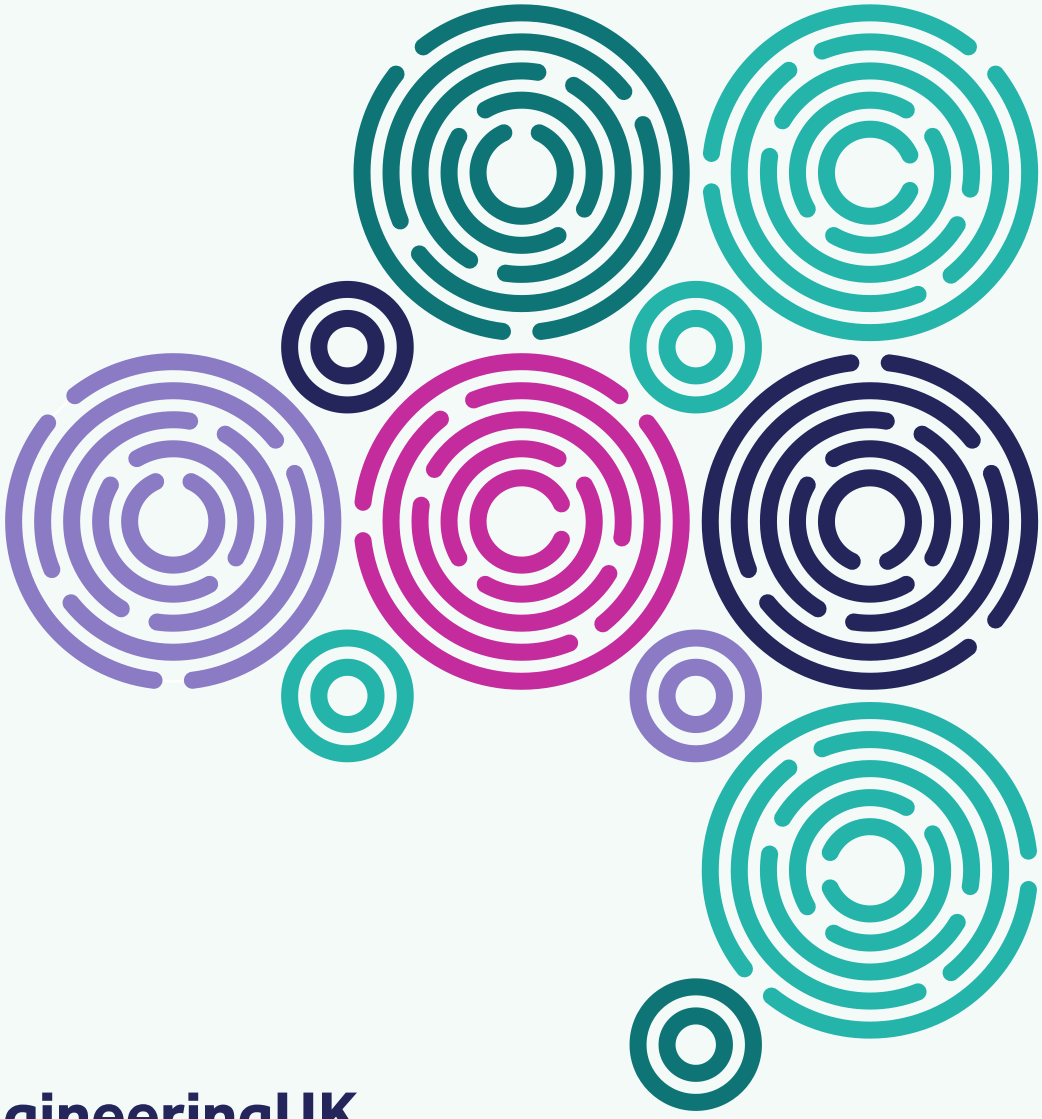
A LEVEL AND SCOTTISH HIGHER RESULTS

August 2025



EngineeringUK
INSPIRING FUTURES TOGETHER

engineeringuk.com

Contents

A level results 2025

Introduction

For 2025, normal exam grading was in place for the third year running, meaning 2025 data is directly comparable with 2023 and 2024. We have included 5 years' worth of data in this report, but it is still necessary to be cautious when comparing 2025 results with previous years. This is particularly the case for teacher-assessed grading in 2021. The data released on results day is followed by more detail later in the year, including demographics beyond gender.

The 2025 A level cohort is smaller than in 2024. Overall entries for A levels have reduced by 0.5%, from 886,514 in 2024 to 882,509 in 2025. Despite this small decline in overall entries, some STEM (Science, Technology, Engineering and Maths) subjects have seen increased uptake. The most notable increases were in Maths, Further Maths, Economics, Environmental Science and Physics. Maths once again increased, keeping entries over 100,000 for the second year running – a milestone reached for the first time by any A level subject in 2024.

A levels are completed across England, Northern Ireland and Wales. In Scotland the equivalent is Highers, which are covered later in this document.

Subject entries

STEM subject entries – proportion of entries

Subjects	2021	2022	2023	2024	2025
Biology	8.5%	8.5%	8.6%	8.4%	8.1%
Chemistry	7.3%	6.9%	7.1%	7.1%	7.2%
Computing	1.7%	1.8%	2.1%	2.3%	2.2%
Design and Technology	1.2%	1.3%	1.2%	1.2%	1.2%
Digital Technology*	-	-	0.2%	0.1%	0.1%
Economics	4.1%	4.3%	4.5%	4.6%	4.8%
Environmental Science*	-	-	-	0.2%	0.3%
Mathematics	11.8%	11.3%	11.2%	12.1%	12.7%
Mathematics (Further)	1.9%	1.8%	1.7%	2%	2.2%
Other sciences	0.3%	0.3%	0.3%	0.3%	0.3%
Physics	4.9%	4.7%	4.4%	4.9%	5.1%

*Digital technology and environmental science were not included in the data published by JCQ in the years with blank cells

- With 12.7% of all A level entries, Maths is once again the most popular subject in 2025. This is an increase from 11.2% in 2023 and 12.1% in 2024.
- STEM subjects make up 5 of the top 10 most popular subjects at A levels by entries – Maths (1st), Biology (3rd), Chemistry (4th), Physics (6th) and Economics (10th).
- Physics has increased from 4.9% of all entries in 2024 to 5.1% of entries in 2025. It is now the 6th most popular subject, up from 9th in 2024.

STEM subjects entries changes 2024 to 2025

Subjects	2024	2025	% change
Biology	74,367	71,400	-4.0%
Chemistry	62,583	63,538	1.5%
Computing	20,370	19,796	-2.8%
Design and Technology	10,548	10,576	0.3%
Digital Technology	1,038	959	-7.6%
Economics	40,451	42,667	5.5%
Environmental Science	2,132	2,392	12.2%
Mathematics	107,427	112,138	4.4%
Mathematics (Further)	18,082	19,390	7.2%
Other sciences	2,376	2,447	3.0%
Physics	43,114	44,957	4.3%

- Despite the decline in overall entries, some STEM subjects still saw an uptick in entries.
- There are notable increases in Environmental Science (+12.2%), Mathematics (Further) (+7.2%), Economics (+5.5%), Mathematics (+4.4%) and Physics (+4.3%).
- Design and Technology has seen a very slight increase (+0.3%) in entries but is still below the number of entries in 2023 (10,639 vs 10,576).
- Digital Technology has seen a large decrease of -7.6% between 2024 and 2025, though because of the relatively low number of entries, any change looks large.
- There have also been drops in Biology (-4%) and Computing (-2.8%).

Subject results

A* to A in STEM subjects

	Teacher assessed	Examinations	Examinations	Examinations	Examinations
STEM Subjects	**2021 (%)**	**2022 (%)**	**2023 (%)**	**2024 (%)**	**2025 (%)**
Biology	45.1%	34.9%	27.0%	27.7%	28.0%
Chemistry	48.6%	39.4%	32.2%	32.7%	32.6%
Computing	44.5%	35.4%	22.2%	24.0%	25.2%
Design and Technology	42.2%	30.8%	17.9%	19.3%	19.3%
Digital Technology*	-	-	23.3%	17.3%	25.0%
Economics	46.7%	38.3%	29.3%	30.2%	29.7%
Environmental Science	-	-	-	15.1%	14.0%
Mathematics	55.2%	48.2%	41.9%	42.0%	41.7%
Mathematics (Further)	75.5%	67.8%	58.5%	58.4%	58.2%
Physics	46.8%	39.5%	31.7%	31.9%	32.1%
Other sciences	41.3%	33.5%	26.6%	24.2%	24.2%

*Digital technology and environmental science were not included in the data published by JCQ in the years with blank cells

- There have been slight increases in the proportion of students attaining an A or A* in 4 of the 10 STEM subjects between 2024 to 2025.
- Digital Technology saw the largest increase (+7.7%p) in A and A* attainment, though the subject has relatively low take-up, so a small shift in numbers can show a large change.
- Environmental Science (-1.1%p) and Economics (-0.5%p) have seen slight drops in the proportion of A* to A grades awarded between 2024 and 2025.

A* to C in STEM subjects

	Teacher assessed	Examinations	Examinations	Examinations	Examinations
STEM Subjects	**2021 (%)**	**2022 (%)**	**2023 (%)**	**2024 (%)**	**2025 (%)**
Biology	86.7%	76.0%	68.6%	69.8%	71.8%
Chemistry	86.4%	76.3%	71.6%	73.5%	73.9%
Computing	87.2%	76.5%	65.8%	67.1%	70.2%
Design and Technology	88.1%	81.1%	68.9%	71.4%	71.9%
Digital Technology*	-	-	73.3%	69.2%	76.3%
Economics	90.4%	86.0%	80.2%	81.3%	82.5%
Environmental science	-	-	-	62.5%	62.9%
Mathematics	89.1%	80.5%	76.5%	76.7%	78.2%
Mathematics (Further)	95.4%	92.2%	88.5%	89.8%	89.6%
Physics	85.2%	77.6%	69.3%	69.7%	71.7%
Other sciences (2)	86.2%	77.0%	72%	68.7%	70.1%

*Digital technology and environmental science were not included in the data published by JCQ in the years with blank cells

- There have been slight increases in the proportion of students attaining an A*to C in 10 of 11 STEM subjects between 2024 to 2025.
- The largest increases are in Digital Technology (+7.1%p), Computing (3.1%p) and Biology (+2%p).

STEM subjects vs. non-STEM subjects – A* to A

	2023 (%)	2024 (%)	2025 (%)	2023 to 2025 (%p)	2024 to 2025 (%p)
STEM	33.5%	34.2%	34.3%	+0.8	+0.1
Non-STEM	22.8%	23%	23.5%	+0.7	+0.5
All Subjects	27.2%	27.8%	28.3%	+1.1	+0.5

- Over one third of all STEM subjects entered in 2025 resulted in an A* to A grade being awarded (34.3%), much higher than for non-STEM subjects.
- There has been a higher increase in the proportion of A* to A grades in non-STEM, and all subjects between 2024 and 2025 (0.5%p) than across STEM subjects.

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

	2023 (%)	2024 (%)	2025 (%)	2023 to 2025 (%p)	2024 to 2025 (%p)
STEM	73.3%	74.3%	75.9%	+2.6	+1.5
Non-STEM	77.9%	77.9%	79.6%	+1.7	+1.7
All Subjects	76.0%	76.4%	77.9%	+1.9	+1.5

- Over three quarters of all STEM subjects entered in 2025 resulted in an A* to C grade being awarded, lower than for non-STEM subjects.
- The 1.5%p increase in the proportion of A* to C grades in STEM subjects is in line with all subjects, but slightly lower than non-STEM subjects (+1.7%p).

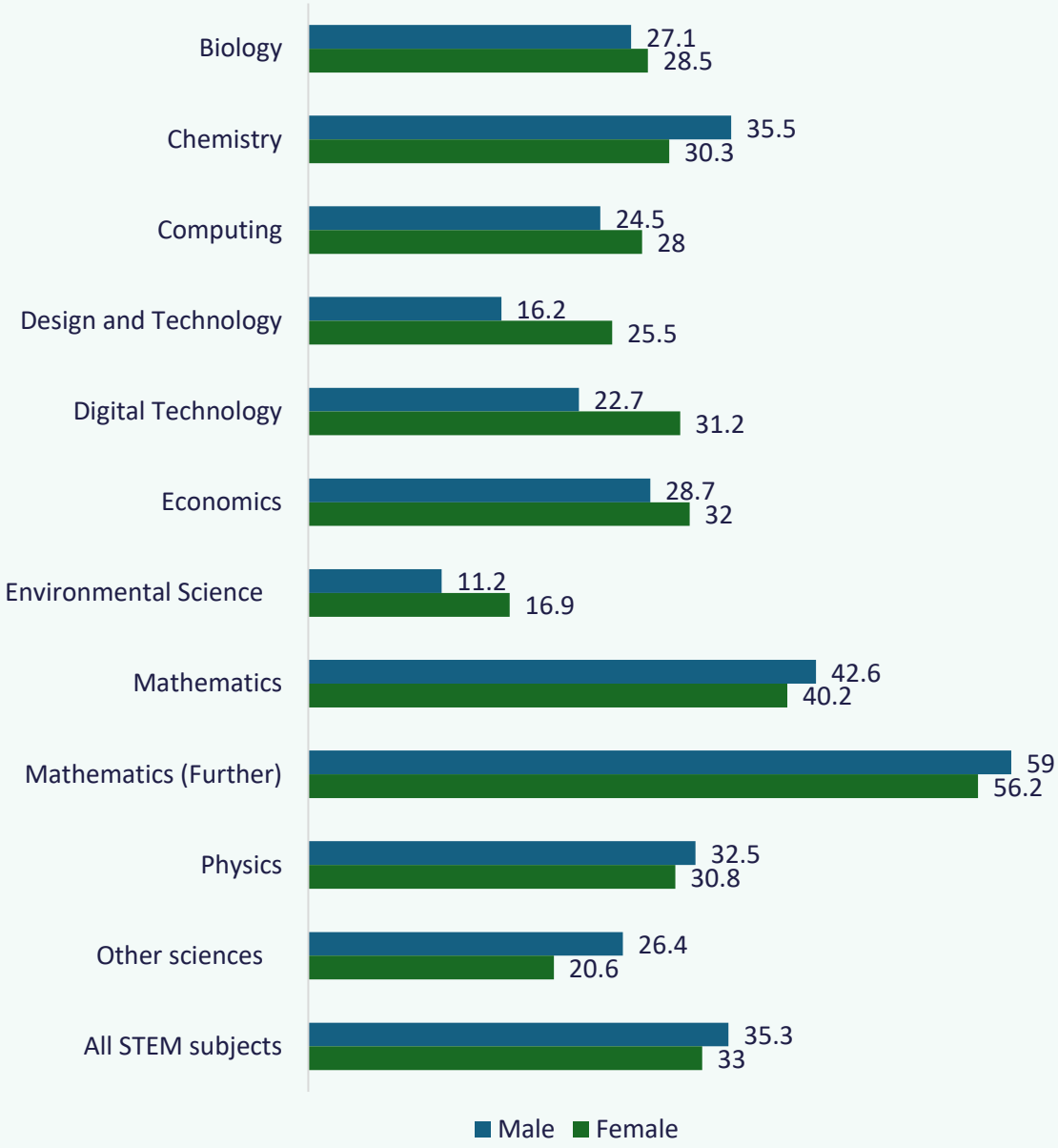
Gender

Entries by gender

Subjects	Total number of entries	Female entries	% female	Male entries	% males
Biology	71,400	45,891	64.3%	25,509	35.7%
Chemistry	63,538	35,578	56.0%	27,960	44.0%
Computing	19,796	3,679	18.6%	16,117	81.4%
Design and Technology	10,576	3,461	32.7%	7,115	67.3%
Digital Technology	959	266	27.7%	693	72.3%
Economics	42,667	12,912	30.3%	29,755	69.7%
Environmental Science	2,392	1,198	50.1%	1,194	49.9%
Mathematics	112,138	41,883	37.3%	70,255	62.7%
Mathematics (Further)	19,390	5,216	26.9%	14,174	73.1%
Physics	44,957	10,814	24.1%	34,143	75.9%
Other sciences (2)	2,447	903	36.9%	1,544	63.1%
All STEM subjects	390,260	161,801	41.5%	228,459	58.5%

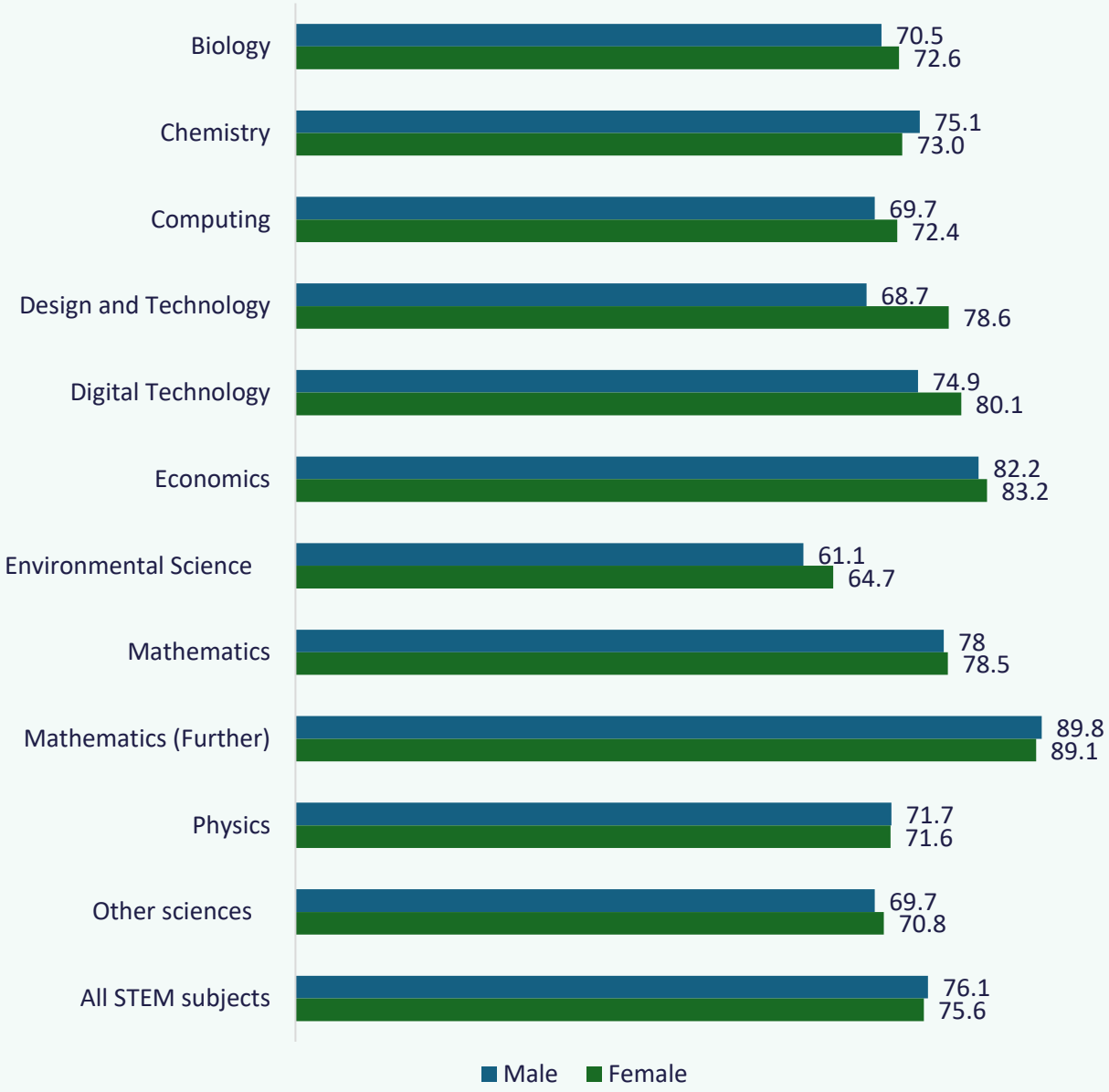
- For the majority of STEM subjects the number of entries by male students is higher than female students.
- The only STEM subjects where entries for female students are higher than male students are in Biology (64.3% vs. 35.7%) and Chemistry (56% vs. 44%).
- The gender gap between male and female students is particularly large in Computing (81.4% vs. 18.6%) and Physics (75.9% vs. 24.1%) where over three quarters of all entries are by male students.
- While the gaps remain large in Computing and Physics, it was encouraging to see growth in female entries for both subjects – Computing +3.5%, Physics +7.9%.
- There are also sizable differences in Mathematics (Further) (73.1% vs. 26.9%) and Digital Technology (72.3% vs. 27.7%).

A* to A grades in STEM subjects by gender



- Female students outperform male students in 6 of the 11 STEM subjects for the proportion attaining A* to A grades.
- Female students outperform male students most in Design and Technology (+9.3%p), Digital Technology (+8.5%p) and Environmental Science (+5.7%p).
- Male students outperform female students most in Other sciences (+5.8%p), Chemistry (+5.2%p) and Mathematics (Further) (+2.8%p).

A* to C grades in STEM subjects by gender



- Female students outperform male students in 8 of the 11 STEM subjects for the proportion attaining A* to C grades.
- Female students outperform male students most in in Design and Technology (+9.9%p), Digital Technology (+5.2%p) and Environmental Science (+3.6%p).
- Male students do better than female students in Chemistry (+2.1%p) and marginally better in Mathematics (Further) (+0.7%p) and Physics (+0.1%p)

Scottish Higher results 2025

Introduction

In 2024, the Scottish Higher assessments returned to full coursework, for the first time since 2019. The assessments have remained the same for 2025, making full comparisons to the previous year possible for the first time since the covid pandemic.

Subject entries

STEM subject entries

Subjects	2021	2022	2023	2024	2025
Mathematics	10.0%	9.6%	9.8%	9.4%	9.7%
Chemistry	5.1%	5.1%	5.0%	5.0%	5.0%
Physics	4.4%	4.3%	4.2%	4.1%	4.2%
Human Biology	3.9%	3.7%	3.7%	3.8%	3.6%
Biology	3.8%	3.9%	3.7%	3.6%	3.5%
Administration and IT	2.2%	2.3%	2.3%	2.3%	2.6%
Applications of Mathematics	0.0%	0.5%	0.8%	1.5%	2.3%
Computing Science	1.7%	1.9%	1.9%	1.9%	2.0%
Design and Manufacture	1.2%	1.2%	1.1%	1.0%	1.0%
Engineering Science	0.6%	0.6%	0.6%	0.7%	0.7%
Health and Food Technology	0.7%	0.7%	0.7%	0.7%	0.7%
Economics	0.3%	0.4%	0.5%	0.5%	0.4%
Environmental Science	0.3%	0.3%	0.3%	0.3%	0.2%
Fashion and Textile Technology	0.1%	0.2%	0.2%	0.2%	0.2%
Matamataig (Mathematics)	0.0%	0.0%	0.0%	0.0%	0.0%

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

- Mathematics is still the most entered STEM subject, it has seen a increase in its entry percentage share between 2024 and 2025 (+0.3%), although Applications of Mathematics has seen a larger increase (+0.8%). Application of Mathematics can be studied alongside or instead of Mathematics.
- 4 of the top 10 most entered subjects are STEM subjects: Maths (2nd), Chemistry (5th), Physics (8th) and Human Biology (9th).

STEM subjects entries changes 2024 to 2025

Subjects	2024	2025	% Change
Matamataig (Mathematics)	35	60	71.4%
Applications of Mathematics	2,995	4,680	56.3%
Fashion and Textile Technology	295	345	16.9%
Administration and IT	4,595	5,250	14.3%
Mathematics	18,480	19,705	6.6%
Physics	8,065	8,560	6.1%
Computing Science	3,745	3,960	5.7%
Chemistry	9,900	10,120	2.2%
Engineering Science	1,395	1,400	0.4%
Economics	925	910	-1.6%
Biology	7,130	7,010	-1.7%
Human Biology	7,450	7,320	-1.7%
Design and Manufacture	2,005	1,940	-3.2%
Health and Food Technology	1,385	1,330	-4.0%
Environmental Science	575	490	-14.8%

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

- Although Matamataig (Mathematics) has seen the largest increase of entries since 2024, the numbers entered were very small.
- Applications of Mathematics, which is an alternative to standard mathematics, has seen the largest in increase since 2024, with an 56.3% increase in entries. This has increased from 870 to 4,680 (+438%) since it was introduced in 2022.
- 9 of the 15 STEM subjects saw an increase in entries between 2024 and 2025.

Subject results

Grade A in STEM subjects

	Teacher Assessed	Exams	Exams	Exams	Exams
Subjects	**2021**	**2022**	**2023**	**2024**	**2025**
Administration and IT	48.7%	34.8%	32.6%	31.0%	33.4%
Applications of Mathematics	-	23.6%	24.8%	19.5%	15.6%
Biology	37.2%	30.4%	34.4%	27.9%	29.1%
Chemistry	43.4%	34.9%	32.6%	29.7%	32.0%
Computing Science	49.2%	36.0%	36.4%	38.3%	42.2%
Design and Manufacture	30.1%	17.5%	12.3%	11.0%	14.7%
Economics	63.1%	50.0%	37.6%	44.3%	45.6%
Engineering Science	40.1%	27.4%	23.7%	21.9%	26.1%
Environmental Science	35.0%	20.2%	13.7%	7.0%	12.2%
Fashion and Textile Technology	51.0%	19.4%	11.4%	16.9%	17.4%
Health and Food Technology	46.7%	16.5%	12.2%	19.9%	10.9%
Human Biology	32.7%	28.3%	29.6%	23.3%	26.2%
Matamataig (Mathematics)	50.0%	33.3%	37.5%	42.9%	33.3%
Mathematics	47.1%	45.9%	38.9%	40.4%	41.2%
Physics	42.5%	37.0%	34.1%	28.9%	27.7%
All STEM Subjects	42.8%	35.8%	33.0%	30.8%	31.7%

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

- The proportion of students attaining an A in STEM subjects has improved in 11 of the 15 STEM subjects between 2024 and 2025.
- The largest percentage point increases are in Environmental Science (+5.3%p), Engineering Science (+4.2%p) and Computing Science (+3.9%p).
- 4 subjects have seen a dip since last year 2024.
- The largest dips have occurred in Matamataig (Mathematics) (-9.5%p), however only small numbers of students were entered into this subject making it highly variable year on year. Health and Food Technology saw the second largest drop (-9%p), with a smaller (-3.9%p) drop for Applications of Mathematics.

Grade A-C in STEM subjects

	Teacher assessed	Exams	Exams	Exams	Exams
Subjects	**2021**	**2022**	**2023**	**2024**	**2025**
Administration and IT	90.9%	80.1%	79.9%	75.8%	79.0%
Applications of Mathematics	-	69.0%	73.7%	60.4%	64.3%
Biology	78.1%	75.3%	75.4%	70.6%	69.3%
Chemistry	81.4%	78.3%	77.8%	74.3%	76.1%
Computing Science	86.2%	71.2%	69.8%	72.8%	75.5%
Design and Manufacture	81.3%	67.5%	54.8%	51.6%	59.0%
Economics	92.6%	81.4%	74.2%	75.7%	80.2%
Engineering Science	83.1%	69.2%	63.9%	62.4%	61.4%
Environmental Science	80.6%	68.8%	59.8%	53.9%	52.0%
Fashion and Textile Technology	94.1%	72.2%	71.4%	83.1%	81.2%
Health and Food Technology	89.5%	67.9%	62.2%	66.1%	54.1%
Human Biology	76.6%	72.2%	71.0%	64.5%	68.4%
Matamataig (Mathematics)	83.3%	77.8%	75.0%	71.4%	66.7%
Mathematics	80.1%	75.3%	73.2%	72.7%	73.9%
Physics	80.8%	77.9%	77.2%	75.7%	73.7%
All STEM Subjects	81.3%	75.2%	73.5%	70.8%	72.0%

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

- There has been an increase in the proportion of students attaining an A-C in 8 of the 15 STEM subjects between 2024 to 2025.
- The largest increases have been in Design and Manufacture (+7.4%p), Economics (+4.5%p) and Human Biology (+3.9%p).
- The largest dips have been in Health and Food Technology (-11.9%p), Matamataig (Mathematics) (-4.8%p) and Physics (-2%p). As highlighted Matamataig (Mathematics) has a very small number of entries and is therefore highly volatile to changes year on year.

STEM subjects vs. non-STEM subjects – A grade

	Teacher assessed	Exam	Exam	Exam	Exam
	2021	2022	2023	2024	2025
STEM	42.8%	35.8%	33.0%	30.8%	31.7%
Non-STEM	50.2%	34.3%	32.7%	30.0%	30.3%
All Subjects	47.6%	34.8%	32.8%	30.3%	30.8%

- The proportion of entries to STEM subjects attaining an A grade is slightly above non-STEM subjects and All subjects.
- The proportion of entries to STEM subjects attaining an A grade has slightly improved since last year.

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

	Teacher assessed	Exam	Exam	Exam	Exam
	2021	2022	2023	2024	2025
STEM	81.3%	75.2%	73.5%	70.8%	72.0%
Non-STEM	90.5%	80.9%	79.0%	77.1%	78.1%
All Subjects	87.3%	78.9%	77.1%	74.9%	75.9%

- The proportion of entries to STEM subjects attaining an A – C grade is below non-STEM subjects and All subjects.
- The proportion of entries to STEM subjects attaining an A- C grade has improved and in line with increases for non-STEM and all subjects.

Gender

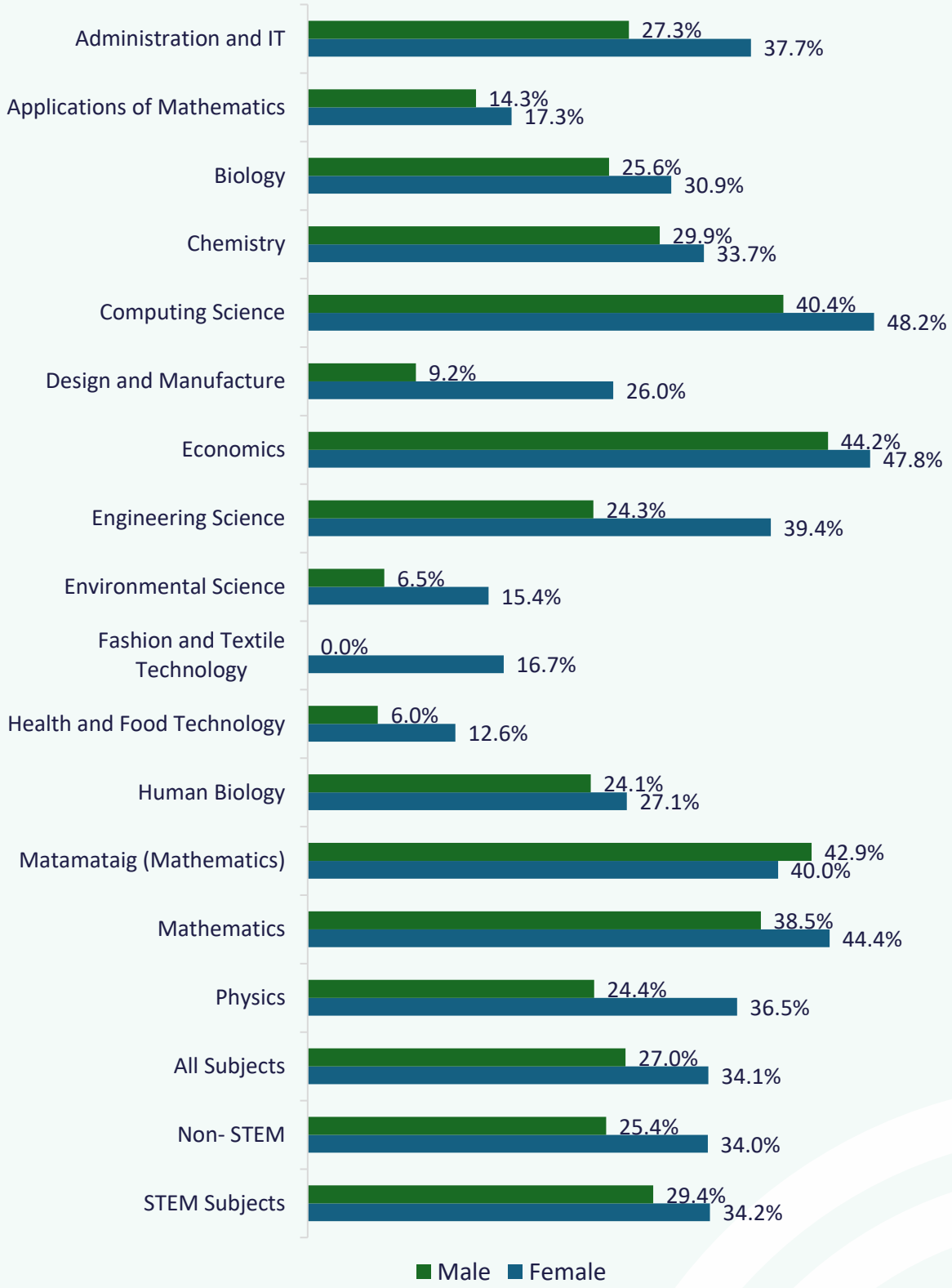
Entries by gender

Subject	All entries	Female entries	% of entries female	Male entries	% of entries male
Administration and IT	5,250	3,090	59%	2,160	41%
Applications of Mathematics	4,680	1,990	43%	2,690	57%
Biology	7,010	4,610	66%	2,400	34%
Chemistry	10,120	5,505	54%	4,610	46%
Computing Science	3,960	820	21%	3,140	79%
Design and Manufacture	1,940	635	33%	1,305	67%
Economics	910	345	38%	565	62%
Engineering Science	1,400	165	12%	1,235	88%
Environmental Science	490	260	53%	230	47%
Fashion and Textile Technology	345	330	96%	15	4%
Health and Food Technology	1,330	995	75%	335	25%
Human Biology	7,320	5,030	69%	2,285	31%
Matamataig (Mathematics)*	60	25	42%	35	58%
Mathematics	19,705	9,000	46%	10,705	54%
Physics	8,560	2,300	27%	6,260	73%
All STEM subjects	73,080	35,100	48%	37,970	52%
Non-STEM subjects	129,395	73,980	57%	55,405	43%
All subjects	202,490	109,090	54%	93,360	46%

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

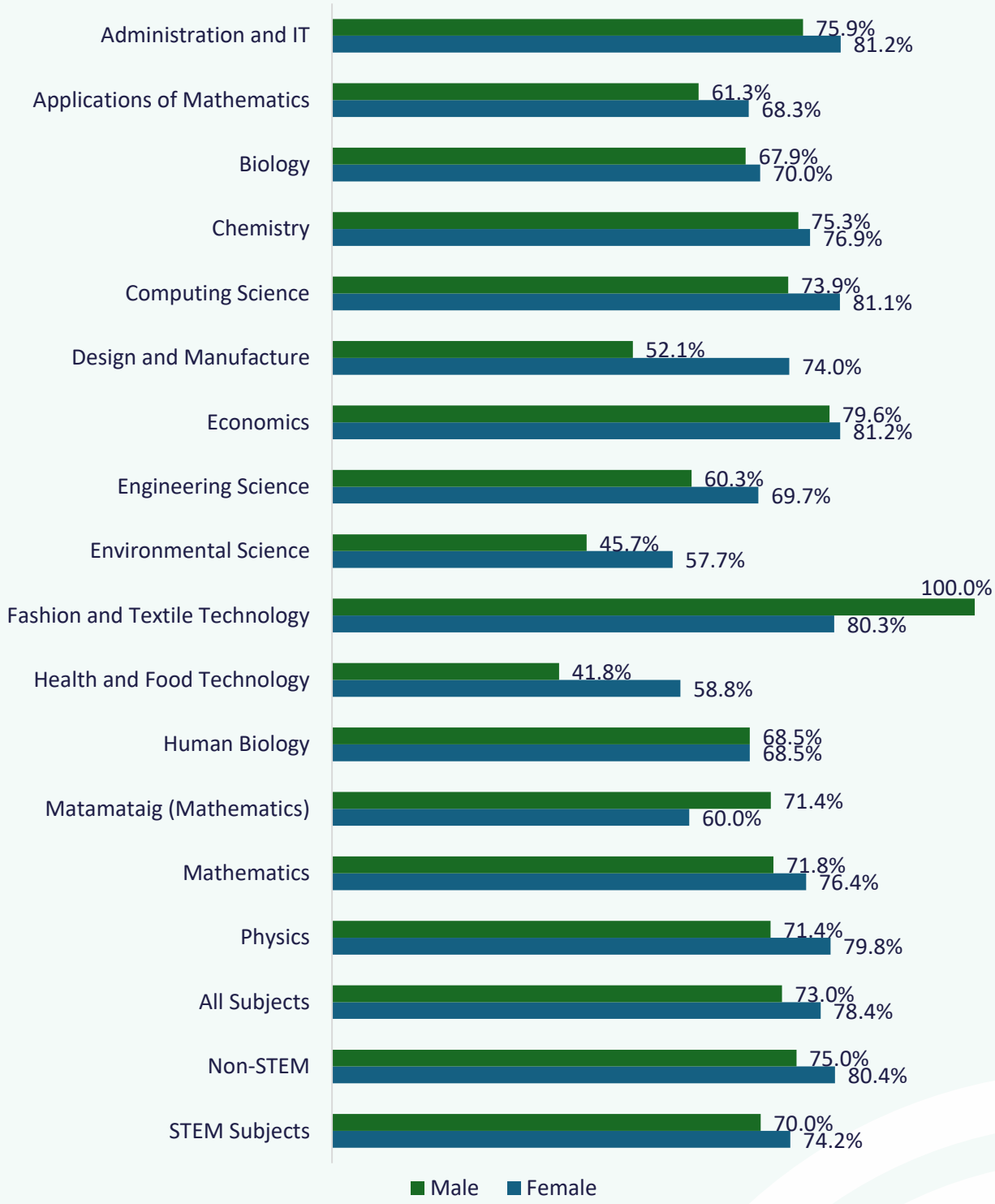
- More female than male students were entered for 7 of the 15 STEM subjects.
- Subjects with the highest proportion of female students were in Fashion and Textile Technology (96% vs. 4%), Health and Food Technology (75% vs. 25%) and Human Biology (69% vs. 31%).
- Subjects with the highest proportion of male students were in Engineering Science (88% vs. 12%), Computing Science (79% vs. 21%) and Physics (73% vs. 27%).

A grade in STEM subjects by gender



- Female students outperform male students in 14 of the 15 STEM subjects.
- The largest gap between female and male students are in Design and Manufacture (+16.8%), Fashion and Textile Technology (+16.7%) and Engineering Science (+15.1%).
- Male students only outperform female students in Matamataig (Mathematics) (+2.9%), however the number of students entered for this subject is very small.

A to C grade in STEM subjects by gender



- Female students outperform male students in 12 out of 15 STEM subjects for the proportion attaining an A to C grade.
- The largest gap between female and male students are in Design and Manufacture (+21.9%), Health and Food Technology (+17%) and Environmental Science (+12%)
- Male students outperform female students in Fashion and Textile Technology (+19.7%), although only 15 male students entered this subject and Matamataig (Mathematics) (+11.4%).