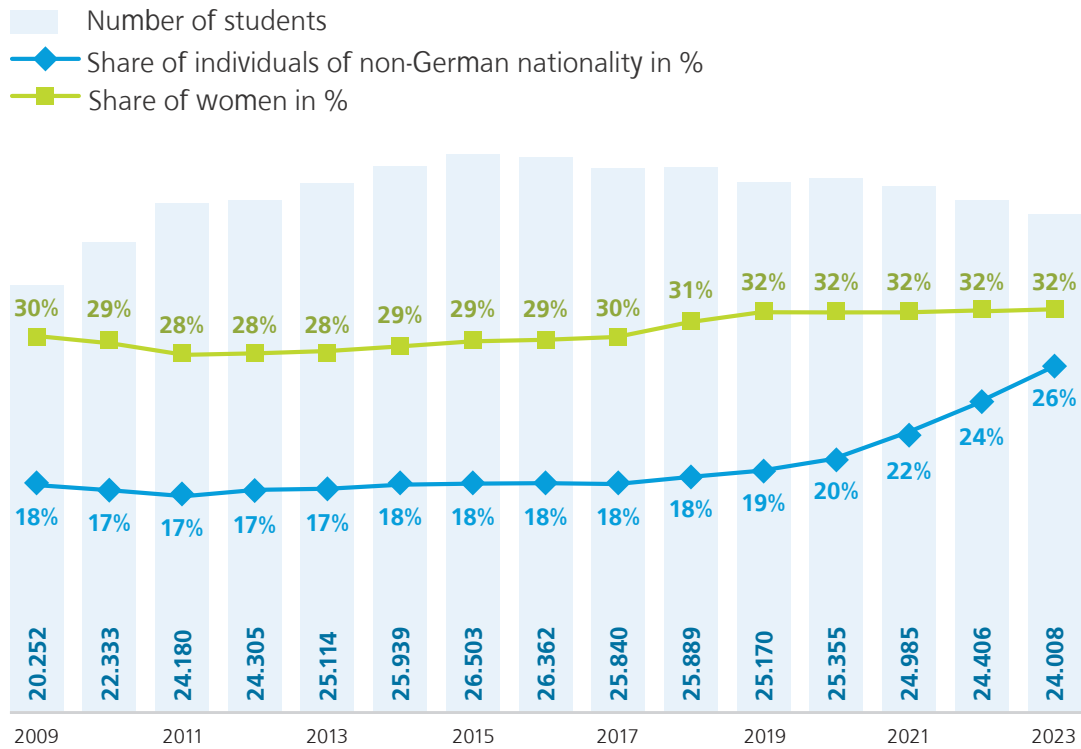
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Introduction

The TU Darmstadt Gender Data Report 2024 presents data from 2009 onwards on the share of women and, if available, on the share of individuals of non-German nationality at the university. In the last 15 years, the percentage of women at all qualification levels as well as the share of individuals at TU Darmstadt who do not hold a German nationality has increased. Short-term fluctuations and temporary trend reversals have usually resulted from changes in the relative sizes of departments with differing percentages of women. In total, the figure for the proportion of women ranges from 27 percent to 35 percent, amongst administrative-technical staff it is no less than 56 percent. The share of individuals of non-German nationality ranges from 6 percent amongst the administrative and technical staff to 26 percent amongst the students at TU Darmstadt.

Students

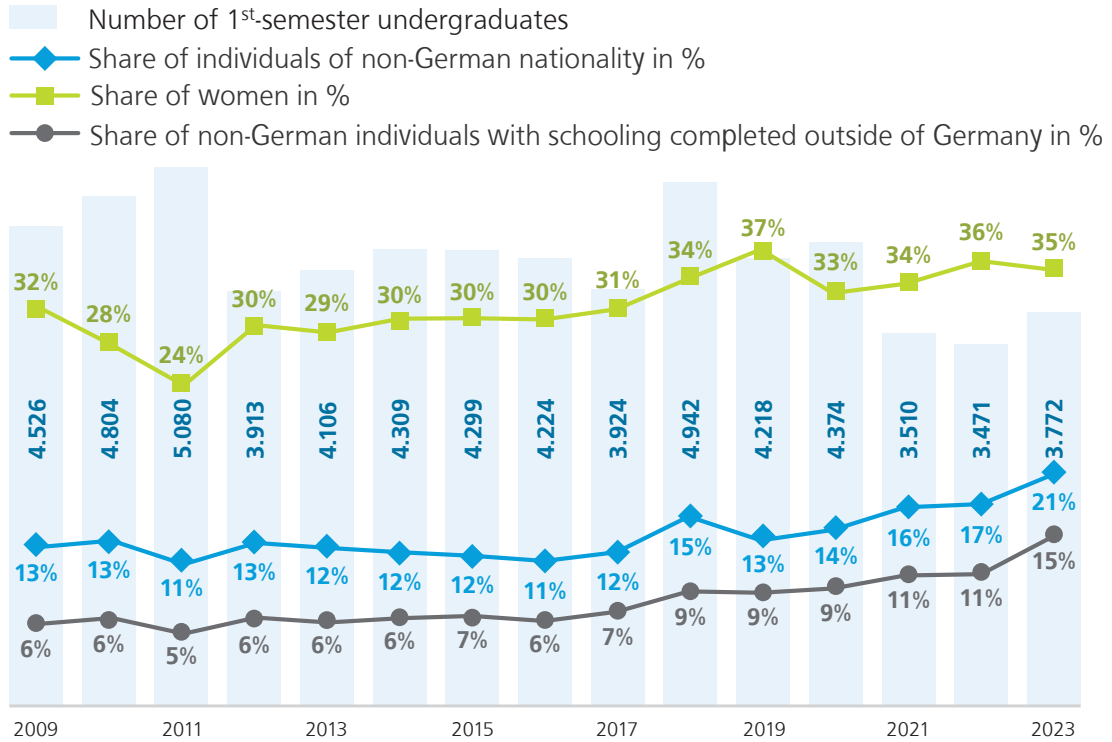
Since 2009, the number of students at TU Darmstadt has risen from 20,252 to currently 24,008. In the last five years, the share of women has remained constant at 32 percent. The share of individuals who do not hold German nationality has risen continuously since 2018 and is currently 26 percent.



In 2023, the proportion of women on the Master's courses was 32 percent. It was slightly higher amongst those who completed their schooling outside of Germany (35%) than amongst those who completed their schooling in Germany (31%), whereby there are very clear subject-related differences: In the Departments of Law and Economics and Computer Science, the share of foreign female students is two to two-and-a-half times higher than that of those who completed their schooling in Germany; in the Department of Electrical Engineering and Information Technology, it is approximately one-and-a-half times higher.

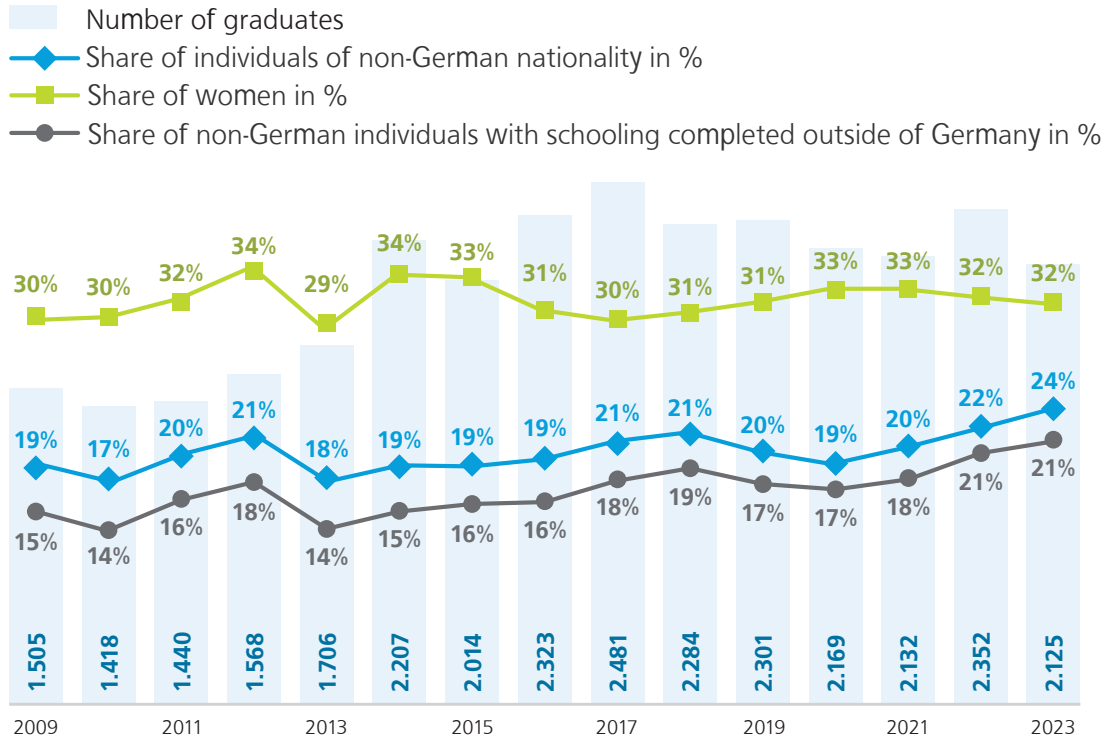
First-semester undergraduates

In the period 2009 to 2023, there was some fluctuation in the number of new undergraduates. The highest figure of 5,080 new undergraduates was reached in 2011. In the two previous years, only 3,510 and 3,471 students respectively started studying at TU Darmstadt. This is mainly due to the change in policy of Abitur after nine years instead of eight in Hesse. In 2023, the number of first-semester undergraduates increased again to 3,772. At 35 percent, the current proportion of women is slightly below the previous year's figure. The share of individuals of non-German nationality reached a new peak at 21 percent. Similarly, the proportion of non-German first-semester undergraduates who completed their schooling outside of Germany reached a new peak at 15 percent.



Graduates

The share of individuals graduating on the Master's and teaching courses has increased significantly in the last 15 years. The proportion of women, on the other hand, has remained fairly constant, ranging from 29 percent to 34 percent. The current figure for women graduates is 32 percent. In 2023, the share of individuals who do not hold German nationality (24%) as well as the proportion of non-German graduates who completed their schooling outside of Germany (21%) reached new peaks or equalled previous year's records.

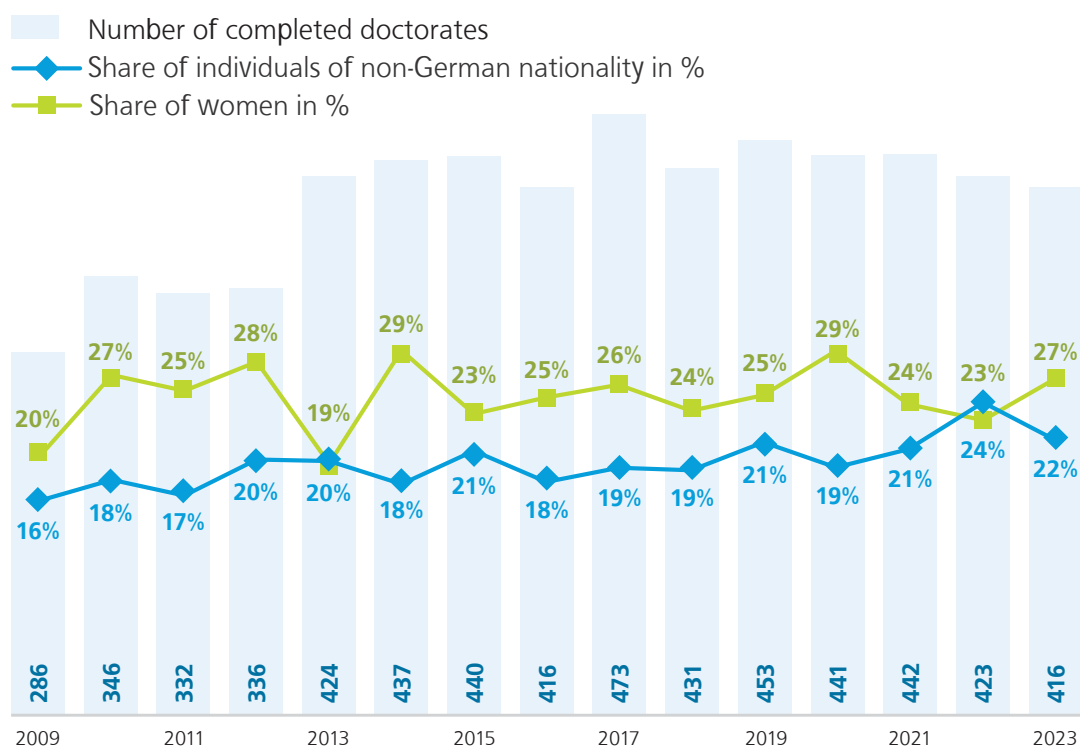


Doctoral candidates

The number of doctoral candidates at TU Darmstadt is currently 2,279, a slight decrease compared to 2020. The share of women has increased by four percent points and is now 30 percent whereby there are very clear subject-related differences between university departments. In Mechanical Engineering, Electrical Engineering and Information Technology, and Computer Science, the share of women is 13 percent to 16 percent whereas in Human Sciences, Biology and Architecture, figures more than 50 percent are achieved. The departments of Materials and Earth Sciences as well as Architecture are particularly international: 45 percent and 28 percent respectively of doctoral candidates in these areas do not hold German nationality. In total, the share of doctoral candidates of non-German nationality at TU Darmstadt is 21 percent.

Doctorates

In 2023, 416 doctorates were completed at TU Darmstadt. At 27 percent, the share of women was slightly above the figure for the share of individuals of non-German nationality at 22 percent. The departments of Physics and Chemistry as well as Materials and Earth Sciences, Civil and Environmental Engineering, Mechanical Engineering and Electrical Engineering and Information Technology as well as Computer Science are particularly strong in terms of doctorates, although the degree of internationality and the proportion of women vary greatly. In the last five years, over 50 percent of doctorates in History and Social Sciences, Human Sciences, Biology and Architecture were completed by women. In the same period, about 40 percent of doctorates in Materials and Earth Sciences as well as Architecture were completed by individuals of non-German nationality.



Early career researchers – junior research group leaders

The focus is on early career researchers who lead BMBF, Helmholtz Association and Emmy Noether junior research groups or are Athene Young Investigators or ERC Starting Grant holders at TU Darmstadt.

In 2024, there were 24 junior research groups at TU Darmstadt, slightly fewer than in 2020. The share of women has increased to 29 percent, while the proportion of individuals of non-German nationality is 21 percent. Currently, nine out of thirteen departments host junior research groups.

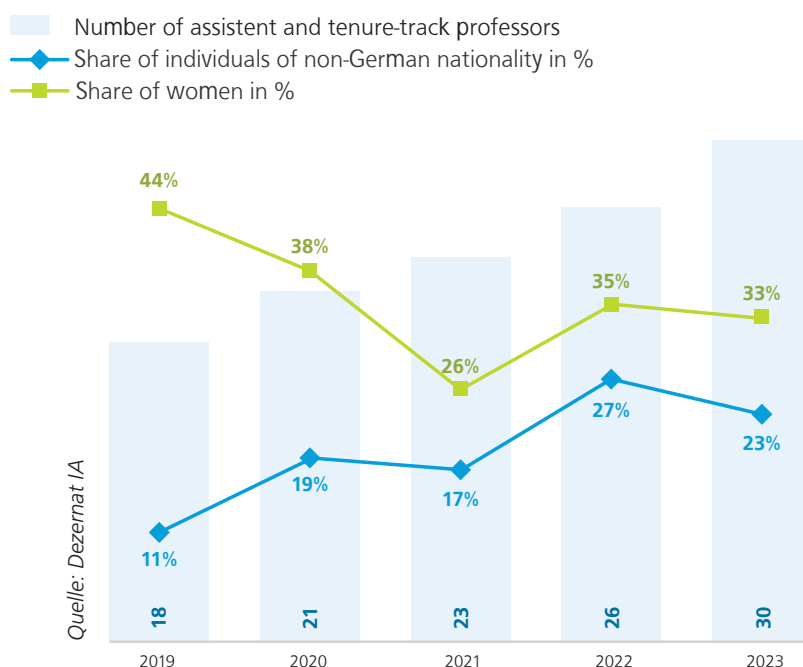
Academic staff

Women's representation on the academic staff of all departments and central facilities at TU Darmstadt is currently 27 percent, having grown by one percentage point in comparison with 2020. In the same period, the percentage of individuals of non-German nationality

increased by six percentage points to 26 percent. There is a particularly high percentage of women in Law and Economics, History and Social Sciences, and Human Sciences as well as Chemistry, Biology and Architecture. In Mechanical Engineering, Electrical Engineering and Information Technology and Computer Science, by contrast, women are underrepresented on the academic staff. At 55 percent and 37 percent respectively, a particularly high number of international academics is employed in Materials and Earth Sciences and Computer Science. The share of women on the academic staff in the central facilities at TU Darmstadt is currently 18 percent, whereby twelve percent do not hold German nationality.

Assistant and tenure-track professors

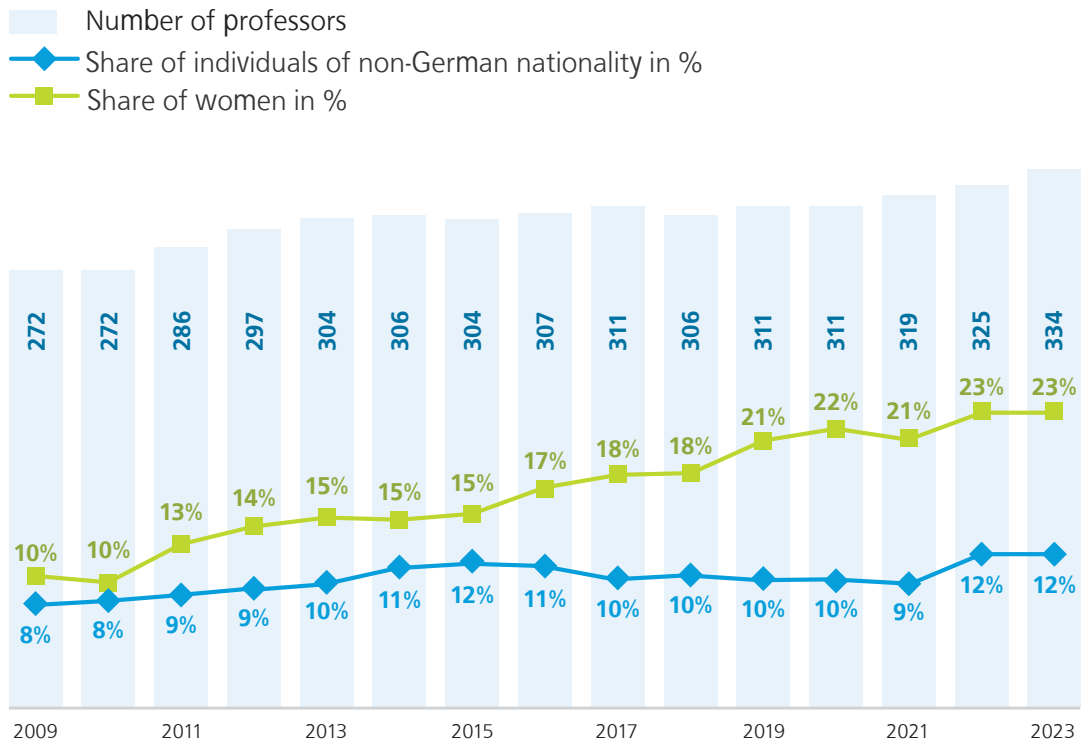
Currently, 30 assistant and tenure-track professors are employed at TU Darmstadt. The share of women is 33 percent, and the share of assistant and tenure-track professors of non-German nationality is 24 percent. In 2023, assistant and tenure-track professors taught in all departments at TU Darmstadt. The field was headed by the Departments of Mathematics, Electrical Engineering and Information Technology with four junior professors each.



Professors

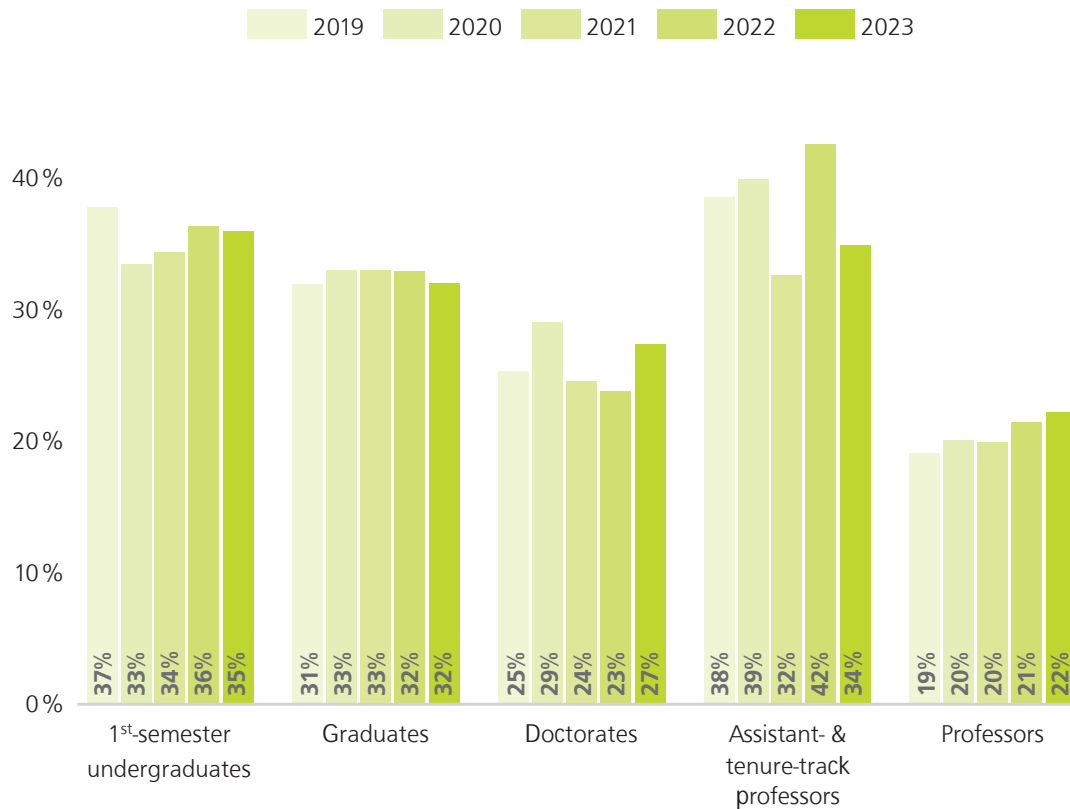
In the last 15 years, the number of professors employed at TU Darmstadt has risen from 272 to 334. Currently, 77 female professors (including female assistant and junior professors) work at the university. As in the previous year, the proportion of women is 23 percent, and the internationality of the faculty equalled previous year's records of percent.

Between 2020 and 2023 alone, the number of female professors increased by 10. Particularly in Human Sciences and Civil and Environmental Engineering, the departments managed to increase the share of female professors significantly by eight and eleven percentage points, respectively. In the departments History and Social Sciences, Human Sciences, and Architecture, women account for about 50 percent of female professors. The Departments of Human Sciences, Physics and Computer Science are especially international.



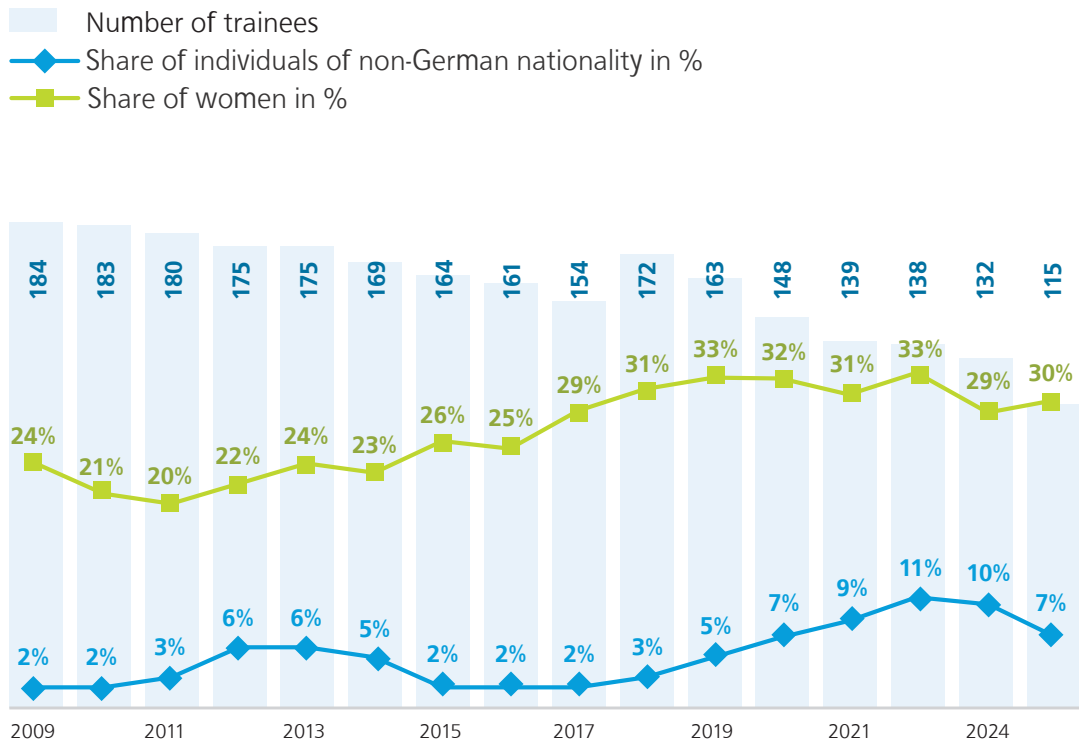
Academic career stages

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 significantly 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 2023, a clear drop of five 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 reached 34 percent this year. In the long run, the high figures for women at this career stage should have a positive impact on the development of the proportion of women in tenured professorial positions. With a share of 22 percent in 2023, only about every fifth professorship at TU Darmstadt was held by a woman.



Trainees

In the last 15 years, there has been an almost linear decrease in the number of trainees at TU Darmstadt; in 2024, the figure was 115. With slight fluctuations, the proportion of female trainees has developed in the opposite direction and is currently 30 percent. Seven percent of trainees do not hold German nationality. The negative trend observed in the number of trainees is also evident in many sectors across Germany and is partly a result of demographic change and the increasing demand for well-trained specialists. With a share of 66 percent, the smallest training sector at TU Darmstadt, “Administration and Libraries”, is particularly popular amongst women whilst the share of women in IT and the commercial-technical sector is significantly lower at 22 percent and 11 percent respectively. At 14 percent, the IT sector is particularly popular with trainees of non-German nationality and has seen an increase in both female trainees and trainees of non-German nationality compared to 2020.



Administrative and technical staff

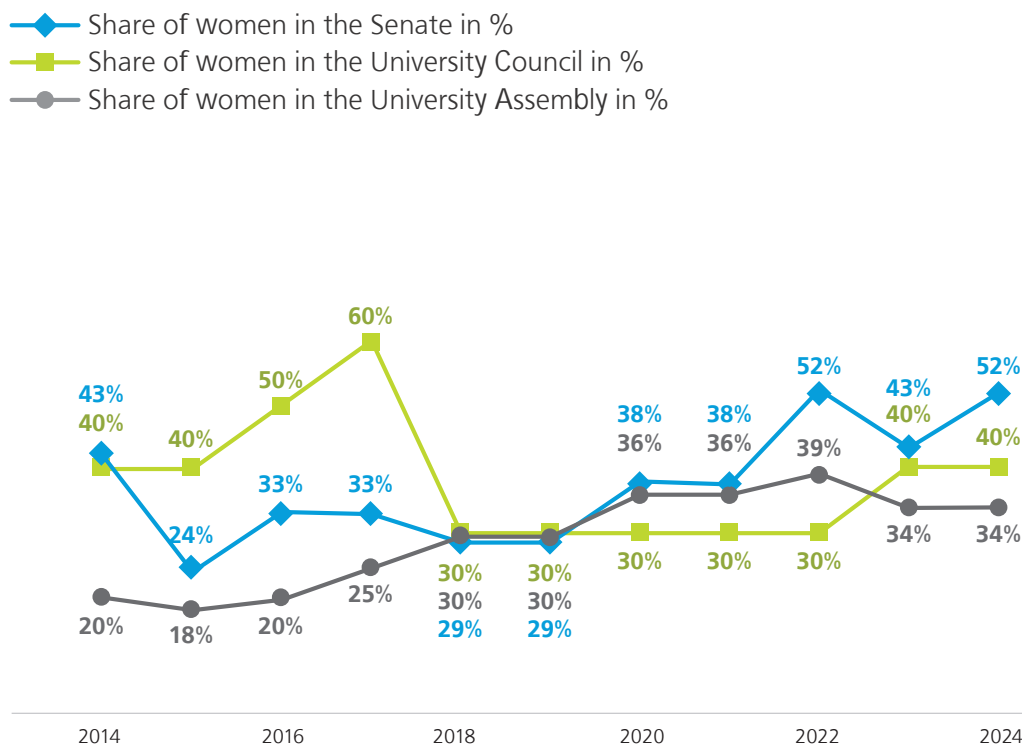
The proportion of women on the administrative and technical staff at TU Darmstadt is currently 56 percent. Except for Physics, Civil and Environmental Engineering as well as Mechanical Engineering, the share of women in the departments well exceeds 50 percent, in central services it is 50 percent and in university administration, 60 percent. The share of administrative and technical staff at TU Darmstadt who do not hold German nationality is six percent. In the Departments of History and Social Sciences, Chemistry as well as in Materials and Earth Sciences, the share is over ten percent.

Appointment procedures

In 2023, the share of women applying for a professorship at TU Darmstadt increased to 30 percent. The figures for the share of women interviewed and those on appointment shortlists were 39 percent and 33 percent respectively. Just as in the previous year, seven women were appointed to professorships, equating to 39 percent. TU Darmstadt consequently achieved its target of awarding at least one third of new appointments to women for the sixth year in succession.

Committees and leadership roles

On TU Darmstadt's central committees dealing with academic self-administration – Senate, University Council and University Assembly – the proportion of women varied in 2024. Whilst there was a significant increase in the Senate (52%) in comparison with the previous year, the share of women on the University Council (40%) and the University Assembly (34%) remained constant.



In the personages of the President and the Vice-President for academic careers, two women currently sit on the Executive Board, a share of 25 percent. The share of women heading the directorates increased to 38 percent; in the directorial units it is 69 percent. All five of the university's staff units are headed by women whilst the figure for the central services is 50 percent.

Despite a further increase of two percentage points in comparison with the previous year, at leadership level in the departments, the proportion of women deans is still particularly low, currently reaching 15 percent, whilst at managing director level it is 71 percent. On the departmental councils the proportion of women varies considerably according to status group: at 45 percent and 46 percent respectively, the share of women amongst the student representatives and academic staff was similar, amongst administrative and technical staff it was 61 percent, amongst professors, 24 percent.

Comparison with TU9 and nationwide benchmarks

A comparison with other German universities of the share of women in the various phases of acquiring academic qualifications in the departments and, to some extent, disciplines at TU Darmstadt makes it possible to rank the results presented above in the German university landscape. In nearly all disciplines the proportion of women 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 later career levels.

The diverse science culture at TU Darmstadt can be summarised in three overarching fields: engineering, natural sciences, and

humanities and social sciences.

In engineering, there is a mixed picture, which is strongly department dependent. In Architecture at TU Darmstadt, the share of women in all career stages ranges between 60 percent and 50 percent, while the comparative bench-marks show a clear leaky pipeline. Similarly, in Civil and Environmental Engineering at TU Darmstadt the share of women is significantly larger than at benchmark universities and ranges between about 30 percent to 50 percent. With one exception, the proportion of women at all levels of qualification in Mechanical Engineering, Electrical Engineering and Information Technology, and Computer Science both at TU Darmstadt and the benchmark universities is under 20 percent.

In natural sciences, there is a pronounced leaky pipeline in Chemistry and Biology both at TU Darmstadt and the benchmark universities. Of all departments belonging to this overarching field at TU Darmstadt, the share of women between first semester undergraduates and those who have completed their PhD in Biology reaches peak values and amounts to 60 percent and more. In contrast, the share of female Biology professors is only about 20 percent. In the other natural sciences departments, besides some outliers, the share of women is 40 percent and less, decreasing with each following career level.

A mixed picture of the share of women emerges both, in the departments and institutes belonging to the humanities and social sciences at TU Darmstadt as well as in the reference values. There is no clear leaky pipeline. At TU Darmstadt, there are particularly high proportion of women in all qualification levels in Pedagogy ranging from 50 percent to more than 80 percent, while in Economics, the share of women in the different career stages amounts to 20 percent to 30 percent.

Conclusions

The Gender Data Report 2024 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 repeated. Despite this, in many areas of the university women are still under-represented.

Achieving a numerical increase in the proportion of women at all qualification and career levels and in the various status groups demands change. In order to live out the idea of a consistently gender- and opportunity-equitable university, data must be considered and scrutinised, for example in the context of working culture, exclusion and discrimination mechanisms, bias, stereotypes and power relations.

The Gender Data Report showcases success stories and, within the university, serves as a guideline for indicating further fields of action.

Sources

The data presented here derive from the various official statistical reports prepared by TU Darmstadt, supplemented in part by our own databases. The comparative data of the TU9 Universities (www.tu9.de) and all German universities were acquired from the German Federal Statistical Office DESTATIS.