

GCSE Results 2023

For 2023 Ofqual have confirmed the return of pre-pandemic grading systems. The implications are that students should be just as likely to receive a particular grade in a subject in 2023 as they would have in 2019. In cases where the national performance is below pre-pandemic levels, examiners have taken this into consideration when setting grade boundaries.

Entries overall for GCSEs are up 3.4% from 2022. The overall grades this year are lower than in 2022 (grades 4+ down 5%p), but remain slightly above 2019 (grades 4+ up 0.9%p).

Since summer 2020¹, all GCSE grades have been using a 9 to 1 grading system, a change from the old A* to G system. The grading was designed to be able to easily compare to the old system, with the bottom of grade 7 being comparable to the bottom of grade A, and the bottom of grade 4 being comparable to the bottom of grade C. In this briefing we look at total entries, attainment of grades 7+ (old A/A*), and grades 4+ (old C+).

STEM subject entries 2023

Proportion of entries for STEM subjects

The below table represents the entries for different STEM GCSEs as a proportion of all entries. Along with English, Maths and Science are compulsory subjects at GCSE and so represent the highest proportion of entries.

Subject	Examination	Teacher Assessed Grading		Examination	Examination
	2019 (%)	2020 (%)	2021 (%)	2022 (%)	2023 (%)
Biology	3.2	3.13	3.2	3.27	3.24
Chemistry	3.07	2.99	3.08	3.12	3.12
Computing	1.44	1.38	1.39	1.42	1.53
Construction	0.01	0.02	0.02	0.02	0.02
Design & Technology	1.8	1.73	1.59	1.51	1.47
Economics	0.12	0.12	0.12	0.12	0.13
Engineering	0.06	0.06	0.05	0.04	0.05
ICT	0.17	0.16	0.17	0.17	0.15
Mathematics	14.04	14.21	14.12	13.71	13.91
Mathematics (Additional)	0.07	0.07	0.07	0.07	0.07
Mathematics: Numeracy	0.43	0.43	0.6	0.49	0.43
Other Sciences	0.06	0.05	0.05	0.05	0.05
Other Technology	0.02	0.02	0.02	0.01	0.01
Physics	3.03	2.96	3.05	3.1	3.1
Science	0.12	0.13	0.14	0.14	0.13
Science: Double Award ²	15.13	15.43	15.6	15.84	15.84
Statistics	0.43	0.43	0.31	0.39	0.45

¹ The reform was phased over a number of years, with most GCSEs moving over to the new system in 2018. All GCSEs are graded on the 9 to 1 system now, and have been since 2020.

² Note that Double Award Science counts for 2 entries per student.

STEM Subject Change 2022 to 2023

Subjects	2022 Number of Entries	2023 Number of Entries	% change 2022 to 2023
Biology	186,445	191,298	+2.6
Chemistry	177,925	184,069	+3.5
Computing	81,120	90,558	+11.6
Construction	1,053	1,295	+23
Design & Technology	86,297	86,840	+0.6
Economics	7,117	7,572	+6.4
Engineering	2,540	2,746	+8.1
ICT	9,440	8,753	-7.3
Mathematics	782,783	821,322	+4.9
Mathematics (Additional)	27,908	25,439	+1.4
Mathematics: Numeracy	4,038	4,093	-8.8
Other Sciences	2,893	3,107	+7.4
Other Technology	796	880	+10.6
Physics	177,137	182,886	+3.2
Science	7,744	7,927	+2.4
Science: Double Award	904,012	935,436	+3.5
Statistics	22,066	26,559	+20.4

- Computing (+11.6%) saw the largest increase across both numbers and percentage change since 2023.
- Construction (+23%), Statistics (+20.4%), Other technology (+10.6%), and Engineering (+8.1%) also saw particularly high percentage increases in entries since 2022, though overall numbers remain low for these subjects.
- Design and Technology saw a small increase of 0.6%, meaning nearly 87,000 young people took this GCSE. This hopefully signals an end to the year-on-year decline we have seen in recent years for this subject.

STEM subject results 2023

Proportion of young people attaining 7+ in STEM Subjects

Subjects	2019	2020	2021	2022	2023
	Examination	Teacher Assessed Grading		Examination	Examination
Biology	42.4	52.7	56	50	42.4
Chemistry	44.1	53.3	54.9	50	44.0
Computing	21.7	33.7	39.7	34.1	24.6
Construction	25.9	33	38.6	34.8	29.4
Design & Technology	19.4	27.8	30.2	26.8	21.1
Economics	32	46.8	52.8	43.5	32.3
Engineering	11.6	25.5	29.7	23.6	15.8
ICT	27.2	36.3	39.2	35	28.0
Mathematics	16.1	19.1	21	20.1	17.5
Mathematics (Additional)	57.9	64.1	67.5	67.4	64.1
Mathematics: Numeracy	11.9	17.9	22.6	18.7	16.6
Other Sciences	39.2	56	55.9	50.6	38.6
Other Technology	7.2	12.2	12.2	11.8	10.2
Physics	44	53.1	55.6	50.6	43.4
Science	5.6	7.3	8.3	8.5	7.6
Science: Double Award	7.8	10.8	12.7	10.7	8.9
Statistics	19.3	28	32.7	28	20.5

- There has been a decline in the proportion of young people attaining a 7 or above in all STEM subjects between 2022 and 2023, as expected.
- Nearly all STEM subjects are either at or above levels seen in 2019.
- Only Physics (-0.6%p) and Other Sciences (-0.6%p) have seen a decline in the proportion attaining a 7 or above since 2019.

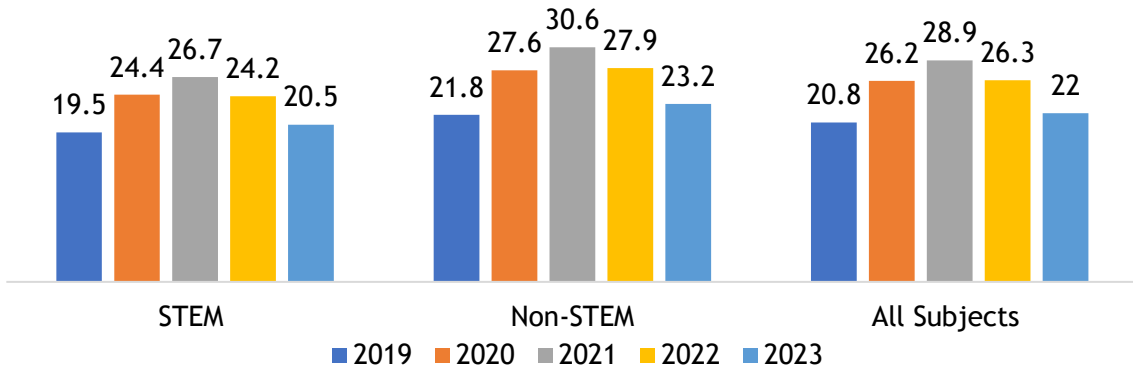
Proportion of young people attaining 4 + in STEM Subjects

Subjects	2019	2020	2021	2022	2023
	Examination	Teacher Assessed Grading		Examination	Examination
Biology	89.7	94.6	94.2	92	89.6
Chemistry	90.1	95.7	94.4	93	89.8
Computing	62.7	80.2	82.5	75.3	64.8
Construction	78.2	91.8	89.7	87.9	81.5
Design & Technology	63.8	79.4	77.2	72	65.6
Economics	81.7	92.6	92.5	87	80.3
Engineering	52.5	77.1	79.1	71.3	57.4
ICT	74.8	87.7	84.5	81.3	70.4
Mathematics	59.6	66.6	69.4	65	61.1
Mathematics (Additional)	94.8	98.8	98	97.8	96
Mathematics: Numeracy	50.5	61.9	65.3	59.6	55.4
Other Sciences	80.0	91.4	90.4	86.7	80.4
Other Technology	57.7	75.7	76.2	74.5	66.7
Physics	90.9	96.2	95.3	93.8	90.2
Science	62.4	65	68.2	68	61.5
Science: Double Award	55.9	64.7	65.1	60.9	57.1
Statistics	72.9	83.8	81.1	77.8	71

- There has been a decline in the proportion of young people attaining a 4 or above in all STEM subjects between 2022 and 2023, as expected.
- Nearly all STEM subjects have returned to levels similar to those seen in 2019.
- Attainment of 4 or above has improved most for Computing (+2.1%p), Construction (3.3%p), Mathematics: Numeracy (+4.9%p), and Other Technology (+9%p) since 2019.
- Attainment of 4 or above has declined most for ICT (-4.4%p) since 2019.

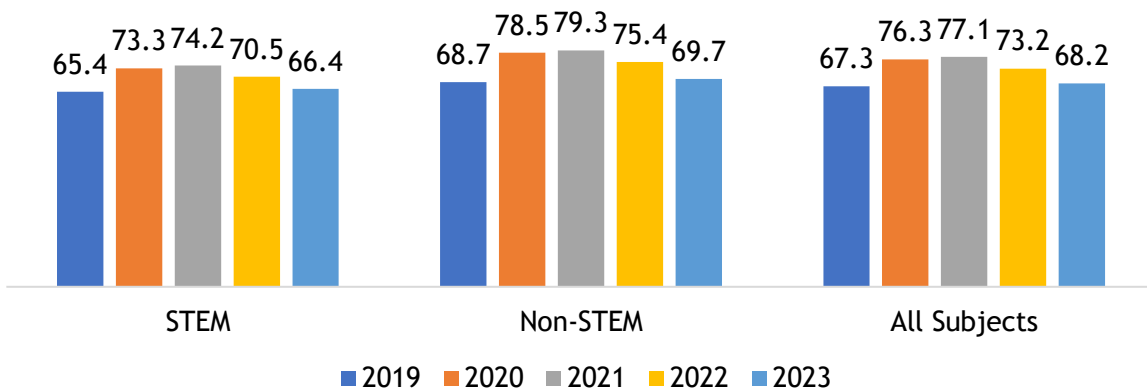
STEM subjects vs. non-STEM subjects results 2023

% Attaining 7 or above



- The proportion of young people attaining a grade 7 or above in STEM subjects has historically been below that of non-STEM subjects. This has remained the case in 2023.
- The proportion of young people attaining a 7 or above has dropped since 2022 across the board (-4.3%p across all subjects), as expected, with a steeper decline seen in non-STEM (-4.7%p) compared to STEM (-3.7%p).
- However, compared with 2019, the proportion of young people attaining a 7 or above in STEM (+1%p) and non-STEM (+1.4%p), has increased.

% attaining 4 or above



- The proportion of young people attaining a 4 or above has also declined since 2022 across all subjects (-5%p).
- The drop is larger for non-STEM subjects (-5.7%p) than STEM subjects (-4.1%p), as with the higher grade attainment levels.
- Attainment at grade 4 or above is also slightly higher than in 2019, both for STEM subjects (+1%p) and for non-STEM subjects (+1%p).

Gender differences in STEM subjects 2023

Proportion of 2023 entries by Gender

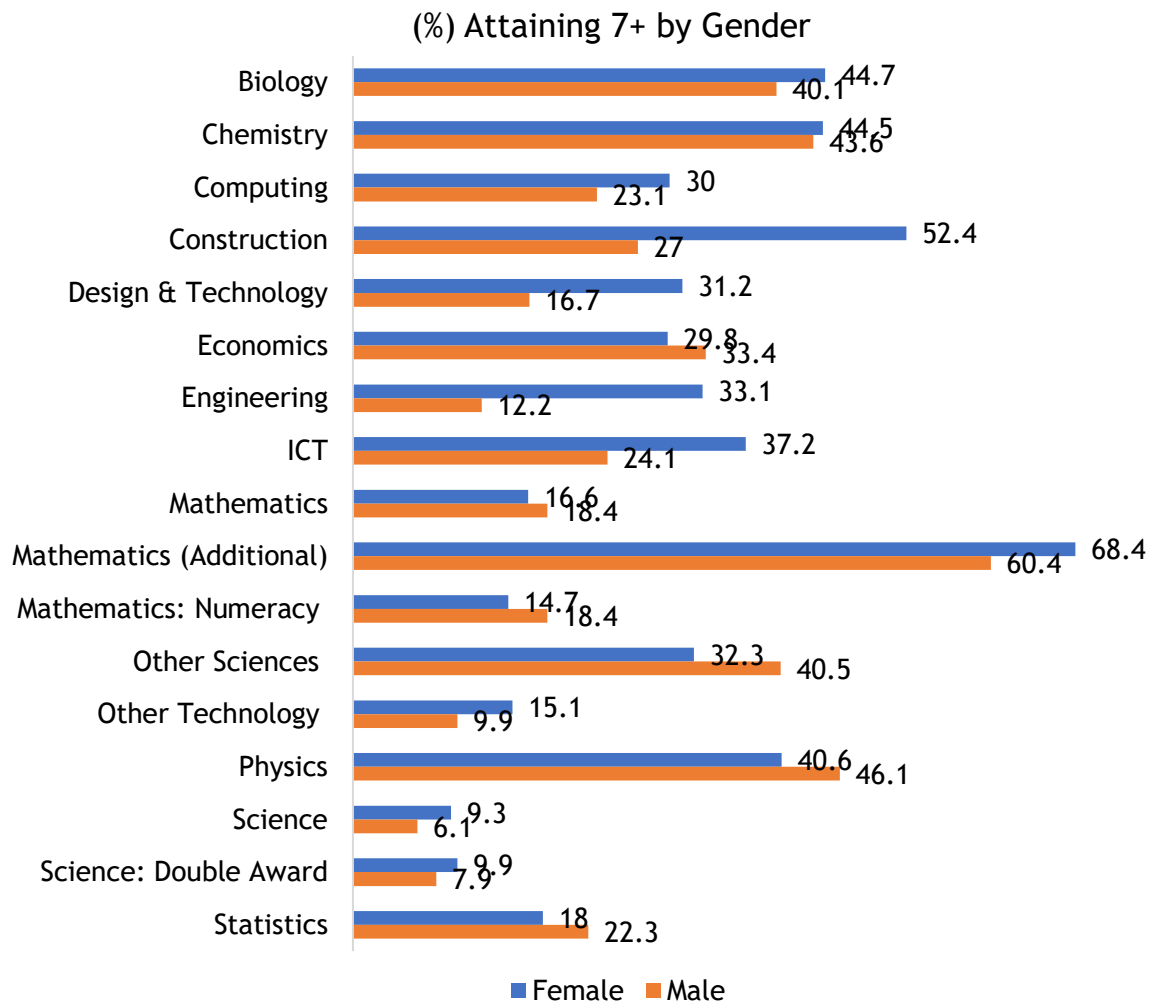
Subjects	Female (%)	Male (%)
Biology	3.2	3.2
Chemistry	3.1	3.2
Computing	0.6	2.4
Construction	0.004	0.03
Design & Technology	0.9	2.0
Economics	0.1	0.2
Engineering	0.02	0.1
ICT	0.1	0.2
Mathematics	13.9	13.9
Mathematics (Additional)	0.1	0.1
Mathematics: Numeracy	0.4	0.4
Other Sciences	0.03	0.1
Other Technology	0.002	0.03
Physics	3.0	3.2
Science	0.1	0.1
Science: Double Award	15.8	15.9
Statistics	0.4	0.5

- Male students are more likely than female students to take optional STEM subjects at GCSE.
- This is particularly apparent in Computing (21% of entries by female students), Construction (10%), Design and Technology (31%), Engineering (17%), and ICT (30%).

Attainment by gender 2023

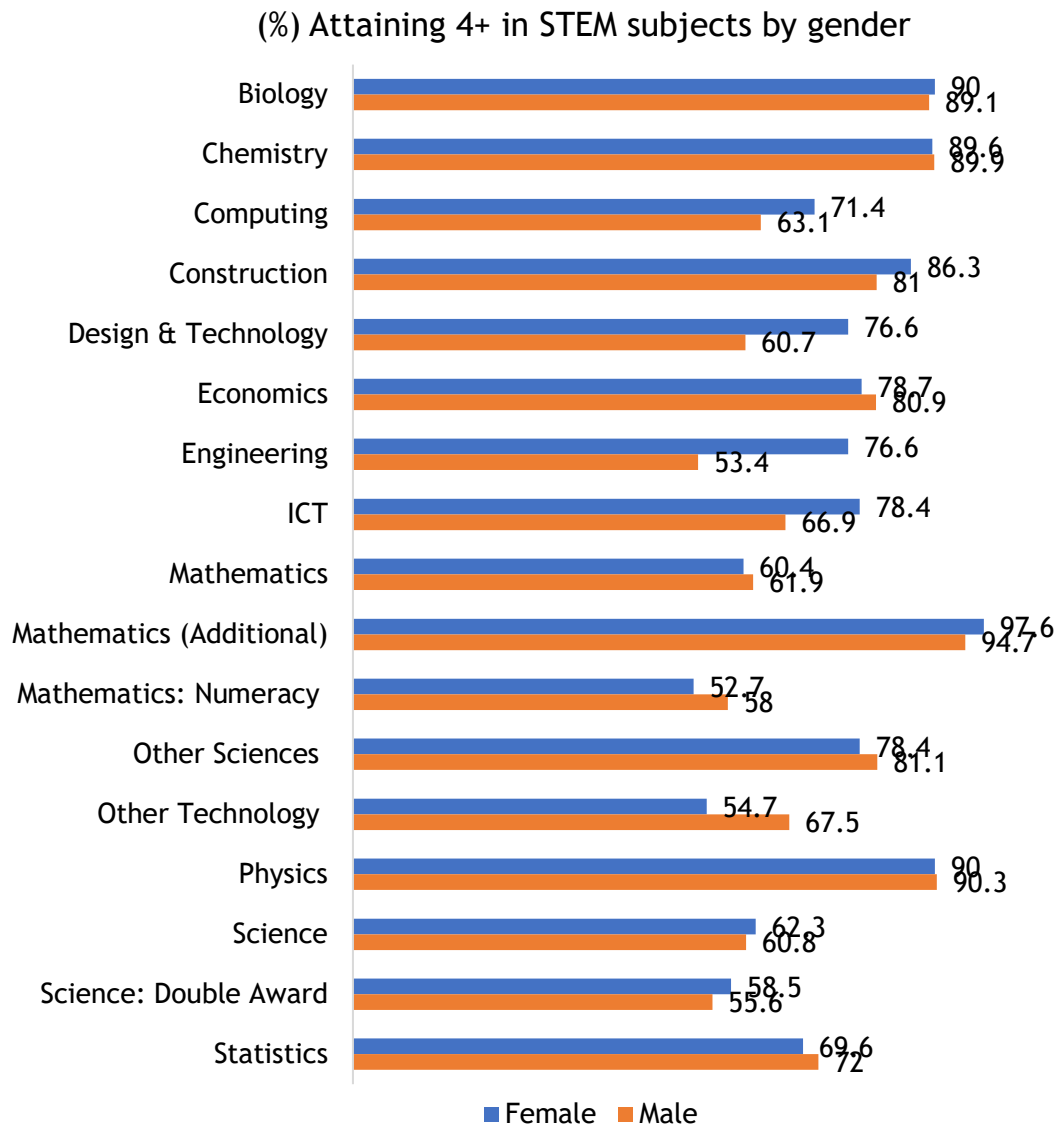
Female students have historically outperformed male students across most subjects at GCSE, including in STEM subjects. There have been longstanding issues surrounding female students choosing optional STEM subjects for GCSE, which remain for 2023. Despite the gender disparity in uptake, female students still outperform male students, particularly when looking at the proportion attaining a level 7 or above in these subjects.

Attainment 7+ in STEM subjects by gender



- The proportion of female students attaining 7 or higher in STEM subjects is above male students in most core science subjects (Double Science, Science, Chemistry and Biology). However, this is lower for Physics.
- Although entries for female students in Computing, ICT, D&T, Construction, and Engineering are lower than male students, the attainment levels are higher.

Attainment 4+ in STEM subjects by gender



- Attainment levels for grades 4+ are more even than for 7+ across STEM subjects.
- Male and female students perform similarly across the individual sciences of Biology, Chemistry, and Physics, while female students slightly outperform male students in Science and Double Science.
- Although entries for female students in Computing, ICT, D&T, Construction, and Engineering are lower than male students, the attainment levels are higher.

Exam results in Scotland were released on 8th August 2023. As with the situation in the rest of the United Kingdom, Scotland has transitioned back to pre-pandemic examination conditions by removing the support measures that were implemented to mitigate for the disruption on educational outcomes caused by the coronavirus. The Scottish Qualification Authority (SQA) took a sensitive approach to awarding as it was recognised that students' performance has not yet returned to pre-pandemic levels despite the positive progression observed in 2023 results, so results for many subjects have not returned to 2019 levels.

STEM subject entries, 2023

Proportion of entries for STEM Subjects

The table below shows the proportion of the total entries for each STEM subject.

Subject	2019	2020	2021	2022	2023
	Examination	Teacher Assessed Grading		Examination	Examination
Administration and IT	1.7	1.7	1.8	1.7	1.7
Applications of Mathematics	1.5	3.5	3.6	4.6	5.9
Biology	7.5	7.2	7.1	7.3	7.1
Chemistry	5.6	5.3	5.1	5	4.8
Computing Science	2.2	2.1	2.1	2.1	2.1
Design and Manufacture	1.6	1.5	1.5	1.4	1.3
Economics	0.1	0.1	0.1	0.1	0.2
Engineering Science	0.6	0.5	0.6	0.6	0.6
Environmental Science	0.1	0.1	0.1	0.1	0.1
Fashion and Textile Technology	0.1	0.1	0.2	0.2	0.2
Health and Food Technology	0.5	0.5	0.6	0.6	0.5
Mathematics	14.4	13.7	12.2	12.3	11.7
Matamataig (Mathematics) ³	0.02	0.02	0.02	0.02	0.02
Physics	4.8	4.5	4.4	4.3	4.1
Practical Electronics	0.1	0.1	0.2	0.2	0.2
Practical Metalworking	0.4	0.5	0.5	0.5	0.5
Practical Woodworking	1.8	2.0	2.3	2.3	2.5
All STEM Entries	42.9	43.6	42.4	43.4	43.6

- The overall proportion of STEM entries has remained broadly consistent since 2019.
- There has been a steady decrease in the proportion of young people studying Mathematics (-2.7%p from 2019 to 2023), while there has been an increase in entries for Applications of Mathematics (+4.4%p).
- There has been a small but steady increase in the proportion of young people taking Practical Woodworking (+0.7%p) since 2019.

³ Matamataig is Mathematics taught in the Scottish language.

- Conversely, there has been a small but steady decline in the proportion of young people studying Biology (-0.4%p), Chemistry (-0.8%p) and Physics (-0.7%p).

STEM Subjects results, 2023

Proportion of young people attaining A in STEM subjects

Subject	2019	2020	2021	2022	2023
	Examination	Teacher Assessed Grading		Examination	Examination
Administration and IT	29.7	38.5	49.2	31.1	31.8
Applications of Mathematics	23.8	29	22.7	25	25.2
Biology	29.5	35.3	36.5	32.6	34.2
Chemistry	34.6	43.2	45	42.5	42.5
Computing Science	31.5	40.9	45.5	40.9	42.4
Design and Manufacture	18.1	28.6	33.5	24.6	22.9
Economics	64.8	72.6	83.1	71.6	60
Engineering Science	48	51.5	52.7	57	51.6
Environmental Science	12.2	25	34.3	17.1	10.4
Fashion and Textile Technology	11.8	27.7	47.1	15.5	18.8
Health and Food Technology	21.2	32.1	34.4	24.1	28.9
Mathematics	30.9	36.8	37.9	36.8	28.3
Matamataig (Mathematics)	0	0	46.4	40	38.7
Physics	31.8	40.3	43.4	34.9	34.7
Practical Electronics	38.1	28.6	36.2	39.8	41
Practical Metalworking	36.8	42.3	37.3	44.1	41.6
Practical Woodworking	34.7	41	42.8	50.5	49.3

- Grade A attainment in the majority of STEM subjects in 2023 remained above 2019, with many remaining at or above the levels seen in 2022.
- However, grade A attainment in Mathematics has dropped to a lower level than in 2019, at 28.3% compared to 30.9%.

Proportion of young people attaining A to C in STEM subjects

Subject	2019	2020	2021	2022	2023
	Examination	Teacher Assessed Grading		Examination	Examination
Administration and IT	78.7	92.2	92.6	81	80
Applications of Mathematics	58.4	75.3	64	64.8	61.9
Biology	70.5	83.4	75.8	71.9	72.9
Chemistry	76.9	88.2	81.9	79.8	77.9
Computing Science	74.7	90	86.2	78	78.7
Design and Manufacture	70.4	90.5	86.3	80.6	76.7
Economics	90.7	98.4	98.3	92.5	89.4
Engineering Science	83.9	92.7	86.1	85.4	84.3
Environmental Science	48.8	84.6	82.1	64.3	46
Fashion and Textile Technology	59.2	91.6	90.2	69	72
Health and Food Technology	74.3	92.3	85	79.5	77.6
Mathematics	65.5	79.1	73	69.7	62.4
Matamataig (Mathematics)	0	0	98.2	77.1	69.4
Physics	74.6	86	81.3	74	70.9
Practical Electronics	85.7	85.7	86.7	81.4	86.4
Practical Metalworking	82.6	94.2	87.1	88	82.9
Practical Woodworking	85.9	94.3	92	91.8	90

- The A to C grade attainment for majority of STEM subjects in 2023 remained above levels observed in 2019.
- Economics, Environmental Science, Mathematics, and Physics were the only subjects to see lower A to C attainment in 2023 compared to 2019.

STEM vs. non-STEM subject attainment 2019 to 2023

A Grade

As widely predicted the proportion of students achieving an A grade in their National 5 examinations fell from 2022, but was higher than in 2019.

	Examination	Teacher Assessed Grading		Examination	Examination
Category	2019 (%)	2020 (%)	2021 (%)	2022 (%)	2023 (%)
STEM	30.8	37.4	39	35.7	33.4
Non-STEM	38.3	46.1	52.3	43.8	42.6
All Subjects	35.1	42.3	46.7	40.3	38.6

- The proportion of young people attaining A in STEM subjects is traditionally below non-STEM subjects, and remains that way for 2023.
- The percentage point change between 2022 and 2023 is larger in STEM subjects (-2.3%p) than non-STEM subjects (-1.2%p).
- The proportion attaining A in all subjects remains higher than in 2019.

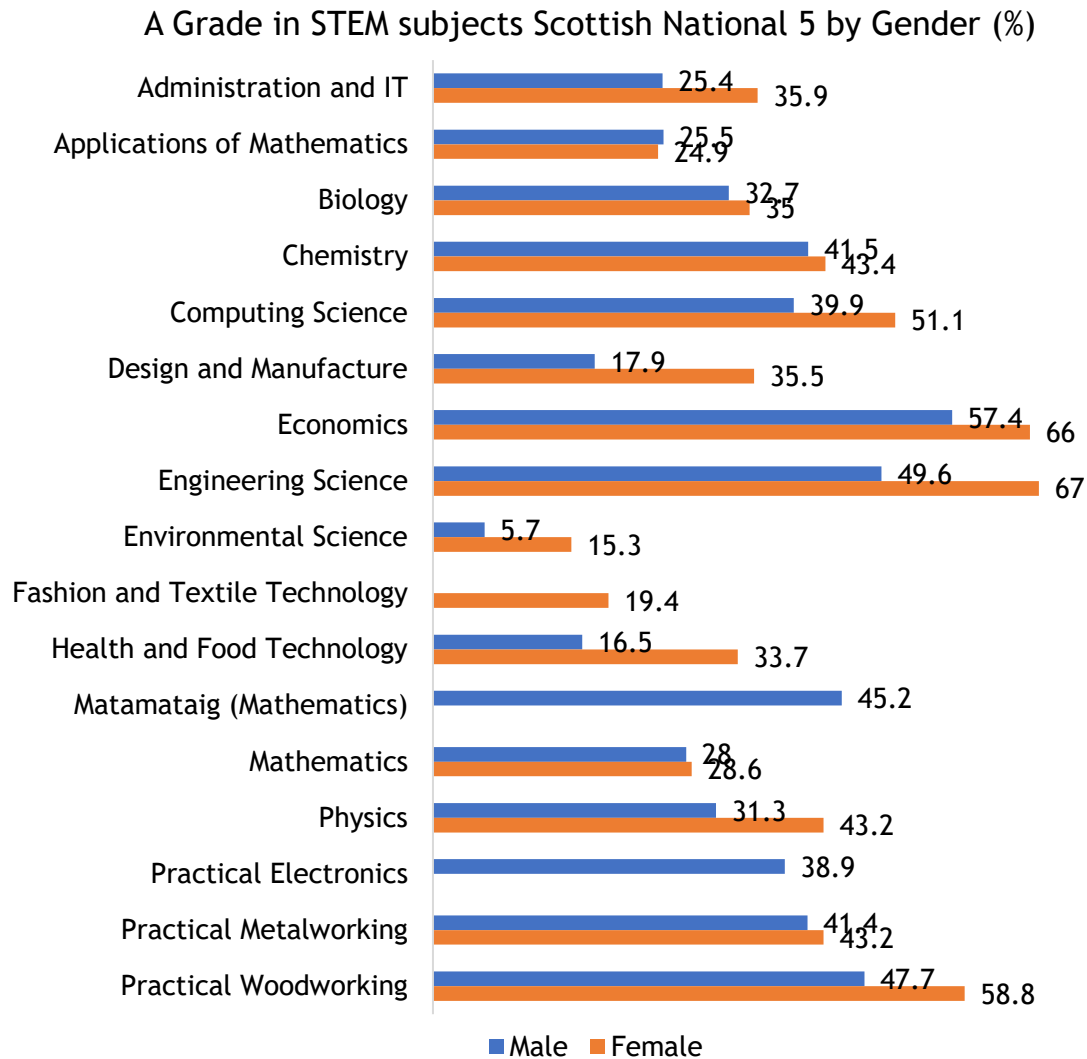
A to C Grade

	Examination	Teacher Assessed Grading		Examination	Examination
Category	2019 (%)	2020 (%)	2021 (%)	2022 (%)	2023 (%)
STEM	71.2	84.1	78.4	74.2	71.0
Non-STEM	83.4	92.8	91.2	85.9	84.8
All Subjects	78.2	89	85.8	80.8	78.8

- The proportion of young people attaining A to C in STEM subjects is below non-STEM subjects. While this has been the case since 2019, in 2023 the difference was the largest thus far at 13.8%p.
- The percentage point difference between 2022 and 2023 is larger for STEM subjects (-3.2%p) than non-STEM (-1.1%p).

Scottish National 5 STEM subjects by Gender

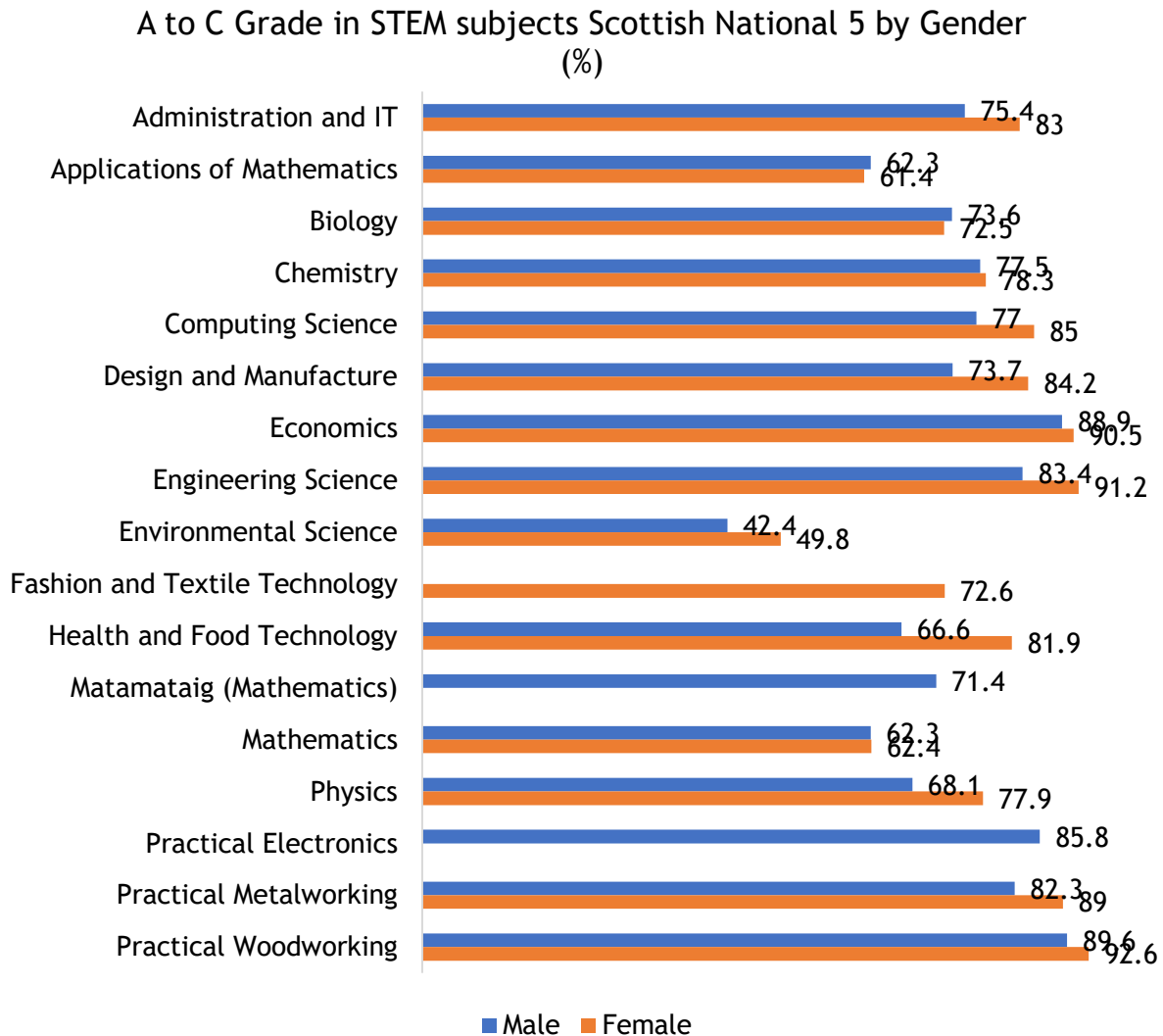
Proportion of A grades in STEM subjects by gender⁴



- Across the majority of STEM subjects there are more female students attaining an A grade, with the largest difference between male and female students in Design and Manufacture (17.6%), Engineering Science (17.4%) and Health and Food Technology (17.2%).
- Across all three core sciences, Biology, Chemistry and Physics, more female students achieved A grades than male students.

⁴ Fashion and Textile Technology data for male students and Matamataig and Practical Electronic data for female students is suppressed due to low numbers, to prevent risk of identification.

Proportion of A to C Grades in STEM subjects by gender⁵



- The gender difference between the proportion of female and male students with an A to C attainment in STEM subjects is less than the difference observed in A grade attainment. For example, there is a 3%p difference in Practical Woodworking between male and female students A to C attainment compared to the 11.1%p difference observed between the genders for A grade attainment.
- A larger proportion of male to female students attained an A to C grade in Biology (73.6% and 72.5% respectively) compared to the proportion of male to female students that attained A grades in Biology (32.7% and 35% respectively).

⁵ Fashion and Textile Technology data for male students and Matamataig and Practical Electronic data for female students is suppressed due to low numbers, to prevent risk of identification.