

GCSE AND SCOTTISH NATIONAL 5 RESULTS

August 2024

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GCSE Results 2024

Introduction

As expected prior to their release, 2024 GCSE results are broadly similar to 2023, where grade boundary setting returned to pre-pandemic conditions in England. 2024 marks the first year that all nations in the UK have returned to pre-pandemic conditions, and so we have also seen an expected drop in pass rates for Northern Ireland and Wales from 2023, back to 2019 levels.

Caution should still be exercised when comparing 2024 results to previous years, especially 2020 and 2021 which were based on teacher assessed grading. The data released on results day is followed by more detail later in the year, including demographics beyond gender.

Overall GCSE entries have increased by 4.8% since 2023, against an increase in the population size of 16-year-olds of 4.6%. 2024 also saw a higher number of resits, more back in line with 2019, now that exams are back to pre-pandemic conditions. This particularly impacts Mathematics and English Language, as mandatory subjects for many further qualifications and jobs.

GCSEs are completed across England, Northern Ireland and Wales. In Scotland the equivalent is National 5s, which are covered later in this document.

Results for level 1 and 2 vocational and technical qualifications were also released, including for the new Tech Awards, which make up the majority of the results. However, due to the way the data is published it is not possible to do the analysis we would like on the engineering and tech-related courses at this time. The data is released in more detail to allow this later in the year.

Subject entries

STEM subject entries as a proportion of all entries

| | Examinations | Teacher Assessed Grading | | Examinations | Examinations | Examinations |
|-----------------------------|--------------|--------------------------------|------|--------------|--------------|--------------|
| Subject | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Biology | 3.2 | 3.1 | 3.2 | 3.3 | 3.2 | 3.2 |
| Chemistry | 3.1 | 3 | 3 | 3.1 | 3.1 | 3 |
| Computing | 1.4 | 1.4 | 1.4 | 1.4 | 1.5 | 1.5 |
| Construction | 0 | 0 | 0 | 0 | 0 | 0 |
| Design & Technology | 1.8 | 1.7 | 1.6 | 1.5 | 1.5 | 1.4 |
| Digital Technology* | 0.2 | - | - | - | 0.1 | 0.1 |
| Economics | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Engineering | 0.1 | 0 | 0 | 0 | 0 | 0 |
| Mathematics | 14 | 14.2 | 14.1 | 13.7 | 13.9 | 14.2 |
| Mathematics (Additional) | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Mathematics: Numeracy | 0.4 | 0.4 | 0.6 | 0.49 | 0.4 | 0.4 |
| Other Sciences | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Other Technology | 0 | 0 | 0 | 0 | 0 | 0 |
| Physics | 3 | 3 | 3 | 3.1 | 3.1 | 3 |
| Science | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Science: Double Award* | 15.1 | 15.4 | 15.6 | 15.8 | 15.8 | 15.9 |
| Statistics | 0.4 | 0.4 | 0.3 | 0.4 | 0.4 | 0.5 |

*Digital technology was not included in the data published by JCQ in previous years

* Science: Double Award counts for 2 entries per student

- Entries to STEM subjects have remained relatively stable.
- The subjects with the highest entries are Science: Double Award (15.9%) and Mathematics (14.2%), which is mainly due to both Science and Mathematics being compulsory subjects at GCSE.
- Science Double Award has increased its proportion of entries since 2019 (15.1% to 15.9%), in comparison entries to triple science subjects (Biology, Chemistry and Physics) have remained broadly stable with only very small drops.

| Subject | 2023 | 2024 | % Change |
|--------------------------|---------|---------|----------|
| Biology | 191,298 | 194,925 | 1.9 |
| Chemistry | 184,069 | 185,274 | 0.7 |
| Computing | 90,558 | 95,841 | 5.8 |
| Construction | 1,295 | 1,463 | 13 |
| Design & Technology | 86,840 | 88,607 | 2 |
| Digital Technology | 8,753 | 8,527 | -2.6 |
| Economics | 7,572 | 8,093 | 6.9 |
| Engineering | 2,746 | 3,018 | 9.9 |
| Mathematics | 821,322 | 878,165 | 6.9 |
| Mathematics (Additional) | 4,093 | 4,549 | 11.1 |
| Mathematics: Numeracy | 25,439 | 25,355 | -0.3 |
| Other Sciences | 3,107 | 3,518 | 13.2 |
| Other Technology | 880 | 1,036 | 17.7 |
| Physics | 182,886 | 185,035 | 1.2 |
| Science | 7,927 | 8,746 | 10.3 |
| Science: Double Award* | 935,436 | 980,786 | 4.8 |
| Statistics | 26,559 | 31,844 | 19.9 |

* Science: Double Award counts for 2 entries per student

- Entries have increased in 15 of the 17 STEM subjects.
- The largest increases have happened in Statistics (+19.9%), Other Technology (+17.7%) and Other Sciences (+13.2%), though all from smaller bases than some other subjects.
- Statistics had the largest percentage increase of all GCSE subjects between 2023 and 2024.
- For the two subjects that have had a negative percentage change, this was marginal in Mathematics: Numeracy (-0.3%) and Digital Technology (-2.6%).

Subject results

As explained in the introduction, Wales and Northern Ireland have returned to fully pre-pandemic conditions for the first time, which has resulted in a decline in grades achieved since 2023, back to 2019 levels. The below results cover England, Wales and Northern Ireland, and so should be considered in this context. Results of GCSEs in England are graded on a numerical scale from 9 to 1, with grades 7 and above broadly equivalent to A and A* under the previous system, while a grade 4 is broadly in line with a C and deemed a standard pass. Wales and Northen Ireland retain the alphabetical system with A* the top grade awarded.

Additionally, the grade boundaries were amended in 2024 for Computing, along with French and German, under instruction from Ofqual to awarding bodies to make adjustments to raise grades. This is as a result of research which indicated that grading was too strict for these subjects, and for Computing that boundaries had not changed to reflect the differences in a relatively new GCSE subject.

7/A and above in STEM Subjects

| | Examinations | Teacher Assessed Grades | | Examinations | Examinations | Examinations |
|-----------------------------|--------------|-------------------------------|-------------|--------------|--------------|--------------|
| Subject | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
| Biology | 42.4 | 52.7 | 56 | 50 | 42.4 | 42.2 |
| Chemistry | 44.1 | 53.3 | 54.9 | 50 | 44 | 44.9 |
| Computing | 21.7 | 33.7 | 39.4 | 34.1 | 24.6 | 28.3 |
| Construction | 25.9 | 33 | 38.6 | 34.8 | 29.4 | 26.2 |
| Design & Technology | 19.4 | 27.8 | 30.2 | 26.8 | 21.1 | 22.3 |
| Digital Technology* | 27.2 | - | - | - | 28 | 24.2 |
| Economics | 32 | 46.8 | 52.8 | 43.5 | 32.3 | 32 |
| Engineering | 11.6 | 25.5 | 29.7 | 23.6 | 15.8 | 15 |
| Mathematics | 16.1 | 19.1 | 21 | 20.1 | 17.5 | 16.9 |
| Mathematics (Additional) | 57.9 | 64.1 | 67.5 | 67.4 | 64.1 | 58.3 |
| Mathematics: Numeracy | 11.9 | 17.9 | 22.6 | 18.7 | 16.6 | 13 |
| Other Sciences | 39.2 | 56 | 55.9 | 50.6 | 38.6 | 37.9 |
| Other Technology | 7.2 | 12.2 | 12.2 | 11.8 | 10.2 | 7.2 |
| Physics | 44 | 53.1 | 55.6 | 50.6 | 43.4 | 44.2 |
| Science | 5.6 | 7.3 | 8.3 | 8.5 | 7.6 | 4.6 |
| Science: Double Award | 7.8 | 10.8 | 12.7 | 10.7 | 8.9 | 9.1 |
| Statistics | 19.3 | 28 | 32.7 | 28 | 20.5 | 20 |

Digital technology was not included in the data published by JCC in previous years

- There has been a decline in the proportion of grade 7/A and above awarded in 12 of the 17 STEM subjects from 2023, and in 4 out of 17 since 2019.
- The largest drops since 2023 have been in Mathematics (Additional) (-5.8%p), Digital Technology (-3.8%p) and Mathematics: Numeracy (-3.6%p). Mathematics (Additional) and Digital Technology have also seen the largest drops since 2019.
- Computing has seen the largest increase between 2023 and 2024 (+3.7%p) and between 2019 and 2024 (+6.6%p), as a result of the grading changes.

4/C and above in STEM Subjects

| | Examinations | Teacher Assessed Grades | | Examinations | Examinations | Examinations |
|-----------------------------|--------------|-------------------------------|------|--------------|--------------|--------------|
| Subject | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| Biology | 89.7 | 94.6 | 94.2 | 92 | 89.6 | 89.3 |
| Chemistry | 90.1 | 95.7 | 94.4 | 93 | 89.8 | 90.5 |
| Computing | 62.7 | 80.2 | 82.5 | 75.3 | 64.8 | 68.4 |
| Construction | 78.2 | 91.8 | 89.7 | 87.9 | 81.5 | 76.3 |
| Design & Technology | 63.8 | 79.4 | 77.2 | 72 | 65.6 | 66.2 |
| Digital Technology* | 74.8 | - | - | - | 70.4 | 65.8 |
| Economics | 81.7 | 92.6 | 92.5 | 87 | 80.3 | 80.7 |
| Engineering | 52.5 | 77.1 | 79.1 | 71.3 | 57.4 | 55.2 |
| Mathematics | 59.6 | 66.6 | 69.4 | 65 | 61.1 | 59.5 |
| Mathematics (Additional) | 94.8 | 98.8 | 98 | 97.8 | 96 | 94.7 |
| Mathematics: Numeracy | 50.5 | 61.9 | 65.3 | 59.6 | 55.4 | 52.3 |
| Other Sciences | 80 | 91.4 | 90.4 | 86.7 | 80.4 | 76.8 |
| Other Technology | 57.7 | 75.7 | 76.2 | 74.5 | 66.7 | 58.1 |
| Physics | 90.9 | 96.2 | 95.3 | 93.8 | 90.2 | 90.3 |
| Science | 62.4 | 65 | 68.2 | 68 | 61.5 | 56.9 |
| Science: Double Award | 55.9 | 64.7 | 65.1 | 60.9 | 57.1 | 57.3 |
| Statistics | 72.9 | 83.8 | 81.1 | 77.8 | 71 | 70.3 |

*Digital technology was not included in the data published by JCQ in previous years

- There has been a drop in the proportion of Grade 4/C and above achieved in 11 of the 17 STEM subjects between 2023 and 2024, and 10 of the 17 since 2019.
- The largest drops since 2023 have occurred in Other Technology (-8.6%p), Construction (-5.2%p) and Digital Technology (-4.6%p).
- The largest increase has been in Computing (+3.6%p), where grade boundaries have been adjusted. There have also been slight increases in Chemistry (+0.7%p) and Design & Technology (+0.6%p).

| | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
|--------------|----------|----------|----------|----------|----------|----------|
| STEM | 19.6 | 24.4 | 26.7 | 24.2 | 20.5 | 20.4 |
| Non-STEM | 21.8 | 27.6 | 30.6 | 27.9 | 23.2 | 22.9 |
| All Subjects | 20.8 | 26.2 | 28.9 | 26.3 | 22 | 21.8 |

STEM vs. non-STEM subjects – 7/A and above

- A fifth of STEM subject entries resulted in a 7/A grade or above being awarded, lower than for non-STEM subjects, a trend seen consistently since 2019.
- The proportion of grade 7/A and above in STEM subjects is in line with 2023 and very slightly above 2019, the most comparable year.

STEM vs. non-STEM subjects – 4/C and above

| | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
|--------------|----------|----------|----------|----------|----------|----------|
| STEM | 65.4 | 73.3 | 74.2 | 70.5 | 66.4 | 65.8 |
| Non-STEM | 68.7 | 78.5 | 79.3 | 75.4 | 69.7 | 69 |
| All Subjects | 67.3 | 76.3 | 77.1 | 73.2 | 68.2 | 67.6 |

- Around two thirds of STEM subject entries in 2024 resulted in a 4/C grade or above being awarded, lower than for non-STEM subjects, a trend seen consistently since 2019.
- The proportion of grade 4/C and above in STEM subjects is slightly lower than 2023, but in line with 2019 which is the most comparable year.

Gender

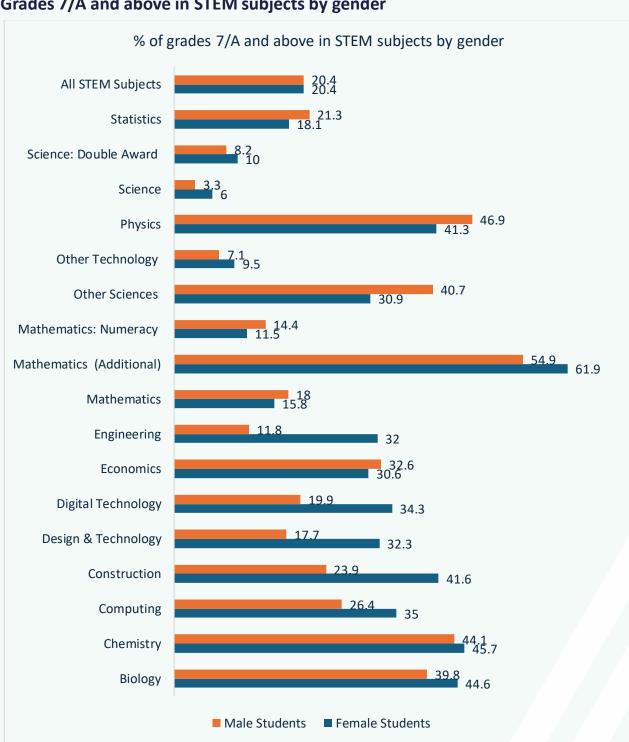
Entries by Gender

| Subject | Total entries | Female entries | % Female students | Male entries | % Male students |
|-----------------------------|------------------|-------------------|----------------------|-----------------|--------------------|
| Biology | 194,925 | 96,095 | 49.3 | 98,830 | 50.7 |
| Chemistry | 185,274 | 90,628 | 48.9 | 94,646 | 51.1 |
| Computing | 95,841 | 21,020 | 21.9 | 74,821 | 78.1 |
| Construction | 1,463 | 185 | 12.6 | 1,278 | 87.4 |
| Design & Technology | 88,607 | 27,683 | 31.2 | 60,924 | 68.8 |
| Digital Technology | 8,527 | 2,511 | 29.4 | 6,016 | 70.6 |
| Economics | 8,093 | 2,462 | 30.4 | 5,631 | 69.6 |
| Engineering | 3,018 | 491 | 16.3 | 2,527 | 83.7 |
| Mathematics | 878,165 | 439,228 | 50 | 438,937 | 50 |
| Mathematics (Additional) | 4,549 | 2,177 | 47.9 | 2,372 | 52.1 |
| Mathematics: Numeracy | 25,355 | 12,548 | 49.5 | 12,807 | 50.5 |
| Other Sciences | 3,518 | 993 | 28.2 | 2,525 | 71.8 |
| Other Technology | 1,036 | 63 | 6.1 | 973 | 93.9 |
| Physics | 185,035 | 89,684 | 48.5 | 95,351 | 51.5 |
| Science | 8,746 | 4,111 | 47 | 4,635 | 53 |
| Science: Double Award | 980,786 | 487,988 | 49.8 | 492,798 | 50.2 |
| Statistics | 31,844 | 13,477 | 42.3 | 18,367 | 57.7 |
| All subjects | 6,186,879 | 3,077,585 | 49.7 | 3,109,294 | 49.7 |

• Male students outnumber female students in 16 of the 17 STEM subjects in 2024.

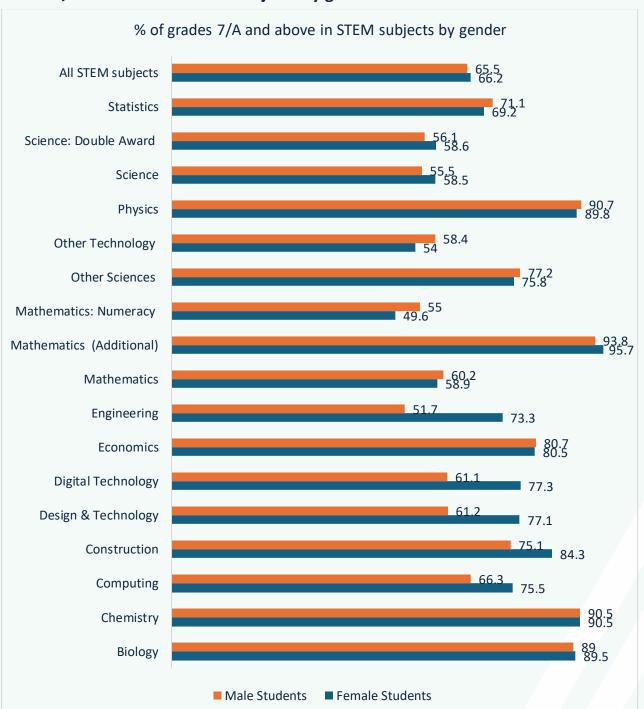
• As expected, for some of the compulsory subjects the gender split is a lot less defined, with only marginal difference in Science and Mathematics qualifications.

- The largest male to female split is in Other Technology (93.9% vs. 6.1%), Construction (87.4% vs. 12.6%) and Engineering (83.7% vs. 16.3%).
- While only 21.9% of Computing entries were from female students, much of the 5.8% increase in overall entries was driven by a 10.3% increase in female entries.



Grades 7/A and above in STEM subjects by gender

- Female students outperform male students in 11 of the 17 STEM subjects for the proportion attaining a grade 7/A or above in 2024.
- Female students outperform male students most in Engineering (20.2%p), Construction (17.7%p) and Design & Technology (14.6%p).
- Male students outperform female students most in Other Sciences (9.8%p), Physics (5.6%p) and Statistics (3.2%p).



Grade C/4 and above in STEM subjects by gender

- Female students outperform male students in 9 of the 17 STEM subjects for the proportion attaining grade 4/C or above in 2024.
- The subjects where female students outperform male students most are Engineering (21.6%p), Digital Technology (16.2%p) and Design & Technology (15.9%p).
- The subjects where male students outperform female students the most are in Mathematics: Numeracy (5.4%p), Other Technology (4.4%p) and Statistics (1.9%p).

Scottish National 5 results 2024

Introduction

National 5 exams are the Scottish equivalent to GCSEs in the rest of the UK. As with Scottish Highers in 2024, full assessment returned for the first time following the covid pandemic, therefore caution must be taken when comparing this year's results with 2023. The statement from the Scottish government on results day highlighted 2019 as being the most directly comparable.

Subject entries

| Subject | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|--------------------------------|------|------|------|------|------|------|
| Mathematics | 14.4 | 13.7 | 12.2 | 12.3 | 11.7 | 11.2 |
| Applications of Mathematics | 1.5 | 3.5 | 3.6 | 4.6 | 5.9 | 7.4 |
| Biology | 7.5 | 7.2 | 7.1 | 7.3 | 7.1 | 6.8 |
| Chemistry | 5.6 | 5.3 | 5.1 | 5 | 4.8 | 4.8 |
| Physics | 4.8 | 4.5 | 4.4 | 4.3 | 4.1 | 4.1 |
| Practical Woodworking | 1.8 | 2 | 2.3 | 2.3 | 2.5 | 2.6 |
| Computing Science | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Administration and IT | 1.7 | 1.7 | 1.8 | 1.7 | 1.7 | 1.6 |
| Design and Manufacture | 1.6 | 1.5 | 1.5 | 1.4 | 1.3 | 1.3 |
| Engineering Science | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 | 0.6 |
| Health and Food Technology | 0.5 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 |
| Practical Metalworking | 0.4 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Fashion and Textile Technology | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Practical Electronics | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 |
| Economics | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| Environmental Science | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Matamataig (Mathematics)* | 0 | 0 | 0 | 0 | 0 | 0 |

STEM subject entries as a proportion of all entries

*Matamataig (Mathematics) is mathematics taught in the Scottish language

• Mathematics remains the most popular STEM subject, perhaps unsurprising due to it being compulsory to take a mathematics subject at National 5 level.

• Entries to Mathematics has been declining since 2019, which is mostly driven by the emergence of the Applications of Mathematics course. Applications of Mathematics is a subject that explores the applications of mathematical techniques and skills in everyday situations, including financial matters, statistics, and measurement.

- Applications of Mathematics now has the second largest share of entries among all STEM subjects, and third most among all subjects (7.4% in 2024 up from 1.5% in 2019).
- Half of the 10 most popular subjects in 2024 were STEM subjects: Mathematics (11.2%), Applications of Mathematics (7.4%), Biology (6.8%), Chemistry (4.8%) and Physics (4.1%).
- Science subjects (Biology, Chemistry and Physics) are not necessarily compulsory subjects in the same way that science is in the rest of the UK.

| Subject | 2023 | 2024 | % change |
|--------------------------------|--------|--------|----------|
| Administration and IT | 5,465 | 5,185 | -5.1 |
| Applications of Mathematics | 19,020 | 24,260 | 27.5 |
| Biology | 22,935 | 22,345 | -2.6 |
| Chemistry | 15,560 | 15,895 | 2.2 |
| Computing Science | 6,795 | 6,745 | -0.7 |
| Design and Manufacture | 4,260 | 4,120 | -3.3 |
| Economics | 490 | 445 | -9.2 |
| Engineering Science | 1,875 | 2,000 | 6.7 |
| Environmental Science | 415 | 465 | 12.0 |
| Fashion and Textile Technology | 630 | 615 | -2.4 |
| Health and Food Technology | 1,650 | 1,530 | -7.3 |
| Matamataig (Mathematics)* | 60 | 90 | 50.0 |
| Mathematics | 37,495 | 36,600 | -2.4 |
| Physics | 13,235 | 13,355 | 0.9 |
| Practical Electronics | 685 | 760 | 10.9 |
| Practical Metalworking | 1,710 | 1,775 | 3.8 |
| Practical Woodworking | 7,950 | 8,365 | 5.2 |

STEM subject entry changes 2023 to 2024

- Applications of Mathematics has seen the second largest percentage increase in entries between 2023 to 2024 with a 27.5% increase. It has also seen a 444% increase since 2019 increasing from 4,460 to 24,260.
- Entries to practical subjects: Practical Electronics (10.9%), Practical Metalworking (3.8%) and Practical Woodworking (5.2%) have increased between 2023 and 2024, they have also seen large increases between 2019 and 2024.
- Since 2019, entries to Practical Electronics have increased by 262% (210 to 760), Practical Metalworking (1,265 to 1,775) has increased by 40% and Practical Woodworking (5,300 to 8,365) has increased by 58%. This is in the context that GCSE D&T, the most comparable course in the rest of the UK, has been declining in recent years, halving entries since 2016.

Subject results

Grade A in STEM subjects

| | Examinations | Teacher assessed Grades | | Examinations | Examinations | Examinations |
|-----------------------------------|--------------|----------------------------|-------------|--------------|--------------|--------------|
| Subjects | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
| Administration and IT | 29.7 | 38.5 | 49.2 | 31.1 | 31.7 | 34.3 |
| Applications of Mathematics | 23.8 | 29 | 22.7 | 25 | 25.2 | 25.6 |
| Biology | 29.5 | 35.3 | 36.5 | 32.6 | 34.2 | 28 |
| Chemistry | 34.6 | 43.2 | 45 | 42.5 | 42.5 | 41.5 |
| Computing Science | 31.5 | 40.9 | 45.5 | 40.9 | 42.4 | 45.1 |
| Design and Manufacture | 18.1 | 28.6 | 33.5 | 24.6 | 22.9 | 26.8 |
| Economics | 64.8 | 72.6 | 83.1 | 71.6 | 60.2 | 69.7 |
| Engineering Science | 48 | 51.5 | 52.7 | 57 | 51.7 | 49.3 |
| Environmental Science | 12.2 | 25 | 34.3 | 17.1 | 10.8 | 5.4 |
| Fashion and Textile Technology | 11.8 | 27.7 | 47.1 | 15.5 | 19 | 17.9 |
| Health and Food Technology | 21.2 | 32.1 | 34.4 | 24.1 | 28.8 | 21.9 |
| Matamataig (Mathematics)* | 38.5 | 50 | 45.5 | 42.9 | 41.7 | 50 |
| Mathematics | 30.9 | 36.7 | 37.8 | 36.8 | 28.3 | 39.8 |
| Physics | 31.8 | 40.3 | 43.4 | 34.9 | 34.7 | 34.4 |
| Practical Electronics | 38.1 | 28.6 | 36.2 | 39.8 | 40.9 | 33.6 |
| Practical Metalworking | 36.8 | 42.3 | 37.3 | 44.1 | 41.5 | 22.8 |
| Practical Woodworking | 34.7 | 41 | 42.8 | 50.5 | 49.4 | 31.2 |

- There has been an improvement in the proportion of A grades in 7 of the 17 STEM subjects at National 5 level between 2023 and 2024, but that number increases to 12 when comparing 2019 to 2024, the year that is most comparable.
- Mathematics (+11.5%p) and Economics (+9.5%p) have seen the largest increase in the proportion of students attaining an A from 2023 to 2024.
- Although entries have increased in Practical Electronics, Practical Metalworking and Practical Woodworking they have also seen the largest drop in attainment at grade A between 2023 and 2024 (-7.3%p, -18.7%p, and -18.2%p respectively).

Grade A to C in STEM Subjects

| | Examinations | Teacher assessed Grades | | Examinations | Examinations | Examinations |
|-----------------------------------|--------------|----------------------------|-------------|--------------|--------------|--------------|
| STEM Subjects | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
| Administration and IT | 78.7 | 92.2 | 92.6 | 81 | 80.1 | 80.5 |
| Applications of Mathematics | 58.4 | 75.3 | 64 | 64.8 | 61.9 | 59.3 |
| Biology | 70.5 | 83.4 | 75.8 | 71.9 | 72.9 | 64.5 |
| Chemistry | 76.9 | 88.2 | 81.9 | 79.8 | 77.9 | 76.6 |
| Computing Science | 74.7 | 90 | 86.2 | 78 | 78.7 | 78.8 |
| Design and Manufacture | 70.4 | 90.5 | 86.3 | 80.6 | 76.6 | 74.5 |
| Economics | 90.7 | 98.4 | 98.3 | 92.5 | 89.8 | 89.9 |
| Engineering Science | 83.9 | 92.7 | 86.1 | 85.4 | 84.3 | 79.8 |
| Environmental Science | 48.8 | 84.6 | 82.1 | 64.3 | 45.8 | 57 |
| Fashion and Textile Technology | 59.2 | 91.6 | 90.2 | 69 | 72.2 | 74.8 |
| Health and Food Technology | 74.3 | 92.3 | 85 | 79.5 | 77.6 | 69.6 |
| Matamataig (Mathematics)* | 84.6 | 83.3 | 100 | 78.6 | 75 | 83.3 |
| Mathematics | 65.5 | 79.1 | 73 | 69.7 | 62.4 | 68.1 |
| Physics | 74.6 | 86 | 81.3 | 74 | 70.9 | 73.9 |
| Practical Electronics | 85.7 | 85.7 | 86.7 | 81.4 | 86.1 | 75 |
| Practical Metalworking | 82.6 | 94.2 | 87.1 | 88 | 82.7 | 73.8 |
| Practical Woodworking | 85.9 | 94.3 | 92 | 91.8 | 90.1 | 81.9 |

- There has been an improvement in the proportion of A to C grades in 8 of the 17 STEM subjects at National 5 level between 2023 and 2024.
- Some of the largest increases in the proportion of A to C grades in STEM subjects are in Environmental Science (+11.2%p) and Mathematics (+5.7%p).
- Some of the largest declines have occurred in Practical Electronics (-11.1%p), Practical Metalworking (-8.9%p) and Biology (-8.4%p).

| | Examinations | Teacher assessed Grades | | Examinations | Examinations | Examinations |
|-------------------|--------------|----------------------------|----------|--------------|--------------|--------------|
| Subjects | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
| STEM subjects | 30.8 | 37.4 | 39 | 35.7 | 33.4 | 34.1 |
| Non-STEM subjects | 38.3 | 46.1 | 52.3 | 43.8 | 42.6 | 41 |
| All subjects | 35.1 | 42.3 | 46.7 | 40.3 | 38.6 | 38 |

STEM subjects vs. non-STEM subjects – A grade

- Overall, a higher proportion of students attain an A grade in non-STEM subjects than they do in STEM subjects. This has consistently been the case since 2019.
- However, the proportion of A grade attained in STEM subjects has improved since 2023 with the full return to pre-pandemic courses , while non-STEM subjects has declined.

| | Examinations | Teacher assessed Grades | | Examinations | Examinations | Examinations |
|-------------------|--------------|----------------------------|----------|--------------|--------------|--------------|
| Subjects | 2019 (%) | 2020 (%) | 2021 (%) | 2022 (%) | 2023 (%) | 2024 (%) |
| STEM subjects | 71.2 | 84.1 | 78.4 | 74 | 71.2 | 69.8 |
| Non-STEM subjects | 83.4 | 92.8 | 91.2 | 85.9 | 84.8 | 83.1 |
| All subjects | 78.2 | 89 | 85.8 | 80.8 | 78.8 | 77.2 |

STEM subjects vs. non-STEM subjects – A to C grades

- A higher proportion of students attain an A to C grade in non-STEM subjects than they do in STEM subjects. This has consistently been the case since 2019.
- The proportion of A to C grades has declined slightly across all subjects

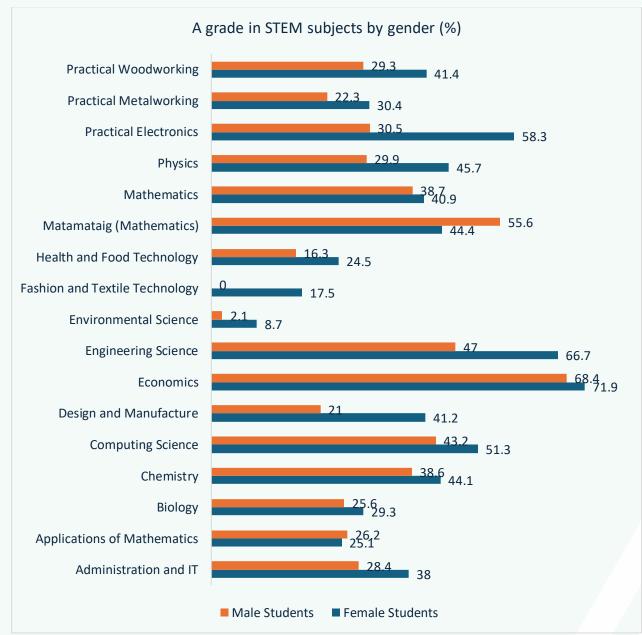
Gender

Entries by gender

| Subject | Total entries | Female entries | % Female | Male entries | % Male |
|--------------------------------|------------------|-------------------|----------|-----------------|--------|
| Administration and IT | 5185 | 3225 | 62.2 | 1955 | 37.7 |
| Applications of Mathematics | 24260 | 12145 | 50.1 | 12105 | 49.9 |
| Biology | 22345 | 14655 | 65.6 | 7685 | 34.4 |
| Chemistry | 15895 | 8350 | 52.5 | 7540 | 47.4 |
| Computing Science | 6745 | 1540 | 22.8 | 5200 | 77.1 |
| Design and Manufacture | 4120 | 1190 | 28.9 | 2930 | 71.1 |
| Economics | 445 | 160 | 36 | 285 | 64 |
| Engineering Science | 2000 | 225 | 11.3 | 1775 | 88.8 |
| Environmental Science | 465 | 230 | 49.5 | 235 | 50.5 |
| Fashion and Textile Technology | 615 | 600 | 97.6 | 15 | 2.4 |
| Health and Food Technology | 1530 | 1100 | 71.9 | 430 | 28.1 |
| Matamataig (Mathematics)* | 90 | 45 | 50 | 45 | 50 |
| Mathematics | 36600 | 18375 | 50.2 | 18215 | 49.8 |
| Physics | 13355 | 3800 | 28.5 | 9550 | 71.5 |
| Practical Electronics | 760 | 60 | 7.9 | 705 | 92.8 |
| Practical Metalworking | 1775 | 115 | 6.5 | 1660 | 93.5 |
| Practical Woodworking | 8365 | 1305 | 15.6 | 7060 | 84.4 |

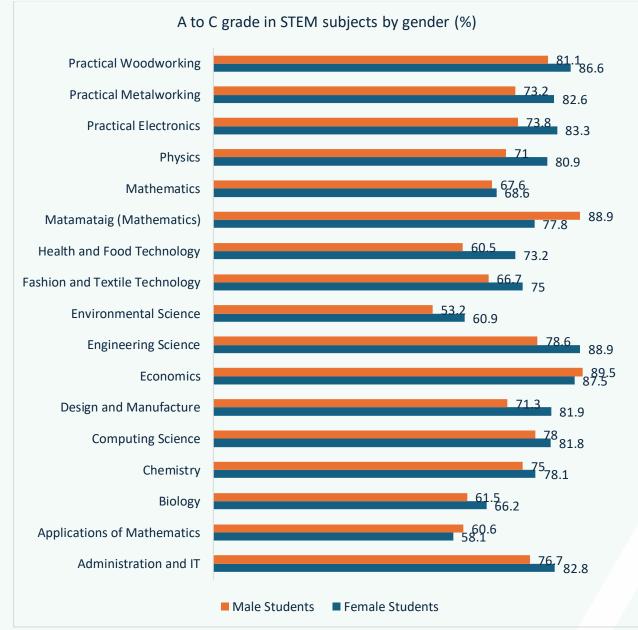
- Generally male students outnumber female students on STEM subjects. This is the case in 10 of the 17 subjects in National 5 in 2024.
- Subjects with the largest male to female student difference in entries are Practical Metalworking (93.5% vs. 6.5%), Practical Electronics (92.8% vs. 7.9%) and Engineering Science (88.8% vs. 11.3%).
- Subjects with the largest female to male student difference in entries are Fashion and Textile Technology (97.6% vs. 2.4%), Health and Food Technology (71.9% vs. 28.1%) and Biology (65.6% vs. 34.4%).
- There are interesting gender splits in science subjects. As mentioned previously, science subjects are not always compulsory subjects in the same way as they are in the rest of the UK. Biology entries by female students are higher than for male students (65.5% vs. 34.4%). Physics entries by male students is higher than for female students (71.5% vs. 28.5%). Chemistry is much more even with male students making up 52.5% of entries compared to 47.4% by female students.

A grade in STEM subject by gender



- Female students outperform male students in 15 of the 17 STEM subjects at A grade.
- The largest gap between female and male students are in Practical Electronics (58.3% vs. 30.5%), Design and Manufacture (41.2% vs. 21%) and Engineering Science (66.7% vs. 47%). These subjects also have small numbers of entries by female students.
- Male students only perform better than female students in Matamataig (Mathematics) (55.6% vs. 44.4%) and very marginally in Application of Mathematics (26.2% vs. 25.1%)

A to C grade in STEM subject by gender



- Female students outperform male students in 14 of the 17 STEM subjects at A to C grade.
- The largest gap between female and male students are in Health and Food Technology (73.2% vs. 60.5%), Design and Manufacture (81.9% vs. 71.3%) and Engineering Science (88.9% vs. 78.6%).
- Male students only perform better than female students in Matamataig (Mathematics) (88.9% vs. 77.8%) and very marginally in Applications of Mathematics (60.6% vs. 58.1%) and Economics (89.5% vs. 87.5%).