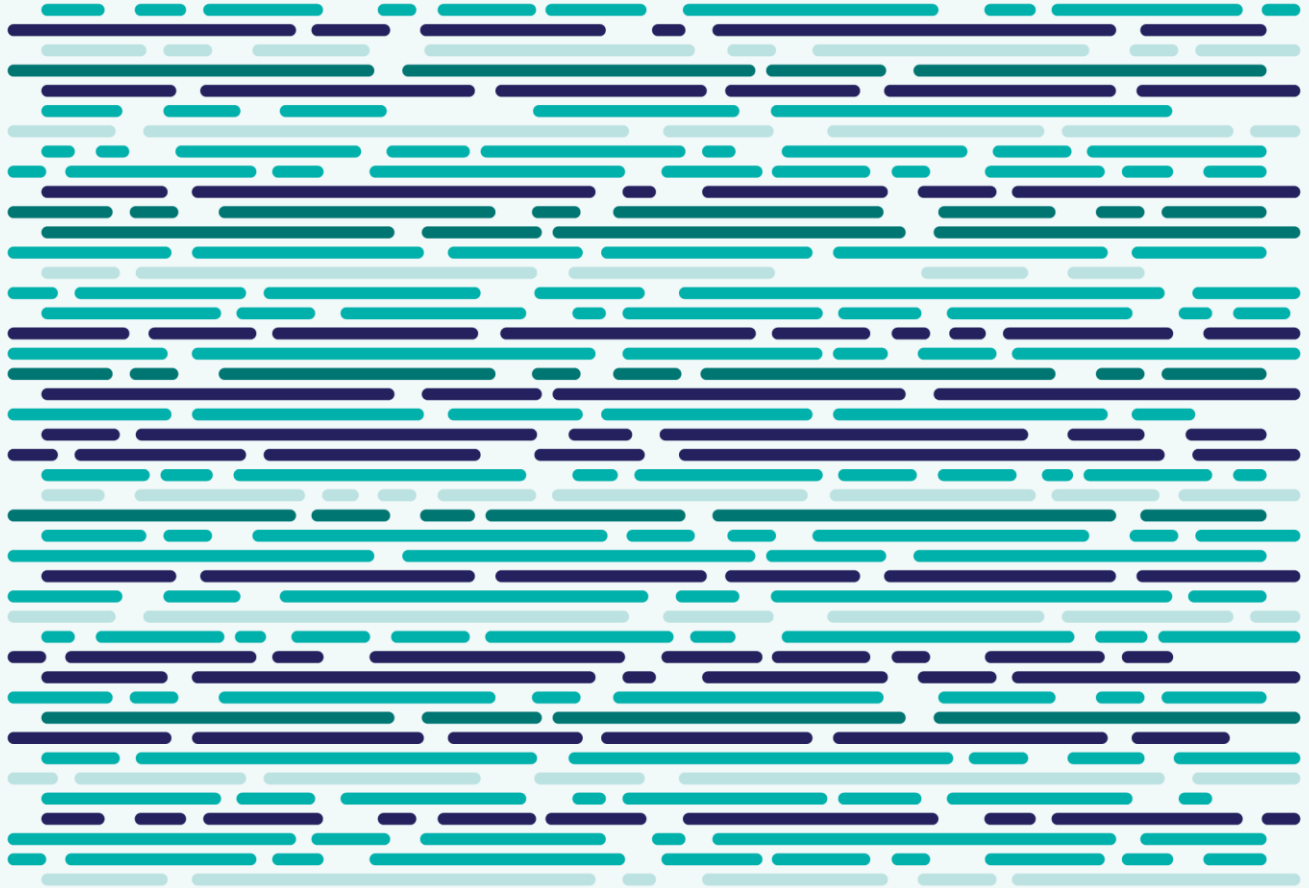




EngineeringUK

INSPIRING FUTURES TOGETHER



WOMEN IN ENGINEERING AND TECHNOLOGY

May 2024 update

Engineering footprint

The engineering footprint is an agreed upon list of Standard Occupational Classification (SOC) codes developed by EngineeringUK, the Engineering Council and Royal Academy of Engineering¹ to ensure a universal and consistent definition of engineering and technology. Analysis of the 2023 Labour Force Survey (LFS) data using this footprint shows that there were approximately 6.3 million working in engineering and technology occupations, which accounts for 19.2% of the UK workforce. This percentage is consistent with 2022, with approximately 4.1 million working in core engineering occupations and a further 2.2 in related engineering occupations (table 1).

Table 1: Approximate number and percentage working in core and related² engineering occupations in the UK

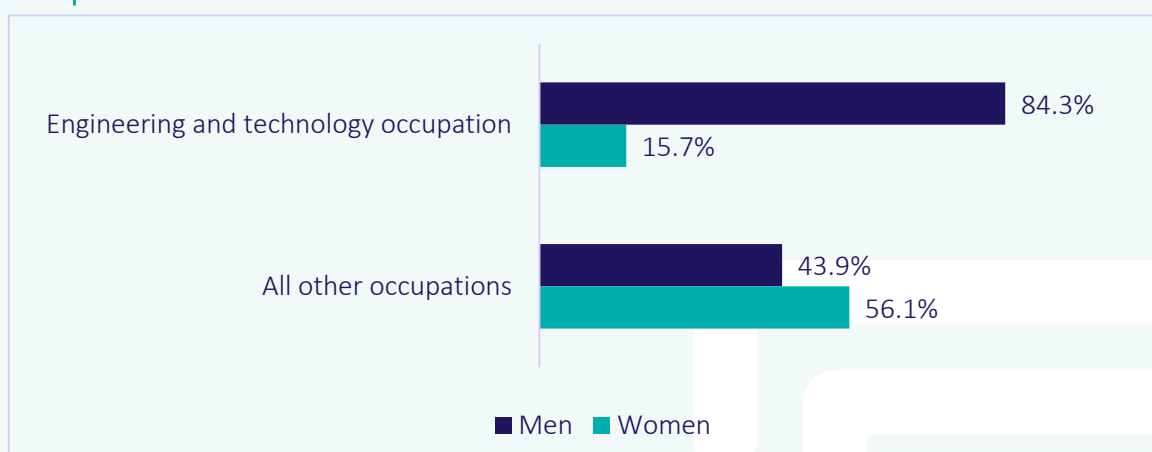
	Approximate number	% of the UK workforce
Core engineering and technology	4.1 million	12.5
Related engineering and technology	2.2 million	6.7
Total engineering and technology	6.3 million	19.2

Source: EngineeringUK analysis of 2023 Labour Force Survey data

Women in engineering and technology

Worryingly, the percentage of women working in engineering and technology occupations dropped from 16.5% in 2022 to 15.7% in 2023, representing a fall of 38,000 women. This is despite the overall proportion of engineering and technology occupations within the UK workforce remaining consistent at 19.2%. In stark comparison, women made up over half (56.1%) of all other occupations combined (figure 1).

Figure 1: Women in engineering and technology occupations, compared to men and all other occupations



Source: EngineeringUK analysis of 2022 and 2023 Labour Force Survey data

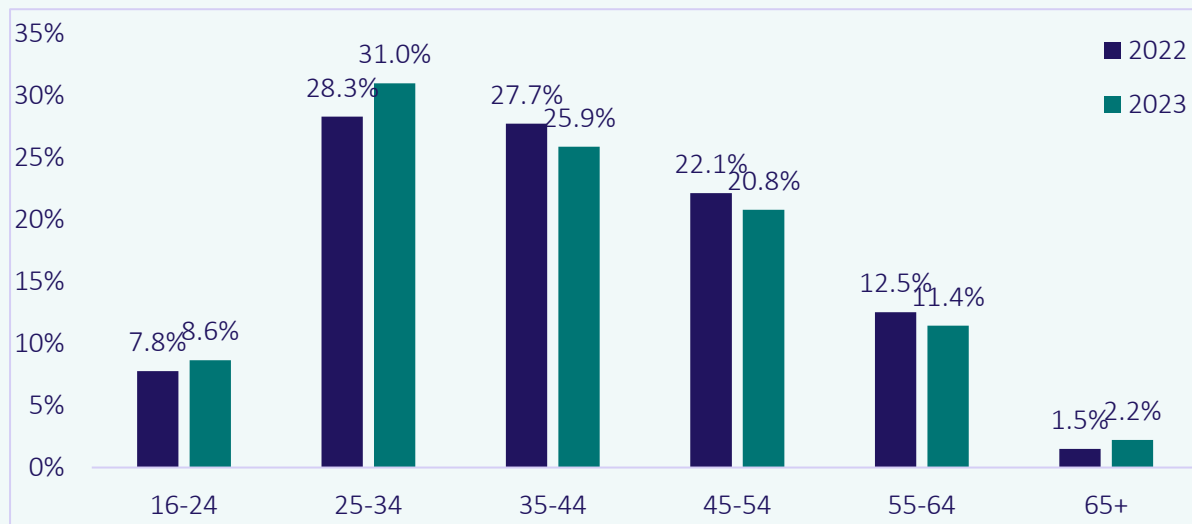
¹ To read the full report on how our engineering footprint was developed and adjusted to take into account the ONS' newly updated occupational coding system from SOC2010 to SOC2020, as well as 2022 statistics, click [here](#).

² Definitions for core and related engineering occupations can be found [here](#).

In response to these findings, we also investigated the age of women in engineering and technology occupations compared to all other occupations for both 2022 and 2023.

Compared to 2022, there were around 22,000 *more* women working in engineering and technology occupations in the 16-24 and 25-34 age groups (figure 2) but 66,000 *fewer* women working in those occupations between the ages of 35 and 64 years (across 3 of our age categories – with the highest drop for those aged 35-44 at 29,000). This suggests the drop in women working in engineering and technology is concentrated towards the middle of the workforce age range - while more women are entering the workforce from education, fewer are being retained.

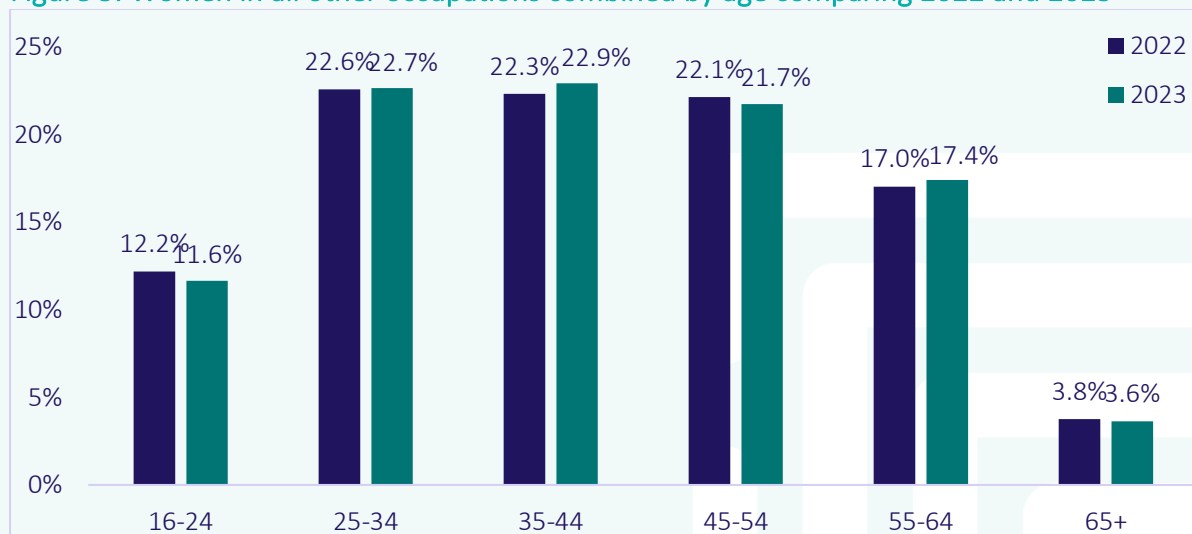
Figure 2: Women in engineering and technology by age, comparing 2022 and 2023



Source: EngineeringUK analysis of 2022 and 2023 Labour Force Survey data

To understand whether this drop in women aged 35-64 years was specific to engineering and technology occupations or consistent across the UK workforce, we also looked at women from all other occupations for 2022 and 2023. In contrast to engineering and technology occupations, the proportion of women from all other occupations combined was relatively consistent across the 2 years, with no observable drop in women between the ages of 35 and 64 years (figure 3).

Figure 3: Women in all other occupations combined by age comparing 2022 and 2023



Source: EngineeringUK analysis of 2022 and 2023 Labour Force Survey data

Methodology

This year, due to reduced response rates to the ONS's Labour Force Survey (LFS) we have adjusted the way in which we measure the proportion of engineering and technology occupations within the UK workforce by using an average from each LFS quarter. As part of our ongoing aim to produce the most detailed and accurate picture of engineering and technology within the UK, this change is explained in more detail in our accompanying methodology report, which can be accessed [here](#).

Throughout this report, engineering and technology occupations were defined using our engineering footprint, an agreed upon list developed by EngineeringUK, the Royal Academy of Engineering and the Engineering Council. In March 2024, we published a report prompted by the ONS revising its standard occupation classification (SOC) codes, which provided up-to-date figures for the percentage of people working in engineering occupations and be accessed [here](#).

Who are we

Established in 2001, EngineeringUK is a not-for profit organisation, funded predominantly via the professional registration fees of individual engineers, as well as the support of a range of businesses, trusts and foundations, and a corporate membership scheme. Our ambition is to enable more young people from all backgrounds to be informed, inspired and progress into engineering and technology.

Working in partnership to inspire more young people from a greater range of backgrounds to pursue the exciting career opportunities in modern engineering and technology is at the heart of EngineeringUK's purpose. Collaboration is essential to reach our long-term vision: for the UK to have the diverse workforce needed for engineering and technology to thrive and to drive economic prosperity, improve sustainability and achieve net zero.

Driven by data

Our work is rooted in our understanding of the current and future needs of the engineering and technology workforce. We complement that understanding by establishing which activities help increase the number and diversity of young people choosing engineering, technology and technician careers, especially those in sustainability and net zero.

We base everything we do on evidence and we share our analysis and insight widely. We publish comprehensive data on all aspects of engineering and technology in the UK – providing a detailed examination of the economic contribution, the workforce composition, as well as the extent to which workforce supply through education and training is likely to meet future demand for engineering and technology skills.

We evaluate all our activity to help ensure our engagements with young people are as effective as possible. It is through evaluation that we can identify the extent to which our programmes are winning the hearts and minds of young people, increasing their understanding of engineering and technology, and changing their perceptions of a career in it as something they'd consider for themselves, regardless of background and gender.