A Review of Women's Participation in Science, Research, and Technology in Israel



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Executive Summary

This document presents an up-to-date overview of women's participation in science, research, and technology in Israel across the life cycle - from high school, through

academia, and into the labor market and the high-tech industry. The data indicate that gender gaps emerge as a cumulative process that begins as early as the choice of study tracks in high school, continues through higher education, and deepens throughout professional careers and advancement pathways.

Already in secondary education, there is a marked underrepresentation of girls in technological subjects that serve as direct pipelines into the high-tech industry, most notably computer science. **This gap persists with little change in the academia**: women account for only about one-third of students in high-tech related disciplines, a figure that closely mirrors the share of girls enrolled in relevant high school tracks. While a broader look at STEM fields reveals a more balanced picture, and near parity at the doctoral level - this is largely driven by the concentration of women in fields that do not typically lead to central roles in high-tech, particularly in biology. In practice, women's dropout from core technological tracks intensifies along the academic pathway.

In the labor market, women remain a minority at the core of the high-tech industry: only about a quarter of R&D positions are held by women, who are concentrated mainly in non-technological staff and support roles where promotion prospects are more limited and wages are comparatively lower. Underrepresentation becomes more pronounced higher up the organizational hierarchy, with women composing less than one-tenth of CEOs. **A similar pattern is evident in the academia: although the share of women among full professors has increased over time, women remain significantly underrepresented both within senior faculty ranks and in leadership positions across universities.**

Alongside representation gaps, substantial and persistent wage disparities exist between men and women. According to data from the Israel Innovation Authority, women in high-tech earn approximately 20% less than men - a gap that is similarly reflected among holders of research and development degrees. Moreover, **wage disparities that emerge during the early years of a career continue to widen over time.**

Nevertheless, **the data also point to gradual improvements in women's representation over the years**, yet progress remains slow. Without proactive measures, closing gender gaps in science, research, and high-tech is expected to take several more decades.

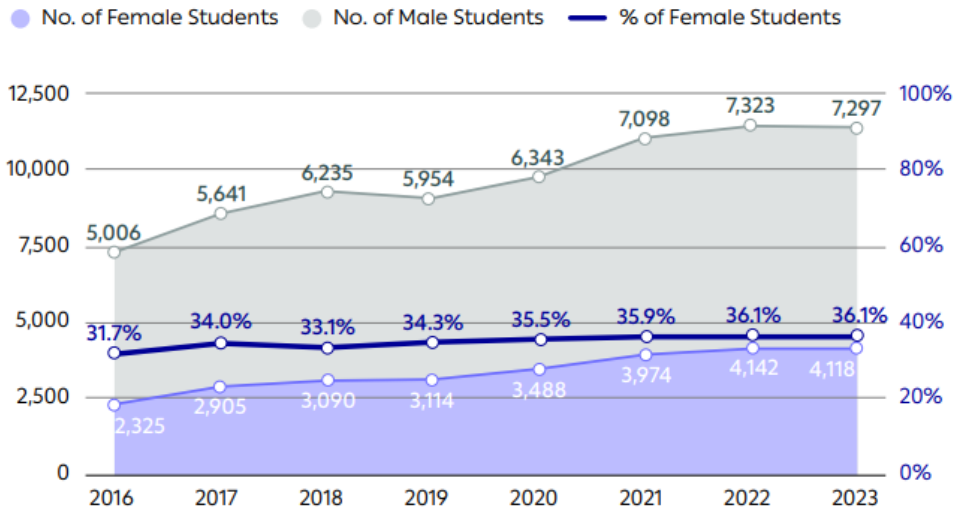
Women in STEM Education

Already in high school, students' choices of subjects for the matriculation track at the five-unit level begin to shape the gender gaps that later appear in academia and the

labor market. According to data from the Israel Innovation Authority, in 2023 girls accounted for only 36.1 percent of all students who took the five-unit matriculation exam in computer science. Since 2016 there has been a gradual increase in their share, rising from 31.7 percent, but since 2021 this progress has largely stalled, even though the absolute number of girls taking the exam continues to grow.

Total number of students taking the 5-unit computer science matriculation exam, by gender, and the ratio of female students

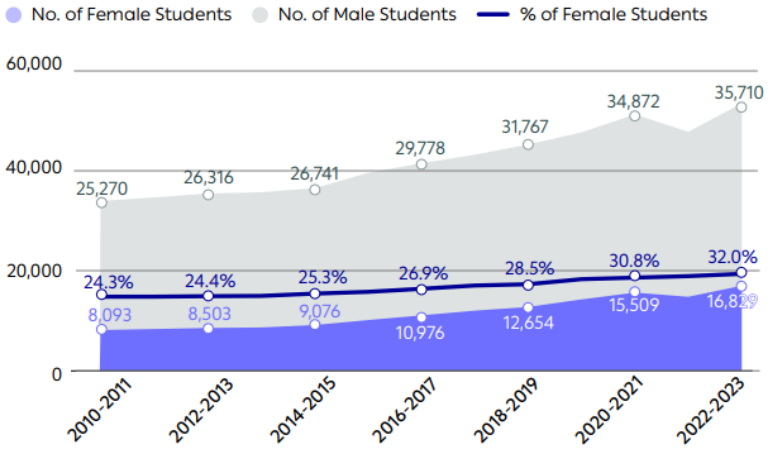
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Source: Innovation Authority adaptations of CBS data.

Similar pattern continues into higher education. The gender gap that begins in high school carries forward almost directly into academic studies. In 2023, women accounted for roughly 32% of students in what are commonly defined as “high-tech fields,” a share that closely mirrors the proportion of girls who pursue advanced computer science in secondary school. Here the trend is somewhat more encouraging, with a faster rate of growth in the representation of women over recent years.

Number of students in universities and academic colleges in expanded high-tech fields by gender and ratio of female students*



Source: Israel Innovation Authority adaptations of CBS data.

*Included in the list of courses as part of this calculation: mathematics, mathematics-physics, mathematics-computer science, statistics, information-data science, computer science, bioinformatics, internet and society, information systems management, electrical engineering, computer engineering-electrical engineering, computer engineering-computer science, communication systems engineering, industrial engineering and management, physics, and mechanical engineering.

A broader look at STEM fields presents a more balanced picture than when focusing solely on high-tech disciplines.[1] The share of women in bachelor's and master's programs is nearly identical, at around 40 percent. At the doctoral level, the proportion rises to 46.6 percent, approaching near parity. [2]

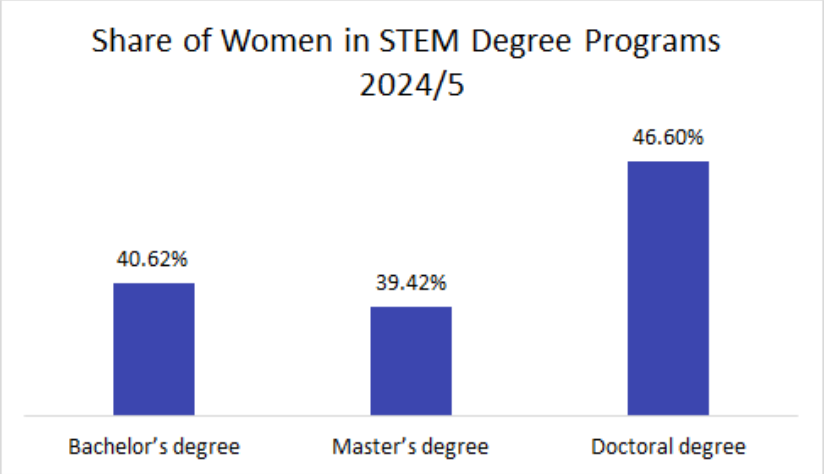
This increase is driven mainly by the field of biology, which has the largest number of doctoral students, 63.1 percent of whom are women. As a result, the high overall representation of women in doctoral studies within STEM is significantly influenced by their strong presence in biology.[3]

However, despite the encouraging figures, they do not reflect a direct increase in women's participation in academic tracks that lead to careers in the high-tech industry. Unlike engineering, computer science, or physics, biology does not typically serve as an entry pathway into high-tech. Therefore, its contribution to the overall statistics does not translate into greater visibility of women within the industry itself.

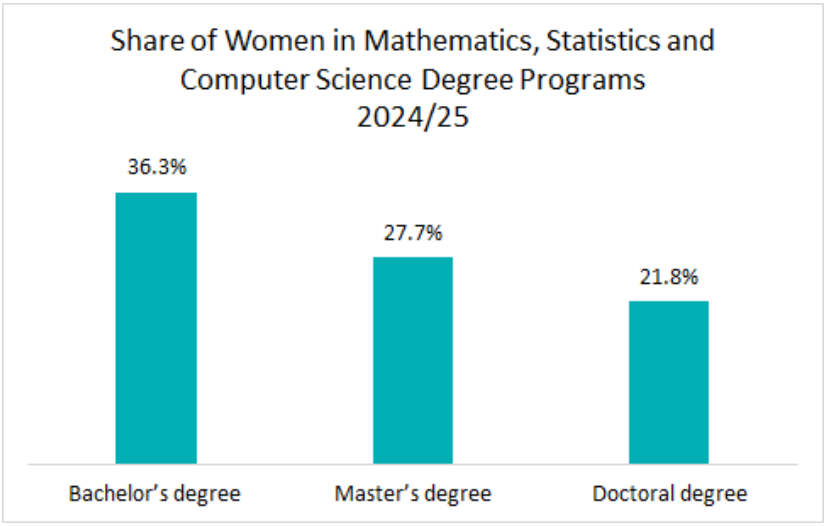
[1] Unlike the OECD, Israel's Central Bureau of Statistics (CBS) includes architecture within the field of engineering. As a result, the Israeli classification of STEM students does not fully align with the OECD definition.

[2] The Council for Higher Education (CHE) and the Central Bureau of Statistics (CBS), *"Students by Degree Level, Field of Study, Type of Institution, and Gender."*

[3] For scale only, a December 2026 review on the ALLJOBS website shows that among life sciences degrees, biology is associated with the lowest wages across experience levels, while algorithm developers and physicists earn the highest wages.

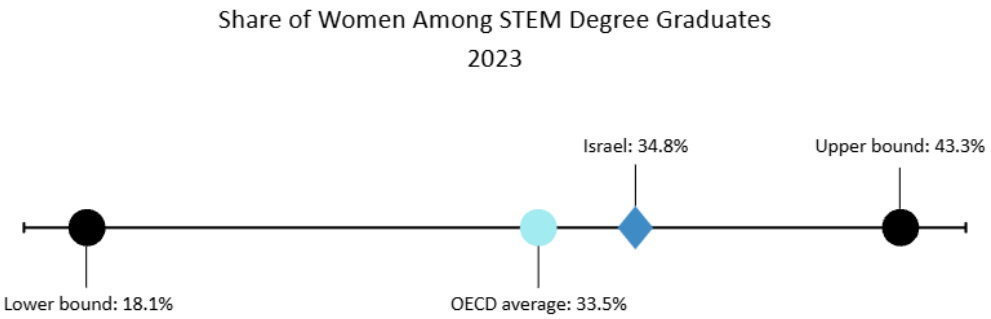


In STEM fields that directly feed into the high-tech industry, such as mathematics, statistics, and computer science, the picture is different. The gradual decline in women's representation across academic stages suggests that even women who choose to enter technological tracks tend, at higher rates, to face difficulties along the way or to choose not to continue into advanced research.



In an international comparison, Israel is positioned slightly above the OECD average in the share of women who have completed an academic degree in STEM. This indicates that women's participation in scientific fields within higher education in Israel is comparable to, and even somewhat higher than, that in other developed countries.[4]

[4] OECD Dashboard on Gender Gaps

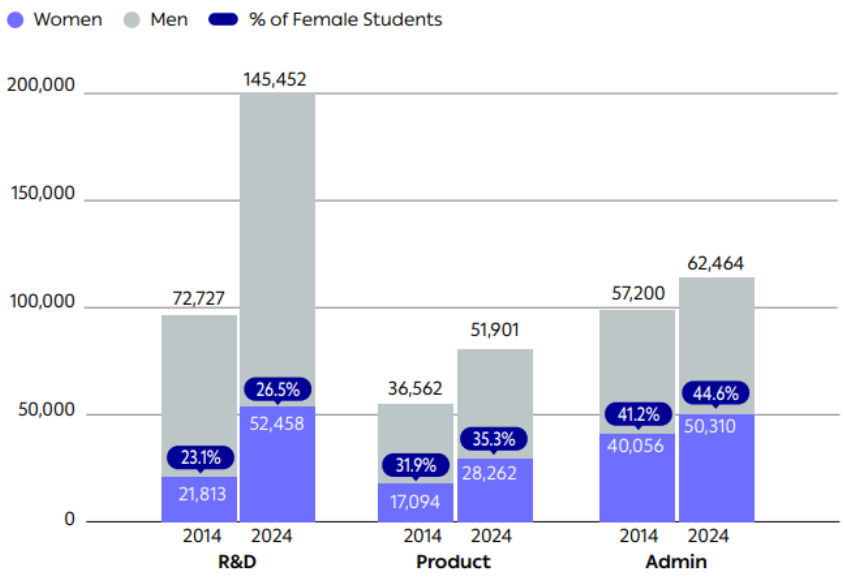


Women in Research Positions

Women at the technological forefront in Israel remain a minority at every stage: in high school, in academia, and in the labor market itself. Data from the Israel Innovation Authority show that women hold only 26.5% of research and development positions, the core of high-tech occupations. Although the total number of jobs in the field has surged since 2014, the share of women has increased by only about 15% over the past decade.

When examining the distribution of roles in high tech, most women are concentrated in staff and support positions. These are non-technological roles that do not constitute a promotion track within the core of the organization and are associated with lower wages, and women's share in these roles has grown over the past decade. At the same time, it should be noted that the share of women across all three segmented sectors within high tech has increased by approximately 10% over the last decade.

Number of employees in the high-tech sector by job and gender, and the ratio of women



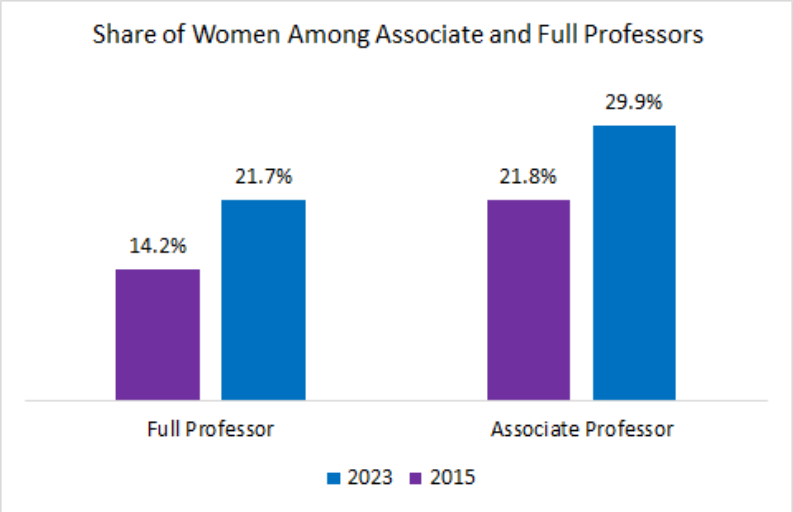
Source: Israel Innovation Authority and Aaron Institute adaptations of CBS data, ages 25–64.

Women in Research Management and Academia

Academic data also reflect the slow progress of women along the research career track. As of 2023, women account for about 29.9% of associate professors and 21.7% of full professors.[5] Compared with the 2015/16 academic year, there has been a substantial increase in women's representation in senior academic research positions, with growth of 37% at the associate professor level and 53% at the full professor level.

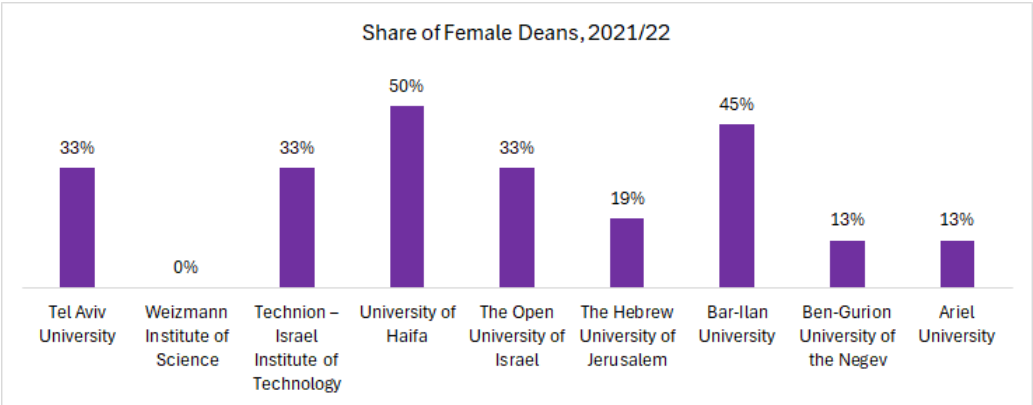
Nevertheless, a significant gender gap remains, and even at the current pace of growth, it is likely to take several more decades before parity is achieved.

[5] Central Bureau of Statistics (CBS), *Academic Staff in Higher Education Institutions in Israel*, 2023/24.



As of the 2025/26 academic year, no Israeli university is headed by a female president. Out of ten universities (including Reichman University, which is not represented in the chart below), there are three female rectors and two female CEOs.

In dean-level positions, the Weizmann Institute reports zero female deans, while the highest representation is found at the University of Haifa, where women account for 50% of deans.[6]



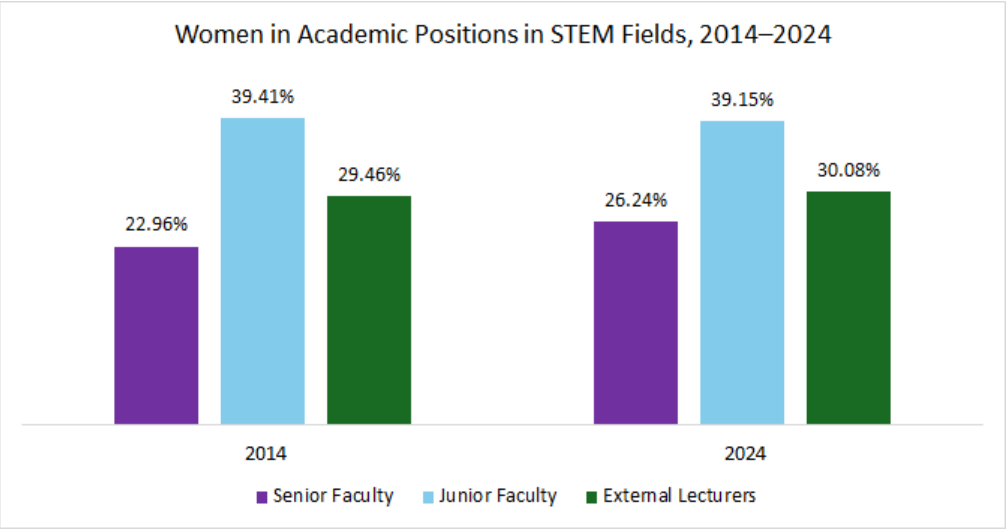
Career and Professional Advancement

Academia

Women's representation along the academic career track in STEM fields in Israel shows limited progress. Over the past decade, there has been almost no increase in women's presence among junior faculty or adjunct lecturers. Even at the senior

[6] *Women's Representation in Universities: Academic Track*, Forum of Women Professors in Israel.

faculty level, where some improvement is observed, the total increase amounts to only about 14.2% over ten years. These figures include biology, a field with relatively high female representation, indicating that progress in engineering, physics, and computer science is even more limited.[7]

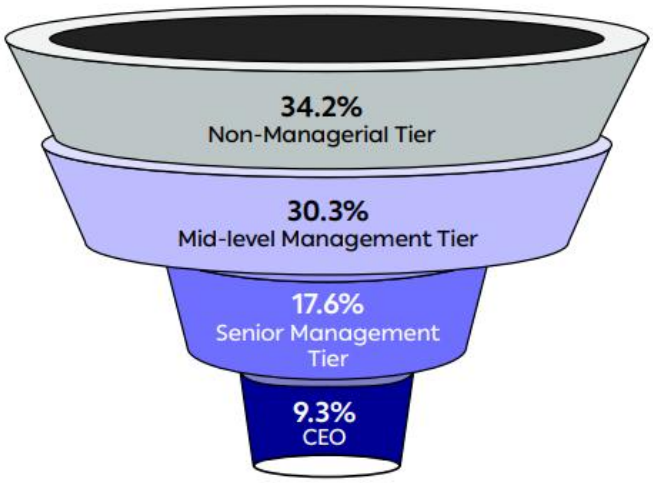


High Tech

According to the Israel Innovation Authority, women's share of employment in the high-tech sector is projected to reach 33.5% in 2025, a marginal increase of just over one percentage point since 2015. In private high-tech companies, women's representation is broadly similar to their share among students in high-tech related academic fields. However, when examining managerial ranks, women's representation declines sharply. At the senior management level, women account for 17.6%, and among CEOs, they represent less than one tenth.

[7] Central Bureau of Statistics (CBS), *Academic Staff in Universities and Academic Colleges, by Field of Teaching and Research and Selected Characteristics*.

Ratio of women in Israeli private technology companies, by management level, 2025



Source: Israel Innovation Authority adaptation of IVC and Dealigence data.

The low representation of women in managerial positions in the high-tech sector also affects the overall share of women in high tech. When examining startups by founder identity, companies founded by women employ a significantly higher share of women than those founded by men.[8] Nearly half of women-founded companies have a female majority workforce, compared with only a small fraction of male-founded companies. When women hold positions of influence, they tend to create work environments that enable other women to enter and advance. As a result, the shortage of women in management is not only an outcome of existing gaps, but also a factor that reinforces and perpetuates them.

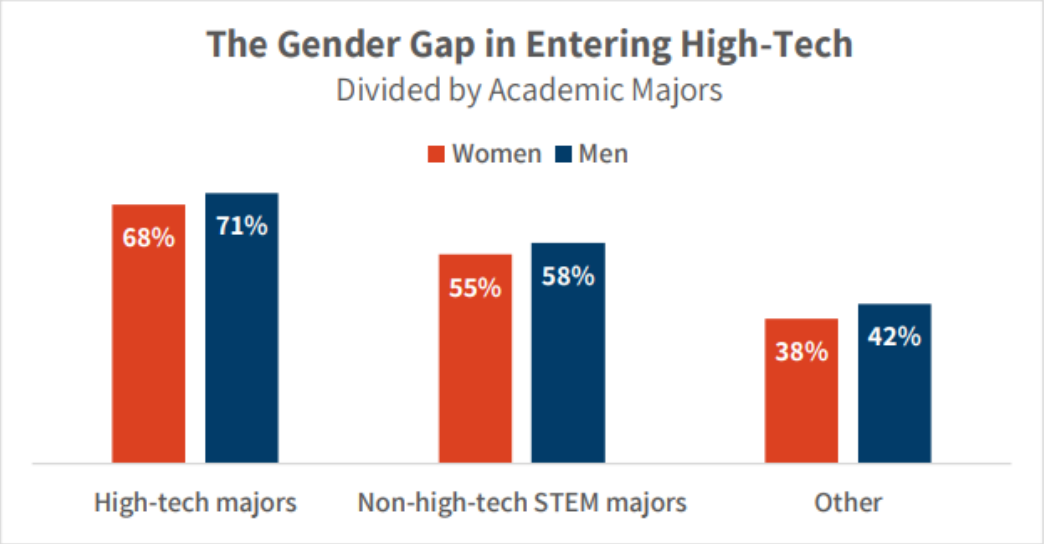
Share of Female Employees	Founded by Men	Founded by Women
Less than half	75%	22%
About half	17%	30%
More than half	8%	48%

Table 1 – Share of female employees in start-ups and growth companies (source: EIB)

The central challenge in women's representation in high tech does not begin at the hiring stage. Women and men with similar academic backgrounds are hired at nearly identical rates, indicating that entry into the sector itself is not the primary barrier. The real gap, as shown above, emerges much earlier, in the choice of fields of study, and then deepens over the course of the career trajectory. Relatively few women choose the technological track in high school and higher education, and among those

[8] *"From the Classroom to the Executive Floor: Gender Gaps in the Israeli High-Tech Sector,"* RISE, March 2024 (RISE is a non-profit research institute working to promote technological innovation in Israel).

who do enter the sector, many face difficulties advancing into leadership and management positions.[9]

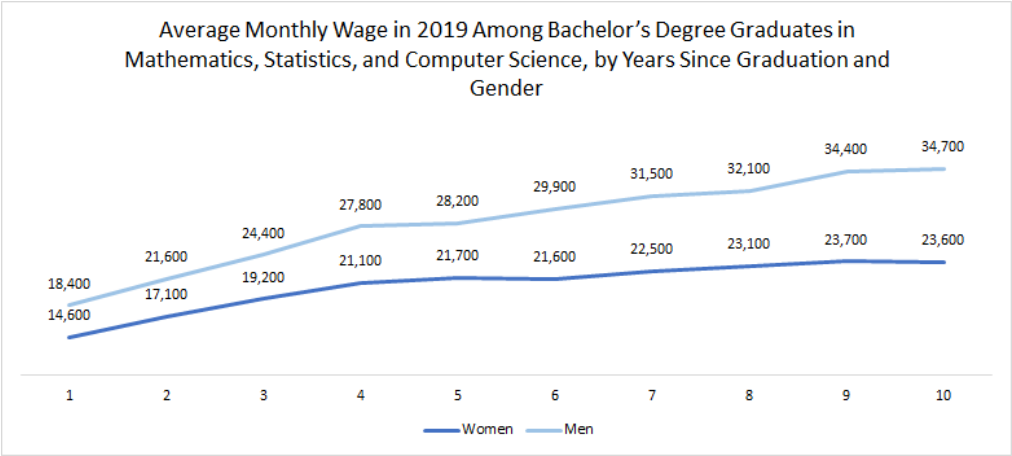


Gender Pay Gaps in Research Occupations

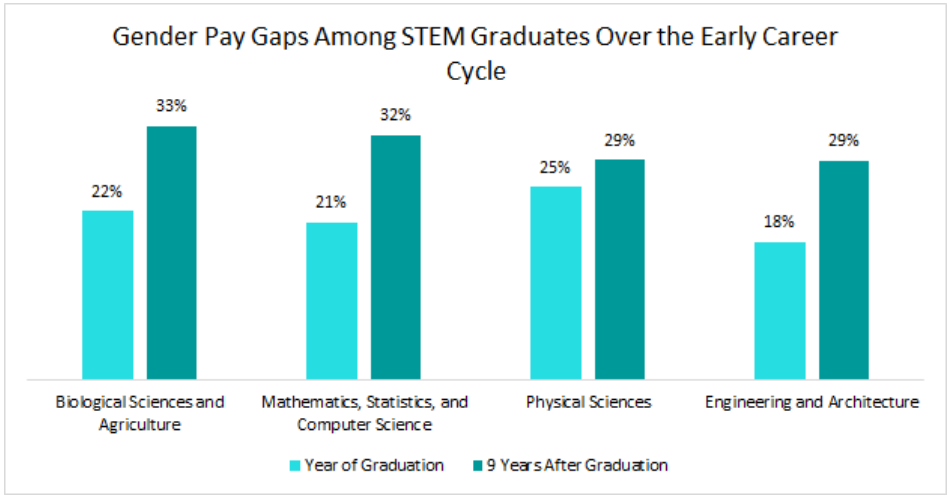
According to the Israel Innovation Authority's *Women in High Tech 2024* report, even after controlling for a wide range of factors commonly identified in the academic literature as affecting wages, such as experience, education, and family status, women in high tech earn about 20% less than men. A similar gap is observed when focusing specifically on individuals with R&D degrees, where women earn on average 17% less than men with comparable characteristics.[10]

A comparable pattern emerges when examining the monthly wages of graduates with a bachelor's degree in mathematics, statistics, and computer science. Already in the first year after graduation, men's wages are higher than women's, and the gap widens over time. While in the first-year women earn about 20% less than men, after ten years their wages are at least approximately 30% lower than those of men.[11]

[9] *"From the Classroom to the Executive Floor: Gender Gaps in the Israeli High-Tech Sector,"* RISE, March 2024 (RISE is a non-profit research institute working to promote technological innovation in Israel).
[10] "Women in High-tech 2024: Status Report", Israel Innovation Authority, 2024
[11] Central Bureau of Statistics (CBS), *Bachelor's Degree Graduates in the Labor Market, 2019*.

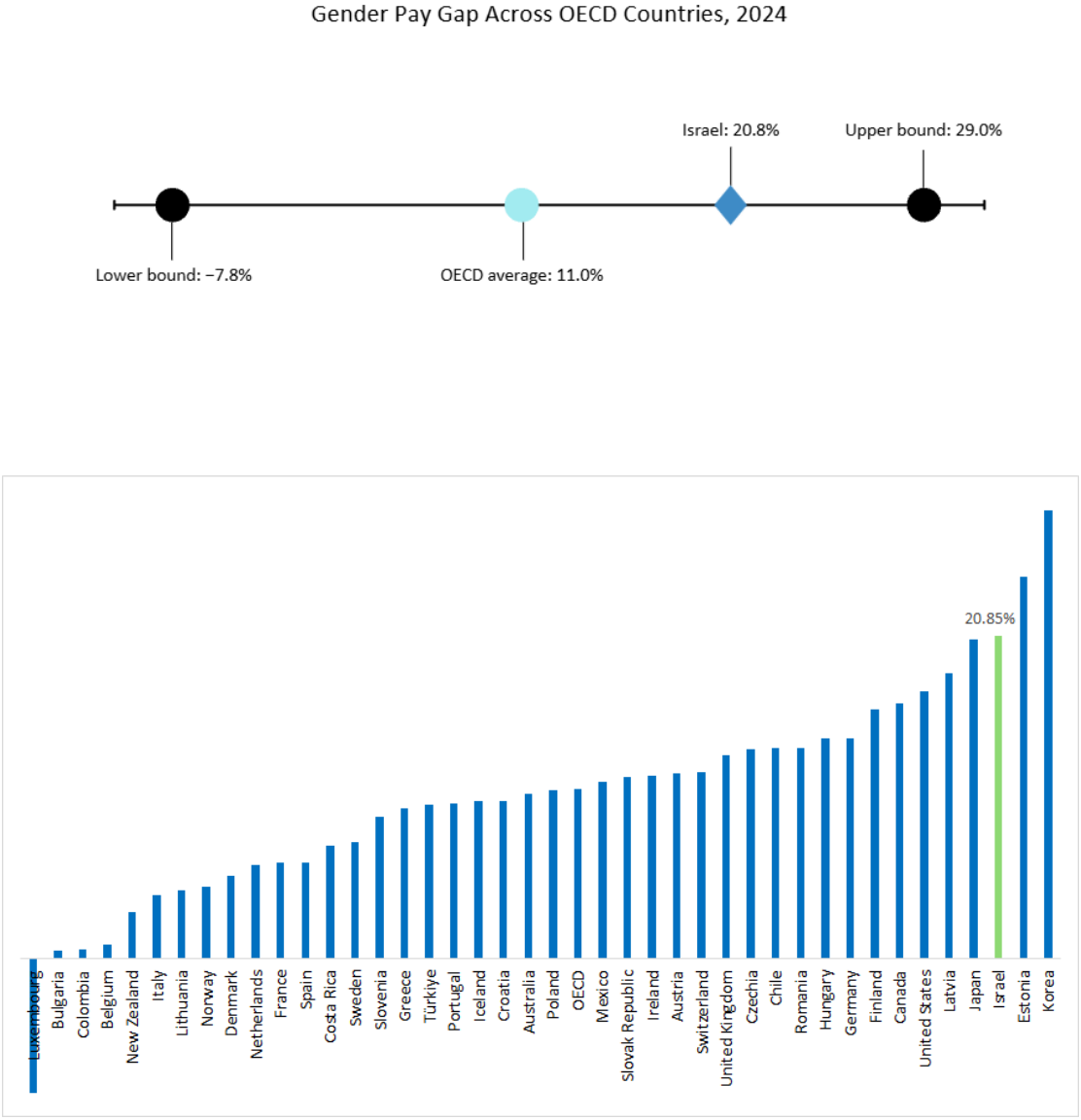


Across STEM occupations more broadly, wage gaps between women and men are already substantial at the beginning of the career and continue to widen as the years progress.



From a broader perspective on wage gaps in Israel, the gender pay gap stands at 20.8%, making Israel the country with the third largest gap among OECD countries, after Estonia and Korea.[12] Even though women in Israel participate in higher education at rates above the OECD average, wage disparities in the labor market remain substantially larger.

[12] OECD Dashboard on Gender Gaps



Innovation and Project Leadership

No data were found on the share of women leading projects within European Union funding programs, nor on women's participation in scientific councils or funding committees.