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Report on the Scaling of the 2023 NSW Higher School Certificate

Contents

Preface

In New South Wales student achievement in Stage 6 (Years 11 and 12) is reported in two ways: through the Higher School Certificate Record of Achievement and through the Australian Tertiary Admission Rank (ATAR).

A student's Higher School Certificate Record of Achievement presents a profile of their achievement in the courses they have completed, both academic and vocational. Their achievement is reported in terms of the standards they have reached in the courses they have completed.

In contrast, the Australian Tertiary Admission Rank (ATAR) is a numerical measure of a student's overall academic achievement in the HSC in relation to that of other students. This measure allows the comparison of students who have completed different combinations of HSC courses and indicates each student's position relative to others. The ATAR is calculated solely for use by universities, either on its own or in conjunction with other selection criteria, to rank and select school leavers for admission to university.

Calculation of the ATAR is the responsibility of the Technical Committee on Scaling on behalf of the NSW Vice-Chancellors' Committee. The NSW Education Standards Authority (NESA) provides the HSC data from which the ATARs are calculated and the Universities Admissions Centre (UAC) advises individual students of their ATARs.

This report contains information on the calculation of the ATAR in 2023.

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May 2024

Acknowledgements

Definitions

ABS

The ABS is the Australian Bureau of Statistics.

ATAR cohort

ATAR cohort is used to refer to those students who received an ATAR in a particular year. The students may have accumulated courses over a five-year period.

ATAR courses

ATAR courses are Board Developed courses for which there are examinations conducted by NESA that yield graded assessments. Life Skills courses and Board Endorsed courses are not ATAR courses. If students wish to have English Studies, Mathematics Standard 1 or a VET course contribute to their ATAR eligibility requirements and calculation, they must enrol in the appropriate additional examination course and complete the examination.

Board Developed courses

Board Developed courses are courses whose syllabuses have been developed by NESA.

Board Endorsed courses

Board Endorsed courses are courses whose syllabuses have been approved by NESA but which do not have formal examinations conducted by NESA.

HSC cohort

HSC cohort refers to students who have completed at least one ATAR course in a particular year.

NESA

NESA refers to the NSW Education Standards Authority (NESA).

VET examination courses

The VET Curriculum Frameworks are based on training packages where the assessment is competency based. As competency-based assessment does not yield a mark that can be used in the ATAR calculations, NESA introduced an additional course for each VET Curriculum Framework that includes an examination. If students wish to have a VET course contribute to their ATAR eligibility requirements and calculation, they must enrol in the appropriate additional course and complete the examination. These additional courses are termed VET examination courses. Students who do not want their VET courses to contribute towards their ATARs are not required to complete these optional examinations.

1   The Higher School Certificate (HSC)

The Higher School Certificate (HSC) is an exit certificate awarded and issued by NESA. It marks the completion of 13 years of schooling, is the gateway to further study and employment, and presents a profile of student achievement in a set of courses.

1.1   Eligibility for an HSC

To qualify for an HSC, students must complete a pattern of Preliminary and HSC courses containing at least 12 units of Preliminary courses and at least 10 units of HSC courses.

These HSC courses must include at least:
■ 6 units of Board Developed courses
■ 2 units of a Board Developed course in English
■ three courses of 2-unit value or greater (either Board Developed or Board Endorsed courses)
■ four subject areas.

More details about HSC eligibility and HSC courses are available on NESA's website.

1.2   Reporting student achievement in the HSC

For most ATAR courses, NESA reports student achievement against published standards by:
■ an examination mark
■ a school assessment
■ an HSC mark
■ a performance band.

These results are shown on a student's Record of Achievement. A Course Report is also provided for most Board Developed courses. The report describes the standard achieved in the course using performance bands and provides a graph indicating the student's position in the course candidature.

1.2.1   Defining standards by performance bands

Standards in a course are described in terms of the content, skills, concepts and principles relevant to the course and represent the range of achievement expected of students completing the course. Performance band descriptors, which describe typical achievement at different standards (bands), have been developed for each course. There are six performance bands for 2-unit courses and four performance bands for Extension courses.

The percentage of students in any performance band depends only on how many students enrolled in that course perform at the standard specified by the performance band descriptor. There are no predetermined percentages of students to be placed in the performance bands.

It follows that, although the standards described by the performance bands in a course will be the same from year to year, standards in different courses are not the same as they are based on different criteria. Because of this, it should not be expected that the percentages of students in the six bands will be the same across courses. For any course, the percentages will also vary from year to year if the performance of the cohort choosing that subject changes.

The ranges of marks for the bands are as follows:

2-unit courses

Band	1	2	3	4	5	6
Mark range	0–49	50–59	60–69	70–79	80–89	90–100

Extension courses (except Mathematics Extension 2)

Band	E1	E2	E3	E4
Mark range	0–24	25–34	35–44	45–50

Mathematics Extension 2*

Band	E1	E2	E3	E4
Mark range	0–49	50–69	70–89	90–100

Mathematics Extension 2 students have their achievement for both Mathematics Extension 1 and Mathematics Extension 2 reported using four bands but the mark range is out of 100 rather than 50.

1.2.2 Examination marks

The examination mark reported on a student's Record of Achievement indicates the standard a student has attained in that examination. If, for example, a student's performance in the Society and Culture examination is at the standard described for Performance Band 3, the examination mark reported on their Record of Achievement for that course will lie between 60 and 69. In general, this mark, termed the aligned examination mark, will differ from the mark the student actually gained on the examination (the raw examination mark).

The aligned mark indicates the standard reached by a student and their position in the performance band. For example, a mark of 62 means that, while the student has performed at a Performance Band 3 standard, their achievement is towards the bottom of this band.

1.2.3 School assessments

To enable school assessments from different schools to be compared, marks submitted by schools (raw assessments) are first moderated using the raw examination marks gained by their students and then aligned to course standards. The school assessments reported on a student's Record of Achievement are the aligned assessments.

The process used for the moderation of school assessments and subsequent alignment with standards ensures that the rank order of a school's students in a course is maintained.

1.2.4 HSC marks

For each course, students receive three marks — an examination mark, a school assessment and an HSC mark — all of which have been aligned to NESA's published standards and rounded to whole numbers. The HSC mark is the average of the examination mark and the school assessment. It is the HSC mark that determines a student's performance band for the course.

Further details about NESA's processes can be found on NESA's website.

2 The Australian Tertiary Admission Rank (ATAR) – an overview

2.1 Background

The Australasian Conference of Tertiary Admission Centres (ACTAC) agreed that, as of 2010, all states and territories would adopt a common name for the ranking index used to rank students for university admission. The agreed name was the Australian Tertiary Admission Rank (ATAR). The name change was to emphasise the common scale used for reporting student ranks. NSW and the ACT adopted the new name in 2009.

The ATAR is a numerical measure of a student's overall academic achievement in the HSC in relation to that of other students. This measure allows the overall achievement of students who have completed different combinations of HSC courses to be compared. The ATAR is calculated solely for use by tertiary institutions, either on its own or in conjunction with other criteria, to rank and select school leavers for admission. Calculation of the ATAR is the responsibility of the Technical Committee on Scaling on behalf of the NSW Vice-Chancellors' Committee.

The ATAR, which aims to provide a fair and equitable method of ranking applicants from all states, is based on the assumption that the age cohorts from which the states' Year 12 cohorts are drawn are equally able to undertake tertiary study. That is, if everyone in the age group completed Year 12, it would be fair to consider the same proportion of each state's students as admissible to any particular university course.

The result of this procedure in NSW is a number which represents the position of a student in the appropriate age cohort, based on their overall academic achievement in the HSC.

From 1998 until 2013 NSW used data from the School Certificate tests administered by NESA as the link that enabled the positions of HSC students relative to their Year 10 group to be estimated from their positions relative to their Year 12 group. With the move to the ATAR in 2009, the School Certificate group was expanded to more accurately reflect the entire HSC-aged population of the state. The last School Certificate tests were held in 2011 so that procedure is no longer available.

From 2014 to 2016, a two-parameter logistic function was used to translate the HSC students' positions based on their scaled aggregate marks into ATARs. This was consistent with the procedure that had been used in most other jurisdictions without Year 10 examinations.

In 2016, all jurisdictions agreed to transition to a consistent process using a one-parameter cubic spline function, depending only on the proportion of the age cohort that is ATAR-eligible, as the means for converting student aggregates into ATARs. This was implemented in NSW in 2017, and with Queensland adopting the same methodology in 2020, all jurisdictions across Australia are now using the one-parameter cubic spline function. It should be emphasised that these changes do not alter the rank order of students, and that the changes in methodology outlined above are sufficiently small to permit valid comparisons of ATARs obtained in different years.

The ATAR is calculated as a number between 0 and 99.95 with increments of 0.05. The ATAR is not a mark. Specifically, a student's ATAR indicates the position of that student relative to the entire HSC-aged population of the state. Students who receive an ATAR of 80.00 in 2023, for example, have performed well enough in the HSC to place them 20 per cent from the top if every HSC-aged person in the state had been ATAR-eligible.

ATAR are calculated for all ATAR-eligible students. Students can obtain their ATAR by downloading their ATAR Advice Notice. ATARs are also made available to institutions for selection purposes.

2.2 Categorisation of ATAR courses

ATAR courses are assessed by formal examinations conducted by NESA and have sufficient academic rigour to be regarded as suitable preparation for university study.

ATAR courses are classified as either Category A or Category B courses. The criteria for Category A courses are academic rigour, depth of knowledge, the degree to which the course contributes to assumed knowledge for tertiary studies, and the coherence with other courses included in the ATAR calculations.

Category B courses are those whose level of cognitive and performance demands are not regarded as satisfactory in themselves, but their contribution to a selection index is regarded as adequate if the other courses included in the aggregate are more academically demanding. Note that English Studies Examination, a Category B course introduced in 2019, can be used by students to satisfy the 2 units of English requirement for ATAR eligibility.

The Category B courses in 2023 were:

- Automotive Examination
- Business Services Examination
- Construction Examination
- Electrotechnology Examination
- English Studies Examination
- Entertainment Industry Examination
- Financial Services Examination

- Hospitality Examination
- Human Services Examination
- Information and Digital Technology Examination
- Mathematics Standard 1 Examination
- Primary Industries Examination
- Retail Services Examination
- Tourism, Travel and Events Examination

2.3 Eligibility for an ATAR in 2023

To be eligible for an ATAR a student must have satisfactorily completed at least 10 units of ATAR courses, which included at least:

- 8 units of Category A courses
- 2 units of English
- three courses of 2 units or greater
- four subject areas.

2.4 Calculation of the ATAR

The ATAR is based on an aggregate of scaled marks in 10 units of ATAR courses comprising:

- the best 2 units of English
- the best 8 units from the remaining units, provided that no more than 2 units of Category B courses are included.

Marks to be included in the ATAR calculations can be accumulated over a five-year period but if a course is repeated only the last satisfactory attempt is used in the calculation of the ATAR.

For students accumulating courses towards their HSC, scaled marks are calculated in the year the courses are completed.

2.5 The ATAR Advice Notice

The ATAR Advice Notice includes:

- the student's ATAR
- a list of the ATAR courses which the student studied and the categorisation of each course
- the number of units of each ATAR course that were actually included in the calculation of the ATAR.

ATAR are calculated for all ATAR-eligible students. Students can download an ATAR Advice Notice.

There are two circumstances where an ATAR will not be shown on the ATAR Advice Notice. The first is when a student receives an ATAR between 0.00 and 30.00, in which case the ATAR will be indicated as '30 or less'. The second is when the student has not met the requirements for an ATAR, in which case the statement 'Not Eligible' will appear.

An example of an ATAR Advice Notice is given below.

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AUSTRALIAN TERTIARY ADMISSION RANK.
2023 ADVICE

Full name	JANE CITIZEN
Year 12 student number	12XXXXXX
AUSTRALIAN TERTIARY ADMISSION RANK (ATAR)	75.80 *SEVEN*FIVE***EIGHT*ZERO*

Shown below are the ATAR courses which were available for inclusion in the ATAR, together with the units that were actually included in the calculation. Information about ATAR eligibility and the calculation of the ATAR are available at http://www.uac.edu.au/atar

Course name	Category	Unit value	Units included in calculation of ATAR
English Standard	A	2	2
Geography	A	2	2
Legal Studies	A	2	1
Mathematics Advanced	A	2	2
Studies of Religion I	A	1	1
Hospitality Examination	B	2	2

Dr David Christie
Managing Director

3 Calculating the ATAR in 2023

3.1 Overview

Tertiary institutions are concerned with ranking school leaver applicants. From their perspective, the importance of HSC marks is that they convey information about a student's position in relation to other students.

With the exception of English, which is compulsory, students are free to choose their courses of study. Consequently, individual course candidatures vary in size and nature, and there are many different enrolment patterns. In 2023 there were 25,304 different enrolment patterns for ATAR-eligible students; only 248 of these combinations were completed by 20 or more students and 18,275 were taken by only one student. Given the choice available, it follows that a student's rank in different courses will not necessarily have the same meaning, as good rankings are more difficult to obtain when the student is competing against students of high academic ability.

Because of the lack of comparability of HSC marks achieved in different courses, either when reported against standards or in terms of ranking, marks of individual students are scaled before they are added to give the aggregates from which the ATARs are determined.

The scaling process is designed to encourage students to take courses that best suit them and prepare them for future studies. The underlying principle is that a student should neither be advantaged nor disadvantaged by choosing one HSC course over another. The scaling algorithm determines what students' marks would have been if all courses had been studied by all students and all courses had the same distribution of marks.

The scaling model assumes that a student's position in a course depends on the student's developed ability in that course and the 'strength of the competition'. Since the ATAR is a rank that reflects academic achievement, 'strength of the competition' is defined in terms of the demonstrated overall academic attainment of a course candidature.

Scaling first modifies the mean, the standard deviation (SD) and the maximum mark in each course. Adjustments are then made to the marks of individual students to produce scaled marks, which are the marks the students would have received if all courses had the same candidature and the same mark distribution.

Although scaled marks are generally different from the raw marks from which they are derived, the ranking of students within a course is not changed.

Once the raw marks have been scaled, aggregates are calculated for ATAR-eligible students. In most cases, the ranking or order of merit based on these aggregates is quite different from the order of merit using aggregates based on HSC marks.

The penultimate step is to determine what the percentiles would have been if all HSC-aged persons in the state were eligible for an ATAR. The last step is to truncate these percentiles to the nearest 0.05. These are the ATARs.

Each ATAR corresponds to a range of aggregates. The target for the number of students with each ATAR varies and is calculated using the cubic spline function referred to in section 2.1. The presence of candidates tied on the same aggregate means that the actual number of students with each ATAR may differ slightly from the calculated target.

The scaling process is carried out afresh each year. It does not assume that one course is intrinsically more difficult than another or that the quality of the course candidature is always the same. All students who complete at least one ATAR course in a given year are included in the scaling process for that year. Students accumulating courses towards their HSC have their scaled mark for each course calculated in the year the course is completed.

3.2 The scaling process in 2023

The scaling procedure used to produce ATARs in 2023 was unchanged from that used in 2022.

3.2.1 Marks used in the ATAR calculations

For each course a student completes, NESA provides the following marks:

- a raw examination mark
- a raw moderated school assessment[1]
- an examination mark, which has been aligned to course standards
- a moderated school assessment, which has been aligned to course standards
- an HSC mark.

All marks are provided on a 1-unit basis to one decimal place. In the description of the scaling process that follows, to cater for both 2-unit and Extension courses, marks are described on a 1-unit basis.

3.2.2 Raw HSC marks

Raw HSC marks, rather than the HSC marks reported by NESA, are used in the scaling process. A student's raw HSC mark in a course is the average of their raw examination mark and their raw moderated school assessment. These marks are not reported to students.

3.2.3 Combined courses

As NESA places English Studies, English Standard and English Advanced raw marks on a common scale, these courses are combined and scaled as a single course but are reported as separate courses in order to be consistent with NESA's reporting practice.

Similarly, while the examinations for the Hospitality VET Frameworks are separated into two streams, NESA places the raw examination marks for the streams on a common scale. Consequently, the Hospitality Exam is scaled as a single course.

In 2020, NESA implemented changes to the examination arrangements for Mathematics Standard 1, Mathematics Standard 2 and Mathematics Advanced which enable them to provide additional information that can be used as the basis for placing the raw marks of these three subjects on a common scale. Currently, neither NESA nor the ATAR calculation process makes any use of this data. While studies are being undertaken to evaluate its usefulness and reliability for ATAR calculation, there are no current plans to change the scaling procedures used for these courses. If it is determined that changes are desirable, they will be announced before the first cohort affected begins their Year 11 studies.

3.2.4 Initial standardisation

Before the scaling algorithm is implemented, a linear transformation is applied to the raw HSC marks in each course to set the top mark to a common value. The marks in each course are then standardised to a mean of 25 and standard deviation of 12 on a 1-unit basis.

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[1] *These are school assessment marks that have been moderated using the raw examination marks.*

3.2.5 Calculating scaled means and standard deviations

The model underpinning the scaling algorithm specifies that the scaled mean in a course is equal to the average academic achievement of the course candidature where, for individual students, the measure of academic achievement is taken as the average scaled mark in all courses completed. The model specification leads to a set of simultaneous equations from which the scaled means of 2-unit courses are calculated.

The scaled standard deviation for a 2-unit course is the standard deviation of the measure of overall academic achievement of the candidature of that course.

For Extension courses, the scaled means and standard deviations are determined by the performance of the Extension students on the corresponding 2-unit courses. The exceptions are: History Extension, which can be completed by both Modern History and Ancient History students; Science Extension, which can be taken by students doing up to three 2-unit science courses (out of Biology, Chemistry, Earth and Environmental Science, Investigating Science and Physics); and the second Extension courses in English and Mathematics (English Extension 2 and Mathematics Extension 2).

A scaled mean is determined for the Modern History students in History Extension on the basis of their performance in the 2-unit Modern History course. A scaled mean for the Ancient History students in History Extension is found in a similar manner. The scaled mean for History Extension is then set equal to the weighted average of these two scaled means. The scaled standard deviation is found in a similar manner.

In the same way, the scaled mean and standard deviation of Science Extension are the weighted average of the scaled means and standard deviations of five groups of students, with each of the scaled mean and standard deviation calculated for students in Science Extension on the basis of their separate performances in 2-unit Biology, Chemistry, Earth and Environmental Science, Investigating Science and Physics.

Scaled means and standard deviations for English and Mathematics Extension 1 courses are calculated as described above. The scaled mean and standard deviation for the Mathematics Extension 2 course are then determined by the performance of the Extension 2 students in the Mathematics Extension 1 course. For English Extension 2, the scaled mean and standard deviation are determined by the performance of the Extension 2 students in English Advanced. (This option is not available for Mathematics as the Extension 2 students do not complete the 2-unit Mathematics Advanced paper.)

3.2.6 Setting maximum marks

The maximum scaled mark in a course is determined according to the academic quality of the course candidature in such a way that the maximum scaled mark for the combined 2-unit English candidature is 50 on a 1-unit basis. With the introduction of English Studies Examination in 2019, the combined 2-unit English candidature consists of students who have taken English Studies Examination, English Standard and English Advanced.

In 2023 the maximum scaled mark in a course was given by the smaller of 50 and the scaled mean + 2.47 times the initial scaled standard deviation, where the scaled mean and initial scaled standard deviation of the course are determined using the scaling algorithm.

The multiple, which in 2023 was 2.47, is calculated afresh each year using the scaled mean and initial scaled standard deviation in English.

3.2.7 Scaling individual marks

Once the scaled means and standard deviations are determined, individual raw marks are scaled using a non-linear transformation which preserves the scaled mean and standard deviation of a course and restricts the scaled marks to the range (0–50).

If this transformation results in a maximum scaled mark which is less than the maximum scaled mark described in 3.2.6, a further linear transformation is applied. The effect of this linear transformation is to increase the standard deviation so that the actual maximum scaled mark in the course is changed to be the same as the maximum scaled mark described in 3.2.6. This further transformation does not affect the scaled mean. In all tables presented in this report, the modified scaled standard deviations rather than the initial scaled standard deviations are shown.

For some courses with very small candidatures the non-linear transformation is not always appropriate, in which case alternative transformations, which are consistent with the principles of the scaling algorithm, are used.

3.2.8 Calculating aggregates and ATAR-eligible percentiles

Aggregates of scaled marks are calculated to one decimal place according to the rules described in section 2.4. In 2023 there were 4,536 distinct aggregates. There are a large number of tied results with some aggregates shared by 30 or more students.

Table 3.1 shows the ATAR-eligible percentiles (the percentage of the ATAR cohort who have received an aggregate mark less than or equal to a given aggregate) corresponding to selected aggregates for the 2023 ATAR cohort. From the table, it can be seen that, for example, 76.8 per cent of the 2023 ATAR cohort received an aggregate mark of 350 or less.

Table 3.1 ATAR-eligible percentiles corresponding to selected aggregates in 2023

Aggregate	ATAR-eligible percentile
450.0	98.3
400.0	90.0
350.0	76.8
300.0	60.8
250.0	44.5
200.0	29.0
150.0	15.3

3.2.9 Calculating the ATAR

Since 2017, a one-parameter cubic spline model has been used in NSW to translate the ATAR-eligible percentiles into ATARs. This model was adopted by some jurisdictions in 2016, was used in all jurisdictions except Queensland from 2017, and was adopted by Queensland in 2020. The model depends only on the participation rate observed in the jurisdiction.

The specific form of the cubic spline function depends on the proportion of students in the target population who are ATAR-eligible. This proportion is called the participation rate. The target population served by UAC consists of students from the ACT and NSW. In 2023 the ACT and NSW combined participation rate, determined using ABS data, was 56.0 per cent, up from 55.6 per cent in 2022. To avoid distortions to the model that might impact the comparability of ATARs obtained in different jurisdictions, the processes described in this section are implemented with reference only to the results of students whose studies took place in NSW or the ACT and who were aged 16-20 on 30 June 2023.

For jurisdictions with participation rates between 25 per cent and 75 per cent, the model expects that the proportion of people whose percentile rank within the target population is x who will be ATAR-eligible is given by

$$\frac{x^3}{(1000\alpha)^2} \quad \text{if } 0 \le x \le 100\alpha \text{ and } 1 - \frac{(100-x)^3}{(1000-1000\alpha)^2} \text{ if } 100\alpha \le x \le 100$$

where α is 1.5 − 2*(participation rate). In 2023, the value of α in NSW and ACT was 0.38.

In particular, the model expects all the most able candidates to complete Year 12 and be eligible for an ATAR, and so the top category should contain 1/2000th of the target population. In 2023 this target frequency for an ATAR of 99.95 was N = 52 for ACT and NSW combined, meaning that the number of students from these two jurisdictions receiving 99.95 should not exceed 52.

With the 2023 ACT and NSW combined participation rate, the model expects that 93.0 per cent of candidates who are at the 70th percentile in the target population will complete Year 12 and be eligible for an ATAR. Accordingly, the target frequency for an ATAR of 70.00 is 93.0 per cent of 1/2000th of the target population. This works out to be 48 students getting an ATAR of 70.00.

In order to implement this model, each ACT student is allocated a notional aggregate using the process to equate NSW HSC and ACT Board of Senior Studies results in use since 2006. (Annual studies are undertaken to ensure that this process continues to be valid.) Starting with the highest aggregate, the candidates are progressively allocated to ATAR bands to achieve the cumulative target frequencies, without exceeding them. (In 2023, the 99.95 ATAR category consisted of 49 NSW students and 2 ACT students.) There is noise in the allocation due to ties in the aggregates. The resulting pattern is shown in Figure 3.1.

Figure 3.1 Percentage of NSW and ACT ATAR-eligible students in each ATAR truncated category in 2023
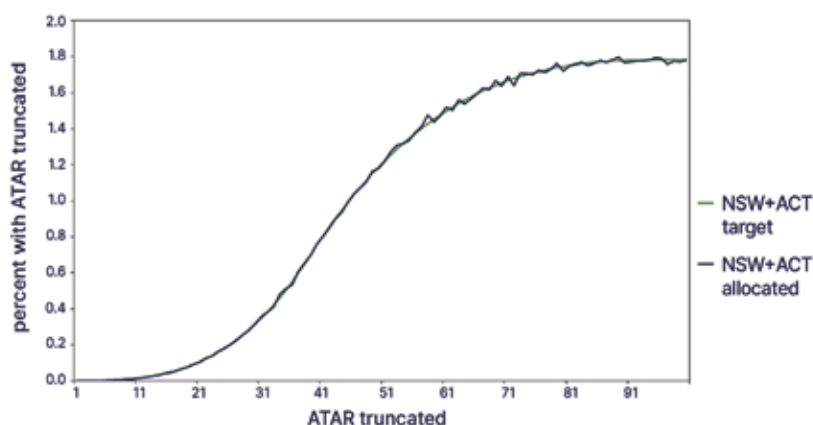
The relationship between the NSW ATAR and ATAR-eligible percentile in 2023 is shown in Figure 3.2.

Figure 3.2 The relationship between NSW ATAR and ATAR-eligible percentile in 2023
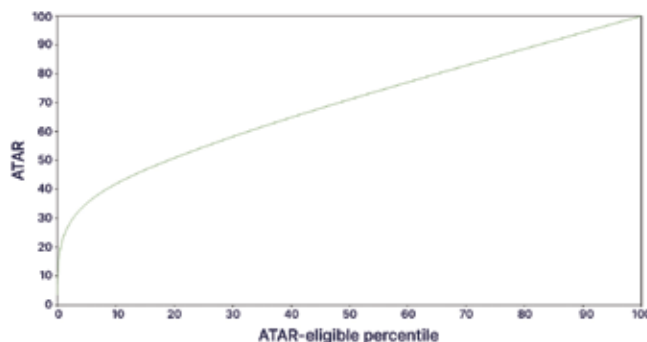
The relationship between aggregates and ATARs in 2023 is shown graphically in Figure 3.3.

Figure 3.3 Relationship between aggregate and NSW ATAR in 2023
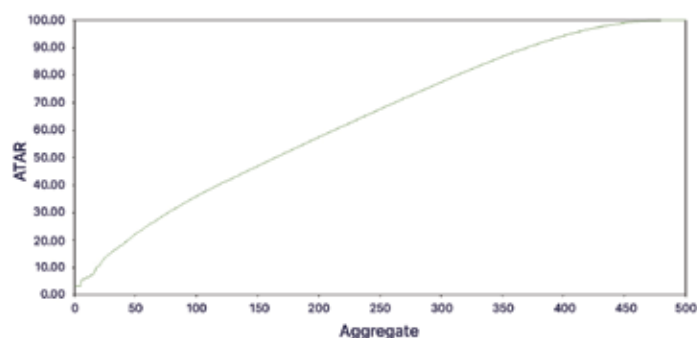
Each ATAR corresponds to a range of aggregate marks. The range of aggregates corresponding to one ATAR is greatest in the extremes of the distribution of aggregates and smallest near the middle of the distribution of aggregates. Table 3.2 gives ATARs for selected aggregates based on the 2023 data.

Table 3.2 Relationship between NSW aggregate and ATAR in 2023

Aggregate	ATAR
450.0	99.00
400.0	94.30
350.0	86.75
300.0	77.45
250.0	67.65
200.0	57.50
150.0	46.95

4 The HSC and ATAR in 2023 – some results

4.1 Overview

A total of 75,924 students completed at least one HSC course in 2023, but 4,725 were removed from the database as they completed no ATAR course. Of the remaining 71,199 students, 89.3 per cent received an HSC and 78.0 per cent received an ATAR. There were 243 students who received an ATAR but did not receive the HSC award, primarily because they had not yet provided evidence of meeting the minimum standards in literacy and numeracy, a requirement for the HSC award as introduced by NESA in 2020. While courses contributing to the underlying aggregate may be accumulated over a five-year period, 91.9 per cent of those receiving an ATAR in 2023 included only 2023 courses in their aggregate.

The percentage of students enrolled in at least one ATAR course who were female was 52.7 per cent (slightly less than 52.9 per cent in 2022), and 53.8 per cent of students who received an ATAR were female (down from 54.0 per cent in 2022).

4.2 Percentage of students receiving an ATAR

HSC students who do not receive an ATAR fall into one of two broad groups:

- Those who are studying less than 10 units. These include private study students who enrol in one or two courses, mature age students who are studying a limited HSC program and students who are accumulating their HSC over two or more years.
- Those who enrol in a full HSC program that does not satisfy the requirements for an ATAR. These students normally complete 6 or 8 units of Board Developed courses, and choose the remaining units from Board Endorsed courses. They receive an HSC but not an ATAR. In 2023 there were 8,278 such students.

Table 4.1 Proportion of students receiving an ATAR, 2019–2023

Year	HSC candidature	Students receiving an ATAR	
		Number	%
2019	69,560	55,031	79.1
2020	70,466	54,894	77.9
2021	70,416	54,841	77.9
2022	69,518	54,308	78.1
2023	71,199	55,523	78.0

4.3 Number of units of ATAR courses completed

The pattern in 2023 was similar to that observed in 2022, with 51.1 per cent completing exactly 10 ATAR units and 27.3 per cent completing more than the required minimum number of ATAR units (Table 4.2).

Table 4.2 Percentage of students completing specified numbers of units[1] of ATAR courses, 2020–2023

Number of units	2020 %	2021 %	2022 %	2023	
				%	Number
1	0.7	0.9	0.9	0.8	560
2	8.0	7.7	8.4	8.5	6,055
3	0.6	0.6	0.8	0.8	568
4	4.4	4.4	4.7	4.2	3,000
5	0.1	0.1	0.1	0.1	73
6	4.6	4.5	5.1	4.2	2,969
7	0.1	0.2	0.3	0.1	95
8	3.1	3.1	4.4	2.8	1,992
9	0.1	0.1	1.2	0.1	99
10	49.3	50.1	49.5	51.1	36,361
11	16.8	16.7	15.6	16.3	11,589
12	10.7	10.2	8.3	9.7	6,886
13	1.2	1.1	0.7	1.1	761
14	0.3	0.2	0.1	0.2	163
15+	0.0	0.1	0.0	0.0	28
HSC cohort	70,466	70,416	69,518		71,199

[1] The units include current year units and units accumulated in previous years.

4.4 Course enrolments – Table A1

Table A1 in the Appendix provides for each course the size of the candidature, the number who received an HSC in 2023, the number who received an ATAR in 2023, the percentage of females and the maximum ATAR gained by a student enrolled in that course. The table includes students who completed the course in 2023 as well as those who completed the course in previous years and completed at least one ATAR course in 2023. The table excludes courses where there were less than 10 students.

What is clear is that in almost all courses some students gained an ATAR in excess of 95.00, and for the majority of courses the maximum ATAR is higher.

In Table A6 we have included a column showing for each course the maximum ATAR of any student doing the course in any year and including all units from that course in the ATAR calculation. For the vast majority of courses, the values for the maximum ATAR in Tables A1 and A6 agree.

The pattern of 'male-dominated' and 'female-dominated' courses was similar to the pattern exhibited previously. Female students were in the majority in languages, creative arts and the humanities, while males were in the majority in technology and computing courses.

A total of 14,678 students enrolled in at least one VET course, of which 10,980 students enrolled in a VET examination course. The proportion taking a VET examination course was 74.8 per cent.

Overall, 78.0 per cent of the 2023 HSC cohort received ATARs but the percentage varied across courses, from 54.2 per cent to 100.0 per cent for Category A courses with candidatures exceeding 100. For students enrolled in any VET courses, the overall figure was 59.8 per cent but was higher, at 79.1 per cent, for students enrolled in VET examination courses.

4.5 Distributions of HSC marks – Table A2

Table A2 in the Appendix shows the distributions of HSC marks in 2023. For each course the percentage of students in Bands 2 to 6 are given, together with the median HSC mark and the band in which the median lies. Data are not provided for courses with less than 10 students.

Since the introduction of standards referenced reporting in 2001, marks reported to students have not been constrained to a set distribution. Students demonstrating the highest level of achievement in a 2-unit course are placed in Band 6 and receive HSC marks of 90 and above. The data show clearly that patterns of HSC marks vary across courses.

There are few students in Band 1. For most 2-unit courses the median HSC mark lies in Band 4.

Comparison of Table A2 with the corresponding table in 2022 shows that distributions of HSC marks have changed for some courses (see section 5.1.).

4.6 Descriptive statistics of HSC and scaled marks – Table A3

Table A3 in the Appendix presents, for each course, descriptive statistics and the 99th, 90th, 75th, 50th and 25th percentiles for HSC and scaled marks. Data is not provided for courses with less than 10 students or courses in which all the students have a total of less than 25 results from other current year scaling courses. Percentiles are not included for courses with less than 40 students.

Although HSC marks are not used as the basis for scaling they are shown in Table A3 because raw marks are not released to students or teachers and hence cannot be presented in this report. Scaled marks are generally lower than HSC marks: few students receive HSC marks less than 25 (on a 1-unit basis) whereas the average scaled mark for the total HSC candidature is approximately 25.

In the table, marks are shown on a 1-unit basis, so the range is 0 to 50. The percentiles in a course are based on all students completing that course in 2023 irrespective of whether they were eligible for an ATAR or not.

When reading the table, it must be remembered that an HSC mark indicates a standard reached whereas a scaled mark reflects the position a student would have obtained in the course candidature had all students completed that course. Because HSC marks and scaled marks serve different purposes, comparing HSC and scaled marks is of little value and can lead to misinterpretations that may adversely affect student choices of courses to study.

Table A3 should not be used as a simple HSC to scaled mark conversion table for reasons explained below.

NESA reports HSC marks rounded to the nearest integer whereas raw marks are calculated to one decimal place. NESA aligns the raw marks to bands that best describe the standards that the students achieve. This can compress a range of raw marks to a smaller number of HSC marks. For example, all Band E4 performances in an Extension course (except for Mathematics Extension 2) are allocated one of the six integer grades 45.0 to 50.0. Thus after aligning and rounding, for each HSC mark there can be a range of raw marks and hence a range of scaled marks. There is, in general, no unique scaled mark for an HSC mark.

A given HSC mark often corresponds to a range of raw and scaled marks and hence to a range of percentiles. Table A3 gives the HSC mark at the specified percentile. Not all students with that HSC mark will be at that percentile when the raw marks are considered. For example, in History Extension the HSC mark at the 90th percentile was 47.0. A History Extension HSC mark of 47.0 in fact corresponded to scaled marks at percentiles ranging from 87.9 to 96.5.

The scaled marks reported in Table A3 are the scaled marks at the specified percentiles. The 90th percentile of the scaled mark distribution in History Extension was 42.7 but there was a range of scaled marks achieved by those with an HSC mark of 47.0.

Looking at Chinese in Context in Table A3 we see that the maximum mark and 99th percentiles of the HSC distribution are both 49.0 whereas the scaled marks at maximum is 50 and for the 99th percentiles is 49.1. This illustrates that there is not a unique scaled mark corresponding to a given HSC mark.

The primary purpose of Table A3 is to show the relativities between courses. For example, Table 4.3 shows the scaled marks corresponding to the 90th and 50th percentiles for German Continuers, Vietnamese Continuers and Business Services Exam.

Table 4.3 Scaled marks for selected percentiles

Course	Scaled mean	Scaled mark for	
		P_{90}	P_{50}
German Continuers	33.5	46.2	33.6
Vietnamese Continuers	19.7	33.8	18.3
Business Services Exam	19.5	33.7	19.5

Vietnamese Continuers and Business Services Exam have similar scaled means and similar scaled marks corresponding to the 90th percentile. German Continuers has a higher scaled mean and higher scaled marks at corresponding percentiles. The table shows that the students who are at the 90th percentile of the Vietnamese Continuers and Business Services Exam candidatures have similar scaled marks for those courses to the middle candidate in German Continuers.

4.7 Distribution of ATARs – Table A7

Table A7 in the Appendix shows the distribution of ATARs. ATARs are not evenly distributed. For most ATARs the number of students on that ATAR lies between 20 and 50. The number of students on an ATAR is less for lower ATARs.

An ATAR of 99.00 does not represent the top 1 per cent of the ATAR cohort; 1.8 per cent of the 2023 ATAR cohort actually gained an ATAR of 99.00 or above. It does, however, represent the level of achievement necessary to be in the top 1 per cent if all HSC-aged people in NSW had completed studies that made them ATAR-eligible in 2023. From Table 4.4 we see that in 2023 17.5 per cent of the ATAR-eligible students received an ATAR of 90.00 or above and 35.0 per cent gained an ATAR of 80.00 and above.

Table 4.4 Percentage of ATAR students receiving specific ATARs and above, 2019–2023

ATAR	2019 %	2020 %	2021 %	2022 %	2023 %
99.00	1.7	1.7	1.7	1.8	1.8
95.00	8.4	8.5	8.6	8.8	8.8
90.00	16.8	17.0	17.1	17.7	17.5
80.00	33.4	33.9	34.2	35.2	35.0
70.00	49.6	50.3	50.7	52.1	51.8
60.00	64.8	65.6	66.1	67.8	67.4
50.00	78.6	79.2	79.8	81.5	81.1

Table 4.5 shows the median ATAR and the median ATAR for male and female candidates for the years 2019-2023.

Table 4.5 Median ATAR, 2019–2023

Year	Median ATAR all students	Median ATAR female	Median ATAR male
2019	69.75	71.10	68.05
2020	70.15	71.30	68.70
2021	70.40	71.80	68.70
2022	71.25	72.45	69.85
2023	71.05	71.90	70.00

In 2023, 49 students received the top ATAR of 99.95. They comprised 37 males and 12 females from a mix of government and independent schools..

4.8 ATAR percentiles and relationship between ATAR and aggregates – Tables A8, A9

Table A8 in the Appendix shows the ATAR corresponding to selected ATAR-eligible percentiles. For example, 10 per cent of the ATAR cohort in 2023 received an ATAR of 94.25 or above.

Each ATAR corresponds to a range of aggregates and the figures provided in Table A9 in the Appendix show the minimum aggregate corresponding to selected ATARs.

4.9 Relationship between subject choice, band and ATAR

There is considerable interest in the relationship between student's selection of HSC courses and ATAR. As mentioned in 3.1, students present an extraordinarily large range of HSC course combinations, and so it is not possible to describe a typical HSC result associated with a particular ATAR. However, some insight can be gained from Table 4.6 which lists the 10 most common HSC course/band combinations for students in selected ATAR ranges. The patterns illustrate that the most able students generally choose the more demanding courses in subjects where choice is available, and that the reported HSC performance bands, at least for the most common courses, are reasonably consistent at most points in the ATAR spectrum.

Table 4.6 The 10 most common HSC courses and results achieved by students at selected ATAR ranges, 2023

ATAR range	HSC course	HSC band	Percentage of students in this ATAR range with this result contributing to their ATAR
99.00 – 99.95	Mathematics Extension 1	E4	86
	English Advanced	6	80
	Mathematics Extension 2	E4	62
	Chemistry	6	58
	Physics	6	41
	Mathematics Advanced	6	25
	Biology	6	19
	Economics	6	18
	English Advanced	5	16
	English Extension 1	E4	14
90.00 – 90.95	English Advanced	5	67
	Biology	5	29
	Mathematics Advanced	5	28
	Mathematics Extension 1	E3	19
	English Standard	5	17
	Mathematics Standard 2	6	16
	Modern History	5	16
	PDH&PE	5	15
	Mathematics Standard 2	5	15
	Economics	5	13
70.00 – 70.95	English Standard	4	47
	Mathematics Standard 2	4	30
	English Advanced	4	28
	Biology	4	26
	Business Studies	4	24
	Mathematics Standard 2	5	21
	PDH&PE	4	21
	Modern History	4	15
	English Advanced	5	13
	Legal Studies	4	12
50.00 – 50.95	English Standard	3	42
	Mathematics Standard 2	3	41
	English Standard	4	38
	Business Studies	3	29
	Biology	3	27
	PDH&PE	3	25
	Community & Family Studies	4	19
	Mathematics Standard 2	4	17
	Legal Studies	3	14
	Modern History	3	12

4.10 Gender differences

As in previous years, female students outperformed male students in the majority of courses and had a higher median ATAR. The percentages of students receiving ATARs on or above specified values who were female are given in Table 4.6.

Table 4.7 Percentage of students receiving ATARs on or above
on or above specified values who were female, 2019–2023

ATAR	% female 2019	% female 2020	% female 2021	% female 2022	% female 2023
99.00	47.2	45.1	47.3	41.8	40.6
98.00	52.6	47.9	49.5	46.2	42.3
95.00	55.8	51.7	52.8	51.2	49.2
90.00	57.7	54.3	55.5	54.8	52.6
80.00	56.9	56.1	57.1	56.2	55.0
70.00	57.2	56.4	56.8	56.1	55.3
60.00	53.0	56.1	56.1	55.4	54.9
50.00	54.8	55.4	55.4	54.7	54.5
40.00	48.4	55.0	54.8	54.3	54.2
30.00	46.5	54.5	54.5	54.2	53.9
Total cohort	54.1	54.4	54.3	54.0	53.8

In 2023, the HSC-aged population of NSW was 98,955, of whom 47,812 (48.3%) were female. If there were no gender-based difference in HSC participation and performance, one would therefore expect 48.3% of the candidates with a particular aggregate score to be female. The solid line in Figure 4.1 shows the number of female students on each aggregate score (smoothed by taking a moving average), while the dotted line shows the expected number (48.3% of the total number of students with that aggregate score).

It is evident from Figure 4.1 that the number of female students on a particular aggregate score is in very close agreement with this expected number for aggregate scores above 434 (ATAR 97.90) and below 77 (ATAR 30.10), indicating that participation and performance at the top and bottom of the aggregate range is not significantly influenced by gender. However, there are considerably more females than would be expected given their proportion in the HSC-aged population on almost every aggregate score between 77 and 434, reflecting higher retention rates and better performance for females in this range.

Figure 4.1 Number of females on each aggregate score compared with the expected number
if there were no gender-based differences in participation or performance
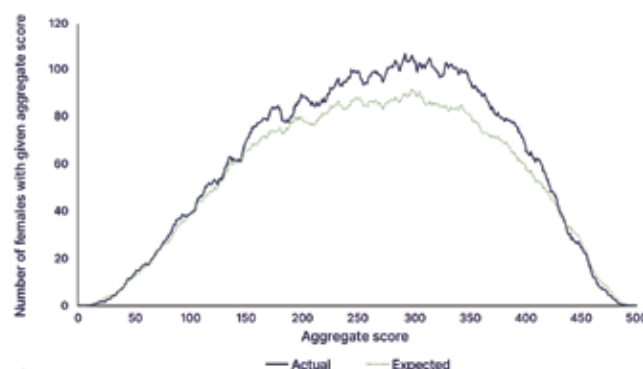
4.11 University offers

UAC makes several rounds of offers for semester 1 courses, starting from August and going through to March. The majority of offers to Year 12 students are made in December and January.

Of the 55,523 students who received an ATAR in 2023, 73.1 per cent applied through UAC for a university course. The table below shows that the higher the ATAR, the greater the percentage of students applying for university through UAC.

Table 4.8 Applicants for university places by ATAR – domestic and international

ATAR band	Total number of students	Applicants	
		Number	Percentage[1]
90.00 – 99.95	9,732	9,466	97.3
80.00 – 89.95	9,674	8,778	90.7
70.00 – 79.95	9,344	7,770	83.2
60.00 – 69.95	8,670	6,246	72.0
50.00 – 59.95	7,596	4,385	57.7
Below 50.00	10,507	3,934	37.4
Total	55,523	40,579	73.1

[1] These are percentages of the total number of students in the given ATAR band.

Of those domestic students applying through UAC for undergraduate courses in semester 1, 94.2 per cent were made at least one offer of a place. Of these applicants receiving at least one offer, 66.9 per cent had an ATAR of 70.00 and above, and 91.7 per cent had an ATAR of 50.00 and above.

It is important to note that not all applicants are made an offer solely on the basis of their ATAR. For some courses, alternative criteria are used and ATARs are not considered at all, and for other courses ATARs are supplemented by additional criteria.

5 Trends and other issues

5.1 Variation in patterns of HSC marks – Tables A4, A5

As noted in Chapter 3, the scaling process uses the raw marks, not the HSC marks that NESA uses to report student achievement. Further, the raw marks for each course undergo an initial standardisation to a common mean and standard deviation before the scaling algorithm is implemented. The HSC marks that NESA uses to report student achievement are not used in the scaling process so any variation in the distribution of these marks across courses does not impact the ATAR calculation.

A common question is whether changes in the pattern of HSC marks from one year to the next affects the pattern of scaled marks and hence the pattern of ATARs. For the reason given above, the answer is no. It is to be expected that the patterns of HSC marks may change from year to year, reflecting differences in student achievement against the published standards in individual courses. In contrast, one would expect to see differences in the patterns of scaled marks only if the overall academic quality of a course candidature changed.

Tables A4 and A5 in the Appendix show the distributions of HSC and scaled marks, respectively, in 2023 and 2022. The marks are on a per-unit basis (0–50) and courses with less than 40 students in either year are not included. Table A4 shows the percentages of each course candidature with an HSC mark less than 45, 40, 35, 30 and 25 for 2023 and 2022. Table A5 provides similar information for scaled marks. The data show that while the distributions of HSC marks have changed for some courses, the distributions of scaled marks were generally the same.

Biology is an example of a course where the candidature was comparable between 2022 and 2023 but there is a change in the distributions of HSC marks (Table 5.1). The distributions of scaled marks in the two years were, however, similar.

Table 5.1 Distributions of HSC and scaled marks for Biology, 2022 and 2023, on a 1-unit basis

Mark	Year	Number	Percentage of students with mark less than				
			45	40	35	30	25
HSC mark	2023	19,382	91.7	68.0	36.1	10.6	1.5
	2022	18,891	93.6	73.2	46.7	20.3	4.2
Scaled mark	2023	19,382	98.3	90.2	77.3	61.8	46.3
	2022	18,891	99.0	91.6	77.8	61.6	45.6

Taken together, the data indicate that the 2023 candidature in Biology performed better than the corresponding cohort in 2022 in terms of the performance standards for Biology. However, their overall performance as judged by their scaled marks is almost the same.

5.2 Distributions of English and mathematics marks: 2020–2023

Because all students study English, and most study mathematics, comparative data is shown for English and mathematics courses for the four years, 2020 to 2023. Table 5.4 shows the distributions of HSC marks and Table 5.5 shows the distributions of scaled marks.

The number of students completing English Extension 1 and English Extension 2 were similar between 2022 and 2023. English Studies Examination was offered as a Category B for the first time in 2019 and could be used to meet ATAR eligibility requirements, and 1,230 students completed this course in 2023, down slightly from 1,273 in 2022. Both English Standard and English Advanced had more students in 2023 than in 2022. The number of English EAL/D students continued to decrease, down from 1,487 in 2022 to 1,204 in 2023.

In 2023, 13.0 per cent of ATAR-eligible students did not complete a mathematics course and 20.2 per cent of those awarded an HSC did not include an ATAR mathematics course in their Year 12 HSC subjects.

When considering the English marks, recall English Studies Examination, English Standard and English Advanced are scaled as a single group. In 2023, English Studies Examination, English Standard and English Advanced all shared common questions worth 20 marks. In addition, English Studies Examination shared two additional questions worth 9 marks with English Standard, and English Advanced shared three additional questions worth 11 marks with English Standard. These shared elements provide sufficient information for NESA to calibrate the marks on the remaining 59 per cent of the English Studies Examination paper, 69 per cent of the English Advanced Examination papers and 60 per cent of the English Standard Examination papers so that they are all on the same calibrated raw mark scale. NESA then moderates school assessments for English Studies Examination, English Standard and English Advanced using these calibrated raw marks, and the usual NESA Standard Setting process is applied to transform these calibrated marks into HSC marks aligned to the common standard shared by all three courses, and these aligned marks are reported to students.

It is the calibrated raw marks for English Standard Examination, English Standard and English Advanced that are used for scaling. These marks are all combined and scaled as a single course. Thus, a given calibrated raw HSC mark yields the same scaled mark for English Studies Examination, English Standard and English Advanced students.

By contrast, the courses Mathematics Standard 1, Mathematics Standard 2 and Mathematics Advanced are distinct 2-unit courses. In 2023, the Mathematics Standard 2 paper shared 9 items worth 23 marks with the Mathematics Standard 1 paper and another 6 items worth 21 marks with the Mathematics Advanced paper. There were no items common to all three papers. However NESA does not use this information to calibrate the marks on the remaining 71 per cent of the Mathematics Standard 1 paper, the remaining 56% of the Mathematics Standard 2 paper or the remaining 79 per cent of the Mathematics Advanced paper. Consequently, the total raw examination marks used in scaling are on a different scales. depending on whether the marks are from the Mathematics Standard 1, Mathematics Standard 2 or Mathematics Advanced paper.

For these reasons, Mathematics Standard 1, Mathematics Standard 2 and Mathematics Advanced are scaled as separate courses. As mentioned in 3.2.3, NESA has provided information derived from these common items which could form the basis of a process to align the raw marks in these three courses. While studies are being undertaken to determine whether such a process should be adopted at some point in the future, no change is currently anticipated.

The performance band information for 2-unit-only students on the Mathematics Advanced course, corresponding to Table A2, is given in Table 5.2, and the information captured in Table A3 is provided in Table 5.3 for this group of candidates.

Table 5.2 Distributions of HSC marks for
Mathematics Advanced 2-unit-only candidates, 2023

| Course | Number | Median HSC mark | Median band | Percentage of students in performance band | | | | |
				6	5	4	3	2
Mathematics Advanced – 2-unit-only	11,461	75	4	13	24	30	23	8

Table 5.3 Descriptive statistics of HSC and scaled marks for
Mathematics 2-unit-only candidates, 2023

Course	Number	Type of mark	Mean	SD	Max. mark	P_{99}	P_{90}	P_{75}	P_{50}	P_{25}
Mathematics Advanced – 2-unit-only	11,461	HSC	37.6	6.1	50.0	49.0	45.5	42.0	37.5	33.5
		Scaled	29.3	9.3	50.0	47.5	41.5	36.1	29.7	22.8

Table 5.4 Distributions of HSC marks for
English and Mathematics courses, 2020–2023

	Year	Enrolment	Percentage of students with HSC mark less than				
			45	40	35	30	25
English Studies Examination	2023	1,230	100.0	99.6	90.4	54.2	14.9
	2022	1,273	100.0	99.6	92.5	65.4	11.0
	2021	1,357	100.0	99.0	91.7	55.8	16.1
	2020	1,274	100.0	100.0	97.9	68.8	22.8
English Standard	2023	31,696	99.7	86.8	40.3	10.3	1.6
	2022	30,643	99.4	84.5	44.3	12.0	1.3
	2021	31,341	99.4	83.4	42.2	9.5	1.6
	2020	30,914	99.5	88.4	42.4	10.8	0.5
English Advanced	2023	25,102	86.2	32.8	4.7	0.6	0.1
	2022	24,661	85.5	32.8	6.8	0.9	0.0
	2021	24,409	83.7	31.2	6.1	0.7	0.1
	2020	24,773	85.8	36.6	5.2	0.6	0.0
English Extension 1	2023	3,671	59.1	21.0	5.6	1.3	0.3
	2022	3,427	60.4	25.5	7.4	1.6	0.3
	2021	3,415	58.9	20.8	6.1	1.7	0.4
	2020	3,551	61.2	24.0	7.3	2.2	0.7
English Extension 2	2023	1,408	71.2	35.7	14.3	4.5	0.7
	2022	1,242	70.5	39.9	15.0	4.5	1.0
	2021	1,308	74.8	40.7	15.8	4.0	0.9
	2020	1,380	74.1	41.4	17.5	5.1	0.7
English EAL/D	2023	1,204	95.0	78.2	46.5	22.0	6.6
	2022	1,487	96.4	81.2	53.9	26.2	8.7
	2021	1,879	97.6	76.6	41.6	13.8	3.3
	2020	2,022	96.6	73.9	42.8	15.5	4.5
Mathematics Standard 1 Examination	2023	1,608	96.7	78.5	38.1	8.4	1.7
	2022	1,410	96.1	73.5	35.1	12.2	2.4
	2021	1,461	95.8	80.7	49.1	16.6	3.8
	2020	1,340	97.4	83.7	45.1	18.0	4.9
Mathematics Standard 2	2023	30,805	90.8	68.4	42.1	17.7	3.5
	2022	29,874	92.6	70.9	45.9	18.2	3.5
	2021	30,035	94.4	75.2	48.7	21.4	6.2
	2020	30,026	94.6	75.3	49.6	24.5	7.1
Mathematics Advanced	2023	16,428	77.7	50.2	24.6	6.9	1.3
	2022	16,865	77.4	51.0	23.6	5.5	0.9
	2021	16,769	76.8	49.8	21.2	6.2	1.9
	2020	16,771	76.9	47.4	19.0	4.2	1.5
Mathematics Extension 1	2023	8,390	65.7	45.7	28.1	11.2	4.1
	2022	8,679	65.2	44.1	26.4	13.0	6.0
	2021	8,547	62.7	42.0	25.7	13.0	5.8
	2020	8,804	62.1	42.0	25.5	12.4	5.5
Mathematics Extension 2	2023	3,273	62.2	31.9	14.2	5.4	1.4
	2022	3,271	60.4	32.7	14.9	8.1	3.9
	2021	3,193	57.2	30.0	13.4	4.7	1.4
	2020	3,372	63.6	34.0	16.0	7.0	2.8

Table 5.5 Distributions of scaled marks for English and Mathematics courses, 2020–2023

	Year	Enrolment	Percentage of students with scaled mark less than					
			45	40	35	30	25	20
English Studies Examination	2023	1,230	100.0	100.0	99.8	99.6	98.9	95.9
	2022	1,273	100.0	100.0	99.8	99.6	99.1	94.5
	2021	1,357	100.0	100.0	99.9	99.4	98.0	94.0
	2020	1,274	100.0	100.0	100.0	100.0	99.8	98.7
English Standard	2023	31,696	100.0	99.4	96.2	87.9	72.9	52.2
	2022	30,643	100.0	99.1	95.7	87.0	72.3	51.3
	2021	31,341	99.9	99.3	95.7	87.0	71.4	50.5
	2020	30,914	99.9	99.3	96.3	87.6	71.9	49.8
English Advanced	2023	25,102	96.8	80.8	57.1	34.5	17.7	7.8
	2022	24,661	97.1	81.9	58.8	36.6	19.8	9.0
	2021	24,409	96.8	81.4	58.1	36.2	19.3	8.8
	2020	24,773	97.4	82.1	58.7	34.9	17.4	7.2
English Extension 1	2023	3,671	94.7	69.2	36.3	14.9	5.5	2.0
	2022	3,427	93.5	67.9	37.9	16.5	6.4	2.5
	2021	3,415	93.3	66.0	34.8	14.1	5.9	2.5
	2020	3,551	94.3	68.0	35.9	14.6	5.4	2.1
English Extension 2	2023	1,408	90.7	70.0	38.9	17.6	6.0	1.4
	2022	1,242	91.9	69.4	42.7	18.6	7.3	2.4
	2021	1,308	92.0	66.5	36.3	15.4	5.2	1.3
	2020	1,380	91.4	68.3	37.2	16.3	5.5	1.2
English EAL/D	2023	1,204	98.2	93.6	85.5	77.7	63.8	52.3
	2022	1,487	98.5	93.5	86.1	78.1	65.8	53.1
	2021	1,879	99.0	95.1	85.6	74.2	62.7	47.2
	2020	2,022	98.7	94.9	86.1	74.9	64.5	49.9
Mathematics Standard 1 Examination	2023	1,608	100.0	100.0	99.9	95.5	86.5	74.4
	2022	1,410	100.0	100.0	100.0	95.2	87.9	76.9
	2021	1,461	100.0	100.0	100.0	95.8	88.2	77.7
	2020	1,340	100.0	100.0	100.0	96.1	88.6	76.0
Mathematics Standard 2	2023	30,805	99.8	95.0	85.1	72.8	59.0	44.4
	2022	29,874	99.9	96.4	87.0	74.3	60.2	44.9
	2021	30,035	99.9	96.4	87.5	75.2	61.0	44.5
	2020	30,026	100.0	97.5	88.5	74.5	58.6	42.5
Mathematics Advanced	2023	16,428	93.7	77.8	58.5	39.8	24.0	12.4
	2022	16,865	93.7	77.8	69.1	40.6	24.9	13.1
	2021	16,769	95.1	79.6	60.0	40.9	24.8	13.2
	2020	16,771	94.6	78.5	59.4	42.0	26.4	14.2
Mathematics Extension 1	2023	8,390	69.7	38.0	19.5	9.9	5.5	2.8
	2022	8,679	69.9	38.3	20.3	11.4	6.3	2.9
	2021	8,547	71.3	39.5	21.2	11.4	6.2	2.5
	2020	8,804	74.9	43.3	21.9	11.4	5.6	2.3
Mathematics Extension 2	2023	3,273	41.1	13.8	5.6	2.5	0.9	0.3
	2022	3,271	42.7	13.4	5.3	2.8	1.3	0.7
	2021	3,193	45.0	15.2	6.0	2.5	0.8	0.4
	2020	3,372	48.1	15.5	5.8	2.5	1.1	0.7

5.3 Courses that contribute to the ATAR – Table A6

If students complete only 10 units all courses must be counted in the calculation of the ATAR, whereas if students complete more than 10 units at least 1 unit will be omitted. In 2023, 36,095 students out of the 55,523 ATAR-eligible students (65.0%) presented exactly 10 units.

Table A6 in the Appendix provides some information about students who completed more than 10 units. Data are not provided for courses with less than 10 students.

For each course:

■ The first column shows the total number of students who did the course in any year and received an ATAR in 2023.
■ The second column shows the number of these students who completed more than 10 units.
■ The third column expresses this number as a percentage.
■ The fourth column gives the percentage of these students who counted all units of that course towards their ATAR. The percentage is based on the number of students in the course who had completed more than 10 units.
■ The final column shows the maximum ATAR of any student doing the course in any year and including all units of that course in the ATAR calculation.

In 67 of the 108 courses listed in Table A6, 70 per cent or more of the students in the course who had completed more than 10 units counted the course. The data also show that, while there are differences in the percentages of students who count a particular course towards their ATARs, there is no evidence of systematic differences across Key Learning Areas.

6 Frequently asked questions

Most of the enquiries from students received by the ATAR Enquiry Centre at UAC concerned the relationship between their HSC marks and their ATARs, and the reason why one course contributed to their ATAR and not another. These two major enquiries will be discussed below, followed by a summary of some of the other frequently asked questions.

6.1 Why is my ATAR low in comparison to my HSC marks?

The ATAR is a rank, not a mark, and so there is no reason why the scores should be close. From Table A2 we can see that the median HSC mark for most 2-unit courses is between 70 and 80. The median ATAR is 71.05, which is lower than the median score for almost all courses. So for students in the middle of the candidature, the ATAR will typically be lower than their average HSC mark.

There is, however, no simple rule to convert HSC marks to ATARs. Courses are unlikely to have the same scaled means from year to year and the pattern of HSC marks varies across courses so that the same HSC mark does not necessarily indicate the same position across courses. The following examples illustrate the complexity of the relationship between HSC marks and ATARs.

Example 1

Consider the following two students, Liam and Kellie, whose HSC marks are shown in Table 6.1. These students are middle students (the 50th percentile) in all of their courses. Their average HSC marks per unit are exactly the same, at 39.1, but their ATARs are quite different, 60.00 and 80.00 respectively.

Table 6.1 Two examples of student achievement to show the effect of different scaled means

Liam
ATAR: 60.00

Course	HSC mark per course	HSC mark per unit
Design & Technology	79	39.5
English Standard	71	35.5
Music 1	84	42.0
Society & Culture	78	39.0
Vietnamese Continuers	79	39.5

Kellie
ATAR: 80.00

Course	HSC mark per course	HSC mark per unit
Biology	74	37.0
Economics	79	39.5
English Advanced	83	41.5
Mathematics Advanced	79	39.5
Physics	76	38.0

Both Liam and Kellie are at the 50th percentile in all of their courses, so the reason for the difference in their ATARs is the difference in the strength of the competition in the courses they have chosen. The average scaled mean for Liam's courses was 21.4, whereas the average scaled mean for Kellie's courses was 30.5. Since the mean scaled mark and the median scaled mark are generally very similar, Kellie's aggregate is around 313, while Liam's aggregate is around 213, reflecting the difference in the academic achievement of the students they have competed against. Consequently, Kellie's ATAR is significantly higher than Liam's ATAR

Example 2

Consider the following two students, James and Amy, whose HSC marks are shown in Table 6.2. Their average HSC marks per unit are identical at 38.2, but their ATARs are quite different, 66.00 and 76.00 respectively.

Table 6.2 Two examples of student achievement to show the effect of different scaled means

James
ATAR: 66.00

Course	HSC mark per course	HSC mark per unit
English Standard	79	39.5
Info Processes & Tech	79	39.5
Mathematics Standard 2	71	35.5
PDH&PE	75	37.5
Society & Culture	78	39.0

Amy
ATAR: 76.00

Course	HSC mark per course	HSC mark per unit
Chemistry	76	38.0
English Advanced	76	38.0
Mathematics Advanced	77	38.5
Studies of Religion II	79	39.5
German Continuers	74	37.0

Amy has an ATAR that is almost the same as her average HSC course score (76.4) whereas James's ATAR is much lower than his average HSC course score (76.4). If we look at Table A3, the average of the scaled means of the courses taken by James is 22.3, whereas the average scaled mean for the courses taken by Amy is 31.5.

Example 3

Consider the following two students who completed the same courses. The first student, Fred, receives an HSC mark of 35.0 per unit in each course, while the second student, Laura, receives an HSC mark of 40.0 per unit in each course (Table 6.3).

Table 6.3   Two examples of student achievement: Fred and Laura

Fred ATAR: 59.90			Laura ATAR: 79.90	
HSC mark per unit	Percentile	Course	HSC mark per unit	Percentile
35.0	39	Biology	40.0	71
35.0	39	Business Studies	40.0	67
35.0	6	English Advanced	40.0	38
35.0	27	Mathematics Advanced	40.0	53
35.0	38	Modern History	40.0	68
35.0	10	Visual Arts	40.0	38

Their HSC marks per unit in each course differ by only 5, yet their ATARs differ by 20.00. Laura's ATAR is the almost the same as her HSC course marks (80 per course), while Fred's ATAR is much lower than his HSC course marks (70 per course).

The reason for the large difference in the ATARs can be found in the differences in the percentiles shown in Table 6.3. The percentiles are much higher for Laura than for Fred. Given these large differences, it is not surprising that their ATARs are very different.

Each year, the same combination of HSC courses and marks is used to compare Fred and Laura. While their HSC marks are the same, the percentiles (their positions in their courses) have changed because of the changes in the distributions of HSC marks, so their ATARs are different.

Table 6.4 ATARs for Fred and Laura: 2010–2023

Year	Fred	Laura
2010	57.05	80.15
2011	58.20	79.80
2012	57.45	79.65
2013	57.55	80.00
2014	55.95	79.45
2015	57.50	79.65
2016	57.10	78.50
2017	57.55	78.05
2018	57.90	78.15
2019	58.70	78.70
2020	58.00	78.00
2021	58.00	78.00
2022	61.00	80.00
2023	59.90	79.90

The ATAR is about position, whereas HSC marks indicate levels of achievement in individual courses.

6.2 Why does this course contribute to my ATAR when another course where I received a higher mark does not count?

As in previous years, this question arose after the results were released because each student is advised which units contribute to their ATAR. The question is not always easy to answer, especially as students are only aware of their HSC marks, which provide little information as to their rankings in their courses.

The question can often be answered by reference to data on the distributions of HSC and scaled marks in Table A3 in the Appendix. Some examples are presented to illustrate the principles involved.

The examples illustrate the general principle that a student's position in their course and the scaled means and standard deviations of their courses are all important in determining which of their courses contribute towards their ATAR.

Also, it must be remembered that a given HSC mark usually corresponds to a range of raw and scaled marks.

Example 1 – Scaled means

The first example (Table 6.5) shows a set of HSC and scaled marks corresponding to results at the 90th percentile of the various course distributions.

Table 6.5 HSC and scaled marks – example 1

Course	Number	Scaled mean	Scaled SD	P_{90}	
				HSC mark per unit	Scaled mark
Chemistry	9,892	31.7	10.0	45.5	43.7
Design & Technology	3,783	22.8	10.6	45.5	37.5
Economics	5,515	31.2	9.8	45.0	42.5
Physics	7,921	30.9	9.9	45.5	43.1
Study of Religion II	5,734	27.7	9.8	45.0	40.2

These HSC marks are similar and each is at the 90th percentile of a large course with comparable standard deviations. Since the position within the course candidature is the same for each course the scaled mark will depend on the academic quality of the candidature of the course concerned. The highest scaled mark is for Chemistry, which has the highest scaled mean. The lowest scaled mark is for Design & Technology, which has the lowest scaled mean.

Example 2 – Position

Consider students with HSC marks of 47.0 per unit in Community & Family Studies and French Beginners. The student in Community & Family Studies is at the 99th percentile and gains a scaled mark of 41.1, whereas the student in French Beginners is at the 90th percentile and gets a scaled mark of 39.7. Therefore, even though the scaled mean for French Beginners (24.8) is higher than the scaled mean for Community & Family Studies (18.6), the difference in position compensates for this and the Community & Family Studies student gets the higher scaled mark.

Table 6.6 HSC and scaled marks – example 2

	Scaled mean	Scaled SD	Percentile	HSC mark per unit	Scaled mark
Community & Family Studies	18.6	10.7	P_{99}	47.0	41.1
French Beginners	24.8	10.9	P_{90}	47.0	39.7

Example 3 – Standard deviations

In some situations, particularly in courses with smaller candidatures, the difference in the distribution spread is also a factor in deciding which course contributes towards the ATAR.

Table 6.7   HSC and scaled marks – example 3

Course	Scaled mean	Scaled SD	P_{90} HSC mark per unit	P_{90} Scaled mark
Korean Beginners	25.9	9.4	47.0	39.2
Spanish Beginners	25.8	12.7	47.0	42.2

Consider students at the 90th percentile of Korean Beginners with an HSC mark of 47.0 per unit and scaled mark of 39.2 per unit; and at the 90th percentile of Spanish Beginners with an HSC mark of 47.0 and scaled mark of 42.2. Korean Beginners has a similar scaled mean as Spanish Beginners, at 25.9 and 25.8 respectively.

Spanish Beginners has the higher scaled mark corresponding to the HSC mark of 47.0 even though the position is the same in both courses. The reason the scaled marks differ is the spread in the distribution as measured by the standard deviation (SD). Spanish Beginners has an SD of 12.7 but Korean Beginners has a lower SD at 9.4. Spanish Beginners has a candidature with more varied academic ability than Korean Beginners.

Example 4 – Raw versus HSC marks

As noted in section 4.6, there is not necessarily a unique scaled mark for each HSC mark. From Table A3, by focusing on the maximum mark and the 99th percentile, we see that candidates receiving the top HSC mark of 49.0 in Korean Beginners received scaled marks from 45.9 to 44.3. The top HSC mark in a course does not necessarily reflect the top raw mark in a course and so a candidate with the top HSC mark in the course may not receive the top scaled mark.

The pattern of several scaled marks corresponding to a given HSC mark can occur across the distribution, not just at the top of the range.

6.3   Other frequently asked questions

Does the school I attend matter?

While your school and the students around you can influence your learning, the ATAR calculation itself does not consider the school you attended. Your ATAR is based solely on the marks you achieved, and no other information is used.

Does my postcode matter?

No.

Are certain courses always 'scaled down'?

No. Scaling is carried out afresh each year: if the quality of the candidature changes, the scaled mean will also change.

Is it true that if I study this course I can't get a high ATAR?

No. As Table A1 in the Appendix shows, there are students in every course who achieve high ATARs.

What impact did the variation in patterns of HSC marks have on the ATAR calculations?

None. It is the raw HSC marks rather than the aligned HSC marks that are scaled. The fact that the percentage of students who are placed in Performance Band 6 differs across courses has no effect on the calculation of the ATAR.

Why can't I use my HSC marks to check the calculation of my ATAR?

There are two reasons. The first is the ATAR is a rank that indicates your position in relation to other students, it is not an average mark. Secondly, raw marks are used in the calculation of the ATAR, not the aligned HSC marks.

Can I find out what my scaled marks are?

No. Scaled marks are not reported to students. They are determined during an interim phase in the ATAR calculation.

I have similar HSC marks to my friend, but we don't have similar ATARs. Why not?

Your ATARs would be similar if your courses were the same.

Which courses should I study?

Do not choose courses on the basis of what you believe are the likely effects of scaling. Choice of which courses to study should be determined only by your interests, your demonstrated abilities and the value of courses for your future career plans. The scaling process is designed to allow students to choose according to these principles and not, as far as university selection is concerned, be disadvantaged by their choice. It treats all students on their merits.

Do I get a better ATAR if I study more units?

This is a common question. While the data show that students who study more units tend to gain higher ATARs, determining causality is difficult. The relationship between the number of units studied and ATAR might result from personal attributes including interest, motivation, effort and time management. You cannot assume that simply by studying more units your ATAR will be increased.

What happens if I repeat a course?

If a course is repeated only the last satisfactory attempt is used towards the calculation of the ATAR. Your aggregate will be re-calculated using your new mark. Your aggregate may increase, remain the same or decrease; it depends on your new mark. Since you are being compared with a different cohort your ATAR may increase, remain the same or decrease, even if your aggregate remains the same.

What happens if I accumulate the HSC?

Students who accumulate courses towards their HSC have their scaled marks calculated the year they complete the courses.

What happens if I already have an ATAR and add a new ATAR course the following year?

Your aggregate will be re-calculated using your new course and your previous courses. Provided all your previous courses were taken within the last five years, your aggregate may increase or stay the same but it will not go down. However, since you are being compared with a different cohort your ATAR may increase, remain the same or decrease.

Any courses taken more than five years ago will be ineligible for inclusion in your new aggregate.

If I'm eligible to get selection rank adjustments, does my ATAR change?

No. Selection rank adjustments do not change your ATAR. They change your selection rank for a particular preference or course.

If selection rank adjustments don't increase my ATAR, then how do they work?

Universities allocate selection rank adjustments for different reasons. Examples include students with a strong performance in specific HSC courses, students who live in or attend school in an area defined by the university and students who have applied for consideration through the Educational Access Scheme.

As the selection rank adjustments are applied differently from university to university and from course to course within the same university, your selection rank can be different for each course you list in your course preferences. For some Year 12 applicants, their selection rank for each preference is their ATAR. However, if a university allocates adjustments to you for a particular course then your selection rank for that preference is your ATAR plus adjustments.

7   Appendix

The following courses are not included in Tables A2 to A5 in the Appendix as they had less than 10 students in 2023:

- Classical Greek Extension
- Classical Hebrew Extension
- Croatian Continuers
- Dutch Continuers
- Filipino Continuers
- Indonesian & Literature
- Indonesian Extension

Some other courses do not appear in all tables if they have less than the minimum number of candidates required for a particular table.

Table A1   **Course enrolments, gender, ATAR eligibility and maximum ATAR by course**
Excludes courses with less than 10 students.

Table A2   **Distributions of 2023 HSC marks by course**
Excludes courses with less than 10 students.

Table A3   **Descriptive statistics and selected percentiles for HSC marks and scaled marks by course**
Excludes courses with less than 10 students completing the course in the current year, or if the group of students completing the course in the current year are collectively undertaking less than 25 other ATAR courses in the same year. No percentile data are given for courses with less than 40 students.

Table A4   **Distributions of HSC marks by course: 2022 and 2023**
Excludes courses with less than 40 students in either year.

Table A5   **Distributions of scaled marks by course: 2022 and 2023**
Excludes courses with less than 40 students in either year.

Table A6   **Courses that contribute to the ATAR (more than 10 units)**
Excludes courses with less than 10 students.

Table A7   **ATAR distribution**

Table A8   **ATAR percentiles: 2019–2023**

Table A9   **Relationship between the ATAR and aggregates: 2019–2023**

Table A1   Course enrolments, gender, ATAR eligibility and maximum ATAR by course

Notes:
(i) The **Number all** column includes students who have completed the course in 2023 or in a previous year (and who have done at least one ATAR course in 2023).

(ii) The **Number HSC** column shows the number of students who completed the course in 2023 or in a previous year and received an HSC award in 2023.

(iii) The **Number ATAR** column shows the number of students who completed the course in 2023 or in a previous year and who were eligible for an ATAR in 2023.

(iv) The % **Female** column shows the percentage of students in the course who were female.

(v) The % **HSC** column shows the percentage of students in the course who received an HSC award in 2023.

(vi) The % **ATAR-eligible** column shows the percentage of students in the course who were eligible for an ATAR in 2023.

(vii) The **Maximum ATAR** column shows the maximum ATAR achieved by a student doing the course.

(viii) The table excludes courses with less than 10 students.

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR-eligible	Maximum ATAR
Aboriginal Studies	869	729	471	75.0	83.9	54.2	99.35
Agriculture	1,498	1,422	1,082	50.2	94.9	72.2	99.95
Ancient History	6,841	6,640	6,060	56.5	97.1	88.6	99.95
Biology	19,808	19,211	18,650	63.9	97.0	94.2	99.95
Business Studies	19,106	18,405	17,246	45.6	96.3	90.3	99.90
Chemistry	10,047	9,816	9,788	47.1	97.7	97.4	99.95
Community & Family Studies	9,199	8,924	7,477	89.6	97.0	81.3	99.00
Dance	813	770	700	95.6	94.7	86.1	99.55
Design & Technology	3,947	3,778	3,420	45.0	95.7	86.6	99.85
Drama	3,415	3,285	2,920	66.4	96.2	85.5	99.95
Earth & Environmental Science	2,658	2,586	2,356	50.5	97.3	88.6	99.80
Economics	5,556	5,461	5,436	34.4	98.3	97.8	99.95
Engineering Studies	2,603	2,532	2,471	11.0	97.3	94.9	99.85
English Studies Exam	1,305	1,126	587	41.3	86.3	45.0	92.60
English Standard	32,085	31,259	28,880	50.1	97.4	90.0	99.60
English Advanced	25,232	25,057	24,977	58.9	99.3	99.0	99.95
English EALD	1,216	1,101	1,079	52.7	90.5	88.7	99.95
English Extension 1	3,683	3,671	3,665	71.8	99.7	99.5	99.95
English Extension 2	1,414	1,411	1,406	74.8	99.8	99.4	99.95
Food Technology	3,852	3,681	3,061	68.5	95.6	79.5	99.45
Geography	4,091	3,994	3,764	44.5	97.6	92.0	99.95
Industrial Technology	5,940	5,652	4191	18.9	95.2	70.6	99.25
Information Processes & Technology	1,857	1,697	1,592	19.5	91.4	85.7	99.95
Investigating Science	3,065	2,740	2,416	44.5	89.4	78.8	99.80
Legal Studies	10,424	10,178	9,757	65.1	97.6	93.6	99.95
Mathematics Standard 1 Exam	1,656	1,555	1,037	51.2	93.9	62.6	91.75
Mathematics Standard 2	31,175	30,474	28,581	52.4	97.8	91.7	99.75
Mathematics Advanced	17,364	15,462	15,439	46.9	89.0	88.9	99.95
Mathematics Extension 1	8,879	8,308	8,321	39.6	93.6	93.7	99.95
Mathematics Extension 2	3,330	3,257	3,265	33.0	97.8	98.0	99.95
Modern History	10,585	10,258	9,618	48.5	96.9	90.9	99.95
History Extension	1,732	1,722	1,717	60.6	99.4	99.1	99.95
Music 1	4,441	4,264	3,634	47.1	96.0	81.8	99.65
Music 2	771	701	699	48.2	90.9	90.7	99.95
Music Extension	388	381	379	52.1	98.2	97.7	99.95
PDH&PE	17,116	16,717	15,290	55.1	97.7	89.3	99.95

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR-eligible	Maximum ATAR
Physics	8,011	7,901	7,873	21.5	98.6	98.3	99.95
Science Extension	795	786	784	59.1	98.9	98.6	99.95
Society & Culture	5,108	4,970	4,644	82.2	97.3	90.9	99.90
Software Design & Development	1,710	1,637	1,568	11.8	95.7	91.7	99.95
Studies of Religion I	8,943	8,220	8,042	56.7	91.9	89.9	99.95
Studies of Religion II	5,982	5,759	5,681	62.9	96.3	95.0	99.95
Textiles & Design	1,412	1,376	1,228	95.6	97.5	87.0	99.85
Visual Arts	8,721	8,327	7,251	72.8	95.5	83.1	99.95
Arabic Continuers	193	185	162	60.6	95.9	83.9	99.40
Arabic Extension	59	57	42	71.2	96.6	71.2	99.30
Armenian Continuers	36	23	23	50.0	63.9	63.9	98.65
Chinese Beginners	34	34	32	50.0	100.0	94.1	99.05
Chinese Continuers	200	196	195	52.0	98.0	97.5	99.95
Chinese Extension	52	51	51	67.3	98.1	98.1	99.95
Chinese & Literature	261	242	257	56.3	92.7	98.5	99.85
Chinese in Context	131	130	130	71.0	99.2	99.2	99.75
Classical Greek Continuers	20	18	18	50.0	90.0	90.0	99.95
Classical Hebrew Continuers	15	15	15	20.0	100.0	100.0	98.65
French Beginners	299	293	272	76.6	98.0	91.0	99.60
French Continuers	538	514	506	68.0	95.5	94.1	99.95
French Extension	115	115	115	60.0	100.0	100.0	99.95
German Beginners	81	70	65	64.2	86.4	80.2	98.50
German Continuers	170	155	154	57.1	91.2	90.6	99.85
German Extension	40	40	40	42.5	100.0	100.0	99.50
Hindi Continuers	45	31	33	73.3	68.9	73.3	99.45
Hungarian Continuers	24	13	12	37.5	54.2	50.0	97.60
Indonesian Beginners	23	22	21	87.0	95.7	91.3	90.70
Indonesian Continuers	53	52	51	73.6	98.1	96.2	97.70
Italian Beginners	232	232	210	74.1	100.0	90.5	99.95
Italian Continuers	195	169	166	61.5	86.7	85.1	99.90
Italian Extension	33	32	32	63.6	97.0	97.0	99.90
Japanese Beginners	541	525	482	53.8	97.0	89.1	99.90
Japanese Continuers	704	660	649	61.1	93.8	92.2	99.85
Japanese Extension	150	139	139	60.0	92.7	92.7	99.85
Japanese in Context	51	49	50	70.6	96.1	98.0	99.05
Khmer Continuers	12	11	12	41.7	91.7	100.0	82.90
Korean Beginners	129	128	126	82.9	99.2	97.7	99.25
Korean Continuers	13	13	13	53.8	100.0	100.0	90.55
Korean & Literature	29	26	28	55.2	89.7	96.6	99.70
Korean in Context	56	56	56	62.5	100.0	100.0	99.90
Latin Continuers	162	162	162	56.8	100.0	100.0	99.95
Latin Extension	93	93	93	62.4	100.0	100.0	99.95
Macedonian Continuers	11	11	10	63.6	100.0	90.9	95.55
Modern Greek Beginners	86	86	82	64.0	100.0	95.3	97.35
Modern Greek Continuers	82	69	67	57.3	84.1	81.7	95.95
Modern Greek Extension	28	22	22	64.3	78.6	78.6	95.95

Course	Number all	Number HSC	Number ATAR	% Female	% HSC	% ATAR-eligible	Maximum ATAR
Modern Hebrew Continuers	26	17	17	61.5	65.4	65.4	99.90
Persian Continuers	24	24	20	83.3	100.0	83.3	87.50
Polish Continuers	14	14	14	78.6	100.0	100.0	93.35
Portuguese Continuers	19	16	15	52.6	84.2	78.9	87.80
Punjabi Continuers	23	23	23	60.9	100.0	100.0	99.15
Russian Continuers	27	27	27	77.8	100.0	100.0	99.50
Serbian Continuers	27	26	26	66.7	96.3	96.3	90.00
Spanish Beginners	192	183	177	69.8	95.3	92.2	99.50
Spanish Continuers	132	131	128	60.6	99.2	97.0	99.50
Spanish Extension	31	31	31	64.5	100.0	100.0	97.00
Swedish Continuers	26	13	12	61.5	50.0	46.2	99.60
Tamil Continuers	88	46	45	67.0	52.3	51.1	99.60
Turkish Continuers	47	36	35	63.8	76.6	74.5	99.25
Vietnamese Continuers	110	94	104	60.9	85.5	94.5	99.70
Automotive Exam	250	215	134	12.4	86.0	53.6	94.90
Business Services Exam	1,159	1,044	925	70.5	90.1	79.8	97.40
Construction Exam	1,613	1,499	1,160	5.6	92.9	71.9	95.35
Electrotechnology Exam	259	251	183	5.4	96.9	70.7	93.80
Entertainment Industry Exam	712	655	591	55.5	92.0	83.0	98.25
Financial Services Exam	100	74	71	38.0	74.0	71.0	91.25
Hospitality Exam	4,648	4,208	3,790	72.7	90.5	81.5	99.15
Human Services Exam	653	642	585	89.7	98.3	89.6	97.00
Information & Digital Technology Exam	401	358	324	20.9	89.3	80.8	96.90
Primary Industries Exam	537	490	365	53.1	91.2	68.0	95.45
Retail Services Exam	872	739	640	66.6	84.7	73.4	97.45
Tourism, Travel & Events Exam	76	70	64	86.8	92.1	84.2	94.70
Total	71,199	63,558	55,523	52.7	89.3	78.0	99.95

Table A2 Distributions of 2023 HSC marks by course

Notes: (i) The **Number** column shows the number of students who completed the course in 2023.

  (ii) The **Median HSC mark** column shows the median HSC mark per course.

  (iii) The **Median band** column indicates the performance band in which the median HSC mark lies.

  (iv) The **Percentage of students in performance band** columns show the percentage of a course candidature in each of the Performance Bands 6 to 2. Extension courses show only Bands 4 to 2 as they have four bands only: E1 to E4.

  (v) This table excludes courses with less than 10 students.

Course	Number	Median HSC mark	Median band	Percentage students in performance band				
				6	5	4	3	2
Aboriginal Studies	781	75	4	13	25	24	19	12
Agriculture	1,417	73	4	10	20	27	28	11
Ancient History	6,682	74	4	9	23	28	20	13
Biology	19,382	74	4	8	24	32	25	9
Business Studies	18,705	75	4	11	25	28	24	10
Chemistry	9,892	76	4	12	26	28	19	12
Community & Family Studies	9,099	76	4	6	30	36	20	6
Dance	777	84	5	17	52	23	8	1
Design & Technology	3,783	79	4	12	35	31	17	4
Drama	3,324	82	5	22	39	28	11	1
Earth & Environmental Science	2,553	74	4	7	26	27	22	12
Economics	5,515	79	4	13	35	28	16	6
Engineering Studies	2,557	74	4	9	21	39	27	4
English Studies Exam	1,230	59	2		<1	9	36	39
English Standard	31,696	71	4	<1	13	47	30	9
English Advanced	25,102	83	5	14	53	28	4	1
English EALD	1,204	71	4	5	17	32	25	15
English Extension 1	3,671	44	E3			41	54	5
English Extension 2	1,408	42	E3			29	57	14
Food Technology	3,743	74	4	7	23	35	24	9
Geography	4,025	78	4	10	32	36	15	5
Industrial Technology	5,808	71	4	8	16	31	31	12
Information Processes & Technology	1,739	73	4	7	25	27	23	13
Investigating Science	2,875	76	4	7	27	37	21	7
Legal Studies	10,244	77	4	14	29	27	21	7
Mathematics Standard 1 Exam	1,608	72	4	3	18	40	30	7
Mathematics Standard 2	30,805	73	4	9	22	26	24	14
Mathematics Advanced	16,428	79	4	22	27	26	18	6
Mathematics Extension 1	8,390	82	E3			34	38	24
Mathematics Extension 2	3,273	86	E3			38	48	13
Modern History	10,456	75	4	10	25	29	20	12
History Extension	1,730	41	E3			26	59	13
Music 1	4,380	84	5	23	46	21	8	1
Music 2	727	87	5	35	50	13	1	<1
Music Extension	386	47	E4			70	25	4
PDH&PE	16,873	74	4	6	25	33	26	9
Physics	7,921	76	4	13	26	29	22	10
Science Extension	794	38	E3			7	71	21

Course	Number	Median HSC mark	Median band	Percentage students in performance band				
				6	5	4	3	2
Society & Culture	5,040	78	4	12	33	35	15	4
Software Design & Development	1,648	75	4	12	23	30	23	9
Studies of Religion I	8,239	39	4	14	35	36	13	3
Studies of Religion II	5,734	79	4	11	35	36	13	4
Textiles & Design	1,401	80	5	17	35	27	16	5
Visual Arts	8,631	83	5	19	47	26	8	1
Arabic Continuers	192	82	5	17	43	32	6	2
Arabic Extension	59	42	E3			34	59	7
Armenian Continuers	22	86	5	32	50	14		5
Chinese Beginners	34	86	5	32	32	18	9	9
Chinese Continuers	193	87	5	41	29	20	5	4
Chinese Extension	52	45	E4			69	29	2
Chinese & Literature	261	85	5	21	50	26	2	1
Chinese in Context	128	92	6	64	30	5	1	1
Classical Greek Continuers	19	89	5	47	32	16	5	
Classical Hebrew Continuers	15	79	4	40	7	33	7	13
French Beginners	298	77	4	21	22	27	20	7
French Continuers	511	82	5	25	33	34	6	1
French Extension	113	40	E3			18	66	16
German Beginners	77	81	5	29	22	23	14	12
German Continuers	162	81	5	27	30	32	10	
German Extension	39	45	E4			62	36	3
Hindi Continuers	29	90	6	55	38		7	
Hungarian Continuers	13	89	5	46	38	8	8	
Indonesian Beginners	23	80	5	35	17	35	4	9

Course	Number	Median HSC mark	Median band	Percentage students in performance band				
				6	5	4	3	2
Indonesian Continuers	48	87	5	35	38	19	6	2
Italian Beginners	232	79	4	20	28	28	13	7
Italian Continuers	167	84	5	26	38	22	13	1
Italian Extension	30	45	E4			53	47	
Japanese Beginners	525	74	4	11	26	22	18	14
Japanese Continuers	659	81	5	23	32	23	14	6
Japanese Extension	145	45	E4			50	38	11
Japanese in Context	51	88	5	35	55	10		
Khmer Continuers	12	88	5	33	58	8		
Korean Beginners	129	82	5	22	36	29	9	2
Korean Continuers	13	84	5	38	31	15	8	8
Korean & Literature	29	89	5	48	48	3		
Korean in Context	56	93	6	66	27	7		
Latin Continuers	160	89	5	46	38	11	5	
Latin Extension	92	46	E4			82	16	2
Macedonian Continuers	11	71	4	27	9	18	45	
Modern Greek Beginners	86	88	5	45	27	17	2	6
Modern Greek Continuers	67	88	5	46	28	24	1	
Modern Greek Extension	23	44	E3			43	52	4
Modern Hebrew Continuers	17	96	6	94	6			
Persian Continuers	24	89	5	46	38	13		4
Polish Continuers	14	95	6	86	14			
Portuguese Continuers	18	85	5	28	39	22	11	
Punjabi Continuers	23	82	5	26	30	4	30	9
Russian Continuers	27	92	6	63	33	4		
Serbian Continuers	27	91	6	59	33	7		
Spanish Beginners	192	81	5	23	33	26	10	5
Spanish Continuers	128	83	5	21	39	30	9	1
Spanish Extension	31	45	E4			58	42	
Swedish Continuers	13	89	5	46	54			
Tamil Continuers	42	91	6	62	38			
Turkish Continuers	34	86	5	44	21	26	9	
Vietnamese Continuers	110	79	4	5	40	47	6	
Automotive Exam	229	68	3	3	15	24	38	18
Business Services Exam	1,032	76	4	2	25	48	18	6
Construction Exam	1,551	78	4	5	38	33	20	3
Electrotechnology Exam	251	71	4	3	13	40	34	9
Entertainment Industry Exam	691	78	4	15	30	33	15	6
Financial Services Exam	81	73	4	7	25	33	23	11
Hospitality Exam	4,424	75	4	6	26	40	23	5
Human Services Exam	652	73	4	2	16	47	29	5
Information & Digital Technology Exam	366	76	4	7	29	40	22	1
Primary Industries Exam	498	75	4	2	24	43	27	3
Retail Services Exam	751	71	4	2	14	38	31	13
Tourism, Travel & Events Exam	67	77	4	3	27	54	13	3

Table A3 Descriptive statistics and selected percentiles for HSC marks and scaled marks by course

Notes: (i) The **Number** column shows the number of students who completed the course in 2023.
(ii) The P_{99}, P_{90}, P_{75}, P_{50}, P_{25} **columns** refer to the 99th, 90th, 75th, 50th and 25th percentiles respectively.
(iii) The table excludes courses with less than 10 students completing the course in the current year, or if the group of students completing the course in the current year are collectively undertaking less than 25 other ATAR courses in the same year. No percentile data are given for courses with less than 40 students.
(iv) This table should not be used as a simple HSC to scaled mark conversion table. For each HSC mark there can be a range of raw marks and therefore a range of scaled marks.

Course	Number	Type of mark	Mean	SD	Max. mark	P_{99}	P_{90}	P_{75}	P_{50}	P_{25}
Aboriginal Studies	781	HSC	36.3	7.9	49.5	48.5	45.5	42.0	37.5	31.5
		scaled	15.7	12.4	45.8	43.5	35.3	24.6	12.8	4.8
Agriculture	1,417	HSC	36.1	6.8	49.5	48.0	45.0	41.0	36.5	32.0
		scaled	18.9	11.4	45.8	42.5	35.7	27.6	18.1	9.1
Ancient History	6,682	HSC	35.9	7.2	50.0	48.0	44.5	41.0	37.0	31.5
		scaled	23.0	11.1	49.5	45.1	38.3	31.5	22.9	14.0
Biology	19,382	HSC	36.8	5.6	49.0	47.0	44.5	41.0	37.0	33.0
		scaled	26.0	10.5	50.0	45.8	39.9	34.2	26.3	17.9
Business Studies	18,705	HSC	37.1	6.1	49.5	48.0	45.0	42.0	37.5	33.0
		scaled	23.6	11.0	49.6	45.0	38.6	32.5	23.5	14.6
Chemistry	9,892	HSC	37.2	6.3	50.0	48.5	45.5	42.0	38.0	32.5
		scaled	31.7	10.0	50.0	47.4	43.7	39.7	33.3	24.6
Community & Family Studies	9,099	HSC	37.4	5.2	49.0	47.0	44.0	41.0	38.0	34.0
		scaled	18.6	10.7	44.3	41.1	34.1	26.9	17.7	9.7
Dance	777	HSC	41.3	4.2	50.0	49.0	46.0	44.0	42.0	38.5
		scaled	23.8	11.2	47.4	45.4	38.6	32.6	24.0	15.0
Design & Technology	3,783	HSC	38.8	5.3	49.5	48.0	45.5	42.5	39.5	35.5
		scaled	22.8	10.6	48.4	46.1	37.5	30.6	22.3	14.6
Drama	3,324	HSC	40.8	4.7	50.0	49.0	46.5	44.5	41.0	37.5
		scaled	24.2	11.2	50.0	47.0	40.0	32.8	23.7	15.5
Earth & Environmental Science	2,553	HSC	36.1	6.7	48.5	47.5	44.0	41.0	37.0	32.0
		scaled	22.5	11.3	48.5	45.1	37.7	31.3	22.2	13.6
Economics	5,515	HSC	38.6	6.0	49.5	47.5	45.0	43.0	39.5	35.0
		scaled	31.2	9.8	50.0	46.5	42.5	38.9	32.8	25.0
Engineering Studies	2,557	HSC	37.3	4.9	49.5	48.0	44.5	40.5	37.0	34.0
		scaled	26.2	9.5	48.8	45.5	39.3	33.2	26.2	19.5
English Studies Exam	1,230	HSC	28.0	6.6	43.5	38.0	34.5	32.0	29.0	26.0
		scaled	9.3	5.9	39.0	25.6	16.7	13.1	8.3	4.7
English Standard	31,696	HSC	35.3	4.4	47.5	43.5	40.5	38.0	35.5	32.5
		scaled	19.9	8.2	46.7	38.9	30.9	25.6	19.5	13.8
English Advanced	25,102	HSC	41.1	3.5	49.5	47.5	45.5	43.5	41.5	39.0
		scaled	32.6	8.1	50.0	46.7	42.4	38.7	33.5	27.5
English EALD	1,204	HSC	34.6	7.1	49.5	47.5	43.0	39.0	35.5	30.5
		scaled	20.6	11.7	48.8	45.9	37.9	28.5	19.2	11.0
English Extension 1	3,671	HSC	42.6	4.4	50.0	49.0	47.0	46.0	44.0	40.0
		scaled	36.3	6.4	50.0	47.3	43.7	40.8	37.3	32.8
English Extension 2	1,408	HSC	40.7	5.6	50.0	49.0	47.0	45.0	42.0	37.0
		scaled	36.3	6.6	50.0	47.9	44.6	41.1	36.8	32.2
Food Technology	3,743	HSC	36.7	5.7	49.0	47.0	44.0	40.5	37.0	33.0
		scaled	18.6	11.1	45.3	42.0	34.8	27.3	17.3	8.9

Course	Number	Type of mark	Mean	SD	Max. mark	P₉₉	P₉₀	P₇₅	P₅₀	P₂₅
Geography	4,025	HSC	38.2	5.7	48.5	47.5	44.5	42.0	39.0	35.5
		scaled	25.8	11.0	50.0	46.4	39.9	34.4	26.6	17.7
Industrial Technology	5,808	HSC	35.7	5.8	49.5	48.0	43.5	39.5	35.5	32.0
		scaled	17.5	10.5	42.7	40.1	32.9	25.3	16.0	8.7
Information Processes & Technology	1,739	HSC	35.6	7.1	48.5	47.0	44.0	41.0	36.5	31.0
		scaled	23.1	11.2	49.5	45.6	38.3	31.6	23.0	14.4
Investigating Science	2,875	HSC	37.3	5.5	48.5	47.0	44.0	41.0	38.0	34.0
		scaled	20.1	11.0	46.8	43.7	35.5	28.5	19.6	11.3
Legal Studies	10,244	HSC	37.8	6.2	49.5	48.0	45.5	42.5	38.5	33.5
		scaled	25.1	11.1	50.0	46.2	39.9	33.7	25.3	16.0
Mathematics Standard 1 Exam	1,608	HSC	36.0	5.3	49.5	46.5	42.5	39.5	36.0	33.0
		scaled	13.5	8.8	35.1	32.8	26.5	20.2	11.9	6.0
Mathematics Standard 2	30,805	HSC	36.1	6.6	50.0	48.5	44.5	41.0	36.5	31.5
		scaled	22.3	10.7	46.4	43.3	37.2	30.9	21.9	13.7
Mathematics Advanced	16,428	HSC	39.2	6.2	50.0	49.5	47.0	44.5	39.5	35.0
		scaled	31.8	9.4	50.0	47.8	43.7	39.3	32.7	25.3
Mathematics Extension 1	8,390	HSC	39.2	7.8	50.0	49.0	47.5	46.0	41.0	34.0
		scaled	40.2	7.7	50.0	49.4	47.7	45.7	42.2	36.8
Mathematics Extension 2	3,273	HSC	41.3	6.0	49.5	48.5	47.0	46.0	43.0	38.0
		scaled	44.3	5.0	50.0	49.6	48.6	47.5	45.8	42.9
Modern History	10,456	HSC	36.6	6.7	49.5	47.5	45.0	41.5	37.5	32.5
		scaled	25.3	10.9	50.0	45.6	39.6	34.0	26.0	16.9
History Extension	1,730	HSC	40.2	5.9	49.0	48.0	47.0	45.0	41.0	37.0
		scaled	33.5	7.6	50.0	47.0	42.7	38.9	33.9	28.6
Music 1	4,380	HSC	41.3	4.8	50.0	49.0	46.5	44.5	42.0	39.0
		scaled	21.4	10.8	47.0	43.9	36.6	29.5	21.1	12.9
Music 2	727	HSC	43.3	3.4	50.0	49.0	47.5	46.0	43.5	41.0
		scaled	34.1	8.5	50.0	48.6	44.7	40.7	34.9	27.7
Music Extension	386	HSC	45.4	4.5	50.0	50.0	50.0	49.0	47.0	43.0
		scaled	35.8	9.5	50.0	50.0	47.4	44.3	36.7	29.2
PDH&PE	16,873	HSC	36.7	5.4	49.0	46.5	44.0	41.0	37.0	33.0
		scaled	22.7	10.6	48.5	42.7	36.9	31.3	22.8	14.1
Physics	7,921	HSC	37.6	6.0	49.0	48.0	45.5	42.5	38.0	33.5
		scaled	30.9	9.9	50.0	47.6	43.1	38.9	32.0	23.8
Science Extension	794	HSC	37.8	4.9	49.0	47.0	44.0	41.0	38.0	35.0
		scaled	32.2	7.2	49.5	47.0	41.1	37.1	32.6	27.9
Society & Culture	5,040	HSC	38.8	5.2	49.5	48.0	45.0	42.5	39.0	35.5
		scaled	23.4	10.6	48.7	45.1	37.9	31.4	23.2	15.3
Software Design & Development	1,648	HSC	37.1	6.4	49.5	48.5	45.5	42.0	37.5	33.0
		scaled	26.4	10.9	50.0	47.8	41.5	34.8	26.5	18.0
Studies of Religion I	8,239	HSC	39.2	4.9	50.0	48.0	45.0	43.0	39.0	36.0
		scaled	27.5	9.0	48.5	44.4	39.1	34.6	27.9	21.1
Studies of Religion II	5,734	HSC	38.9	5.0	49.5	47.5	45.0	42.5	39.5	36.0
		scaled	27.7	9.8	50.0	45.4	40.2	35.4	28.3	21.0
Textiles & Design	1,401	HSC	39.2	5.6	49.5	48.5	46.0	43.5	40.0	35.5
		scaled	23.0	11.1	48.7	45.0	38.5	31.3	23.2	13.9

Course	Number	Type of mark	Mean	SD	Max. mark	P$_{99}$	P$_{90}$	P$_{75}$	P$_{50}$	P$_{25}$
Visual Arts	8,631	HSC	40.9	4.2	50.0	48.5	46.0	44.0	41.5	38.5
		scaled	21.8	11.2	48.9	45.7	37.7	30.4	20.8	12.5
Arabic Continuers	192	HSC	40.7	4.4	49.0	48.0	46.0	43.5	41.0	38.5
		scaled	19.2	11.9	48.0	45.5	37.6	27.6	16.8	10.1
Arabic Extension	59	HSC	41.5	4.7	50.0	50.0	46.0	45.0	42.0	38.0
		scaled	25.2	9.5	48.2	48.2	37.0	31.8	24.3	17.2
Armenian Continuers	22	HSC	42.3	4.6	47.5					
		scaled	20.6	13.8	50.0					
Chinese Beginners	34	HSC	41.1	6.1	49.5					
		scaled	26.2	12.2	50.0					
Chinese Continuers	193	HSC	42.2	5.7	49.5	49.5	48.0	46.5	43.5	39.5
		scaled	32.4	9.9	50.0	48.9	44.1	39.2	33.7	26.8
Chinese Extension	52	HSC	45.0	3.1	49.0	49.0	48.0	47.0	45.0	44.0
		scaled	36.2	6.9	50.0	50.0	44.1	41.0	35.5	32.0
Chinese & Literature	261	HSC	41.8	3.6	48.5	47.5	46.0	44.5	42.5	39.5
		scaled	24.4	10.2	48.9	45.6	37.9	31.8	24.5	15.9
Chinese in Context	128	HSC	44.8	3.2	49.0	49.0	48.0	47.0	46.0	43.5
		scaled	31.0	9.3	50.0	49.1	42.2	36.8	32.8	25.1
Classical Greek Continuers	19	HSC	43.2	4.8	49.5					
		scaled	40.2	8.1	50.0					
Classical Hebrew Continuers	15	HSC	39.8	6.1	46.5					
		scaled	33.8	10.5	50.0					
French Beginners	298	HSC	38.2	6.9	49.5	49.0	47.0	44.0	38.0	33.5
		scaled	24.8	10.9	49.2	47.3	39.7	33.5	24.3	16.6
French Continuers	511	HSC	41.0	4.5	49.0	48.5	46.5	45.0	41.0	38.0
		scaled	34.0	8.1	50.0	48.4	43.9	40.2	34.8	28.3
French Extension	113	HSC	39.6	4.6	47.0	47.0	46.0	44.0	40.0	37.0
		scaled	39.0	5.8	50.0	49.7	46.0	43.6	39.5	35.6
German Beginners	77	HSC	39.5	6.7	50.0	50.0	47.5	45.0	40.5	34.0
		scaled	24.3	11.7	49.9	49.9	40.1	32.7	23.4	15.4
German Continuers	162	HSC	40.8	5.3	49.0	48.5	47.0	45.0	40.5	37.0
		scaled	33.5	9.6	50.0	49.2	46.2	41.4	33.6	25.7
German Extension	39	HSC	43.9	3.8	49.0					
		scaled	39.8	5.5	50.0					
Hindi Continuers	29	HSC	44.1	3.7	48.0					
		scaled	24.2	13.6	50.0					
Indonesian Beginners	23	HSC	40.6	6.0	48.5					
		scaled	25.4	8.9	42.5					
Indonesian Continuers	48	HSC	42.5	4.7	49.0	49.0	47.5	46.5	43.0	38.5
		scaled	30.1	8.8	47.5	47.5	41.2	37.1	30.1	22.4
Italian Beginners	232	HSC	38.9	6.6	50.0	49.5	47.5	44.0	39.5	35.0
		scaled	26.2	10.7	50.0	49.0	41.7	33.4	25.4	18.4
Italian Continuers	167	HSC	41.0	5.0	49.5	49.0	47.0	45.0	42.0	38.0
		scaled	32.2	9.2	50.0	49.7	42.9	39.0	33.2	26.5
Italian Extension	30	HSC	44.4	3.0	49.0					
		scaled	39.3	5.0	50.0					

Course	Number	Type of mark	Mean	SD	Max. mark	P_{99}	P_{90}	P_{75}	P_{50}	P_{25}
Japanese Beginners	525	HSC	35.4	9.0	49.5	48.0	45.5	42.0	37.0	30.0
		scaled	23.4	11.8	48.2	43.7	38.2	33.4	24.4	13.5
Japanese Continuers	659	HSC	39.6	6.1	49.5	48.5	46.5	44.5	40.5	36.0
		scaled	30.8	10.0	50.0	47.2	43.0	38.9	32.1	23.9
Japanese Extension	145	HSC	42.3	5.6	49.0	49.0	48.0	47.0	45.0	39.0
		scaled	37.2	6.5	50.0	48.0	44.7	42.2	38.0	33.2
Japanese in Context	51	HSC	43.5	2.6	46.5	46.5	45.5	45.0	44.0	42.5
		scaled	28.8	10.5	48.8	48.8	40.0	35.7	29.6	21.7
Khmer Continuers	12	HSC	43.4	2.4	47.0					
		scaled	15.8	10.2	36.9					
Korean Beginners	129	HSC	40.3	5.2	49.0	49.0	47.0	44.0	41.0	37.0
		scaled	25.9	9.4	45.9	44.3	39.2	32.3	26.4	19.3
Korean Continuers	13	HSC	41.3	6.2	48.5					
		scaled	25.0	9.0	40.9					
Korean & Literature	29	HSC	44.1	2.7	48.0					
		scaled	26.3	12.5	50.0					
Korean in Context	56	HSC	45.1	3.2	49.0	49.0	48.0	47.0	46.5	43.5
		scaled	29.2	8.8	48.4	48.4	40.5	34.5	30.6	22.0
Latin Continuers	160	HSC	43.5	3.8	49.5	49.0	48.0	46.0	44.5	41.5
		scaled	41.2	6.4	50.0	49.7	48.1	45.8	42.6	38.4
Latin Extension	92	HSC	45.9	3.1	50.0	50.0	49.0	48.0	46.0	45.0
		scaled	42.2	6.0	50.0	50.0	47.8	45.9	43.2	39.9
Macedonian Continuers	11	HSC	37.7	6.2	47.0					
		scaled	25.4	14.6	50.0					
Modern Greek Beginners	86	HSC	41.9	6.9	49.5	49.5	48.0	47.0	43.5	39.0
		scaled	25.5	10.8	48.7	48.7	38.5	34.1	25.5	17.9
Modern Greek Continuers	67	HSC	43.4	4.2	49.5	49.5	48.5	47.5	44.0	39.5
		scaled	28.1	9.8	48.6	48.6	42.0	37.3	26.7	19.7
Modern Greek Extension	23	HSC	43.1	5.0	50.0					
		scaled	34.5	7.6	49.5					
Modern Hebrew Continuers	17	HSC	47.2	2.1	49.5					
		scaled	34.9	10.3	50.0					
Persian Continuers	24	HSC	43.3	4.8	49.0					
		scaled	15.9	11.4	41.5					
Polish Continuers	14	HSC	46.9	1.6	49.0					
		scaled	26.4	9.2	42.6					
Portuguese Continuers	18	HSC	41.4	4.3	46.5					
		scaled	26.6	11.9	47.2					
Punjabi Continuers	23	HSC	38.9	6.3	46.0					
		scaled	24.0	15.4	49.5					
Russian Continuers	27	HSC	45.6	2.5	50.0					
		scaled	28.9	9.7	50.0					
Serbian Continuers	27	HSC	44.6	3.2	49.5					
		scaled	20.9	10.7	46.3					
Spanish Beginners	192	HSC	39.3	7.6	49.0	49.0	47.0	44.5	40.5	36.0
		scaled	25.8	12.7	50.0	50.0	42.2	35.4	26.1	16.6

Course	Number	Type of mark	Mean	SD	Max. mark	P_{99}	P_{90}	P_{75}	P_{50}	P_{25}
Spanish Continuers	128	HSC	41.0	4.5	50.0	49.0	46.5	44.5	41.5	38.0
		scaled	26.8	10.1	48.8	45.6	40.3	34.5	26.3	20.3
Spanish Extension	31	HSC	44.8	2.8	48.0					
		scaled	31.6	7.7	46.4					
Turkish Continuers	34	HSC	41.9	5.0	48.5					
		scaled	25.3	12.9	50.0					
Vietnamese Continuers	110	HSC	39.4	3.9	48.5	46.5	44.0	42.0	39.5	37.5
		scaled	19.7	10.0	44.2	42.1	33.8	27.2	18.3	12.2
Automotive Exam	229	HSC	34.1	5.7	47.5	47.0	42.0	37.0	34.0	30.5
		scaled	15.1	8.5	36.0	35.6	28.4	19.7	13.9	8.8
Business Services Exam	1,032	HSC	37.2	4.4	48.5	46.5	42.5	40.0	38.0	34.5
		scaled	19.5	10.1	43.7	42.2	33.7	26.8	19.5	11.3
Construction Exam	1,551	HSC	38.4	4.7	49.5	47.0	44.0	42.0	39.0	35.5
		scaled	16.2	10.0	40.6	37.8	30.5	24.1	14.9	7.8
Electrotechnology Exam	251	HSC	35.5	4.6	48.5	46.5	41.5	38.0	35.5	32.5
		scaled	17.9	8.3	38.3	36.9	29.6	23.0	16.8	11.7
Entertainment Industry Exam	691	HSC	38.6	5.5	48.5	47.5	45.5	43.0	39.0	35.0
		scaled	21.3	10.0	45.6	43.3	35.3	29.1	20.5	13.4
Financial Services Exam	81	HSC	37.0	5.1	48.0	48.0	44.0	41.5	36.5	34.0
		scaled	23.0	10.1	46.1	46.1	37.8	31.6	21.0	16.3
Hospitality Exam	4,424	HSC	37.4	4.8	49.5	46.5	43.0	40.5	37.5	34.5
		scaled	19.0	10.3	44.2	41.4	33.0	26.0	17.7	11.1
Human Services Exam	652	HSC	36.4	4.1	49.0	46.5	42.0	39.0	36.5	33.5
		scaled	19.2	9.3	41.9	39.8	32.6	26.5	19.3	11.7
Information & Digital Technology Exam	366	HSC	38.1	4.3	48.0	46.5	44.0	41.5	38.0	35.0
		scaled	20.8	9.2	43.1	40.3	34.1	28.3	19.7	13.5
Primary Industries Exam	498	HSC	37.2	4.1	47.0	45.5	42.5	40.0	37.5	34.5
		scaled	16.1	9.7	39.7	38.2	30.6	22.6	15.3	8.5
Retail Services Exam	751	HSC	35.1	5.0	47.5	45.5	41.0	38.5	35.5	32.0
		scaled	16.4	10.8	42.8	40.8	31.9	24.0	14.6	7.2
Tourism, Travel & Events Exam	67	HSC	38.1	3.8	45.5	45.5	43.0	40.5	38.5	36.0
		scaled	20.5	11.0	46.3	46.3	36.8	27.2	19.5	12.6

Table A4 Distributions of HSC marks by course: 2022 and 2023

Notes: (i)   The **Number** column shows the number of students who completed the course in the given year.

   (ii)   **Columns 45, 40, 35, 30 and 25** show the percentage of the course candidature with an HSC mark less than the specified mark.

   (iii)   The table excludes courses with less than 40 students in either year.

Course	Year	Number	Percentage of students with HSC mark less than				
			45	40	35	30	25
Aboriginal Studies	2023	781	87.2	61.7	37.4	18.7	7.0
	2022	737	84.8	65.0	41.1	18.7	4.7
Agriculture	2023	1,417	89.6	69.2	42.3	14.6	4.0
	2022	1,464	92.1	73.9	46.7	17.3	4.4
Ancient History	2023	6,682	90.7	67.3	39.0	19.0	5.7
	2022	6,336	91.5	66.1	36.3	16.5	5.7
Biology	2023	19,382	91.7	68.0	36.1	10.6	1.5
	2022	18,891	93.6	73.2	46.7	20.3	4.2
Business Studies	2023	18,705	88.6	63.9	35.9	11.8	2.0
	2022	17,950	89.5	65.1	35.1	9.7	1.4
Chemistry	2023	9,892	87.6	61.7	33.7	14.3	1.8
	2022	9,929	90.8	66.8	36.0	15.4	4.1
Community & Family Studies	2023	9,099	94.2	64.1	27.9	7.8	1.5
	2022	8,964	94.2	67.1	25.5	5.3	0.7
Dance	2023	777	83.1	31.1	8.4	0.6	0.1
	2022	840	80.7	33.6	8.0	0.4	
Design & Technology	2023	3,783	87.8	52.7	22.0	5.0	1.1
	2022	3,622	87.2	52.9	18.0	3.6	0.7
Drama	2023	3,324	78.5	39.7	11.8	1.1	0.1
	2022	3,231	79.4	41.4	12.1	1.5	0.1
Earth & Environmental Science	2023	2,553	92.6	66.3	39.2	16.8	4.9
	2022	2,224	94.5	67.9	31.5	8.7	0.7
Economics	2023	5,515	86.9	51.5	23.4	7.7	2.2
	2022	5,378	85.5	50.6	24.1	6.9	0.8
Engineering Studies	2023	2,557	91.2	70.6	31.3	4.8	0.3
	2022	2,346	91.1	70.0	37.9	14.0	1.5
English Studies Exam	2023	1,230	100.0	99.6	90.4	54.2	14.9
	2022	1,273	100.0	99.6	92.5	65.4	11.0
English Standard	2023	31,696	99.7	86.8	40.3	10.3	1.6
	2022	30,643	99.4	84.5	44.3	12.0	1.3
English Advanced	2023	25,102	86.2	32.8	4.7	0.6	0.1
	2022	24,661	85.5	32.8	6.8	0.9	
English EALD	2023	1,204	95.0	78.2	46.5	22.0	6.6
	2022	1,487	96.4	81.2	53.9	26.2	8.7
English Extension 1	2023	3,671	59.1	21.0	5.6	1.3	0.3
	2022	3,427	60.4	25.5	7.4	1.6	0.3
English Extension 2	2023	1,408	71.2	35.7	14.3	4.5	0.7
	2022	1,242	70.5	39.9	15.0	4.5	1.0
Food Technology	2023	3,743	93.2	69.8	35.1	11.3	2.1
	2022	3,639	91.2	69.7	42.7	13.4	3.8

Course	Year	Number	Percentage of students with HSC mark less than				
			45	40	35	30	25
Geography	2023	4,025	90.1	58.1	22.3	7.2	2.2
	2022	4,053	89.2	57.7	27.0	10.0	2.6
Industrial Technology	2023	5,808	92.4	76.3	45.5	14.2	2.2
	2022	5,673	92.4	78.1	49.1	13.4	2.1
Information Processes & Technology	2023	1,739	93.2	68.4	41.7	19.0	6.0
	2022	1,808	94.2	72.1	35.3	15.2	3.5
Investigating Science	2023	2,875	92.6	65.7	28.7	8.2	1.7
	2022	2,695	95.6	74.6	37.0	14.0	4.6
Legal Studies	2023	10,244	86.0	57.5	30.5	9.7	2.8
	2022	10,225	85.4	59.0	33.8	15.2	5.2
Mathematics Standard 1 Exam	2023	1,608	96.7	78.5	38.1	8.4	1.7
	2022	1,410	96.1	73.5	35.1	12.2	2.4
Mathematics Standard 2	2023	30,805	90.8	68.4	42.1	17.7	3.5
	2022	29,874	92.6	70.9	45.9	18.2	3.5
Mathematics Advanced	2023	16,428	77.7	50.2	24.6	6.9	1.3
	2022	16,865	77.4	51.0	23.6	5.5	0.9
Mathematics Extension 1	2023	8,390	65.7	45.7	28.1	11.2	4.1
	2022	8,679	65.2	44.1	26.4	13.0	6.0
Mathematics Extension 2	2023	3,273	62.2	31.9	14.2	5.4	1.4
	2022	3,271	60.4	32.7	14.9	8.1	3.9
Modern History	2023	10,456	89.7	64.9	35.8	15.6	3.9
	2022	10,153	90.2	65.6	32.1	11.2	2.6
History Extension	2023	1,730	73.6	36.4	14.7	6.0	1.6
	2022	1,532	74.6	39.8	16.3	6.5	2.1
Music 1	2023	4,380	77.4	31.0	10.2	2.0	0.7
	2022	4,263	78.3	30.4	10.5	1.9	0.4
Music 2	2023	727	65.2	14.7	1.2	0.1	
	2022	684	66.1	13.9	0.9		
Music Extension	2023	386	29.5	12.2	4.1		
	2022	353	23.8	9.1	2.5	0.3	
PDH&PE	2023	16,873	93.6	69.0	36.5	10.4	1.4
	2022	15,883	94.8	73.9	49.7	20.1	3.2
Physics	2023	7,921	86.9	61.1	32.5	10.9	1.1
	2022	7,633	87.6	58.5	32.0	13.2	4.0
Science Extension	2023	794	92.8	61.2	22.0	6.4	1.1
	2022	658	91.8	61.9	21.3	5.0	0.6
Society & Culture	2023	5,040	88.4	55.1	19.8	5.1	0.9
	2022	4,614	89.0	56.5	24.7	6.9	1.5
Software Design & Development	2023	1,648	87.9	64.7	34.8	12.1	2.8
	2022	1,806	86.2	62.0	30.4	13.1	2.8
Studies of Religion I	2023	8,239	86.1	51.4	15.9	3.2	0.6
	2022	8,433	89.6	59.1	19.8	4.0	0.6
Studies of Religion II	2023	5,734	89.2	53.8	17.7	5.0	1.1
	2022	6,091	89.9	53.5	20.5	6.8	1.5
Textiles & Design	2023	1,401	83.4	48.5	21.4	5.8	1.0
	2022	1,485	83.0	45.7	20.6	6.7	1.3

Course	Year	Number	Percentage of students with HSC mark less than				
			45	40	35	30	25
Visual Arts	2023	8,631	81.5	34.4	8.7	1.0	0.1
	2022	8,177	83.5	34.2	8.1	1.4	0.2
Arabic Continuers	2023	192	83.3	40.1	7.8	2.1	0.5
	2022	294	84.4	36.4	8.8	2.0	1.0
Arabic Extension	2023	59	66.1	30.5	6.8	1.7	
	2022	70	84.3	37.1	10.0	1.4	1.4
Chinese Continuers	2023	193	58.5	29.5	9.8	5.2	1.0
	2022	207	58.9	24.6	6.3	0.5	
Chinese Extension	2023	52	30.8	5.8	1.9		
	2022	61	41.0	3.3	1.6		
Chinese & Literature	2023	261	78.5	28.4	2.7	1.1	
	2022	330	76.1	28.5	6.7	1.2	0.3
Chinese in Context	2023	128	35.9	6.3	1.6	0.8	
	2022	152	39.5	11.2	4.6	3.3	1.3
French Beginners	2023	298	78.5	56.7	30.2	9.7	2.3
	2022	323	77.4	57.3	36.5	10.5	2.2
French Continuers	2023	511	74.6	41.1	7.2	1.0	0.2
	2022	514	73.9	42.2	15.0	4.3	1.2
French Extension	2023	113	82.3	46.0	15.9	1.8	
	2022	98	86.7	40.8	13.3	3.1	
German Beginners	2023	77	71.4	49.4	26.0	11.7	
	2022	91	67.0	41.8	28.6	9.9	
German Continuers	2023	162	73.5	43.2	11.1	0.6	0.6
	2022	143	73.4	43.4	15.4	4.2	
Indonesian Continuers	2023	48	64.6	27.1	8.3	2.1	
	2022	45	60.0	26.7	11.1	4.4	
Italian Beginners	2023	232	80.2	52.2	23.7	10.3	3.0
	2022	282	77.0	54.3	28.7	12.8	4.3
Italian Continuers	2023	167	73.7	35.3	13.8	1.2	
	2022	181	79.0	44.8	9.9	3.3	0.6
Japanese Beginners	2023	525	88.8	62.7	41.1	23.6	9.1
	2022	636	90.3	67.9	44.2	25.8	7.5
Japanese Continuers	2023	659	76.8	44.3	21.2	7.7	1.5
	2022	746	76.1	42.4	19.4	5.1	2.0
Japanese Extension	2023	145	49.7	26.9	11.7	1.4	0.7
	2022	161	54.7	25.5	9.3	3.1	0.6
Japanese in Context	2023	51	64.7	9.8			
	2022	44	56.8	11.4	2.3		
Korean Beginners	2023	129	78.3	42.6	13.2	3.9	1.6
	2022	110	73.6	43.6	19.1	4.5	0.9
Korean in Context	2023	56	33.9	7.1			
	2022	51	37.3	15.7	3.9		
Latin Continuers	2023	160	54.4	16.3	5.0		
	2022	141	61.7	25.5	7.1	2.8	0.7

Course	Year	Number	Percentage of students with HSC mark less than				
			45	40	35	30	25
Latin Extension	2023	92	18.5	5.4	2.2		
	2022	83	21.7	9.6	4.8	1.2	1.2
Modern Greek Beginners	2023	86	54.7	27.9	10.5	8.1	2.3
	2022	75	48.0	16.0	8.0	2.7	
Modern Greek Continuers	2023	67	53.7	25.4	1.5		
	2022	80	61.3	23.8	5.0	3.8	
Spanish Beginners	2023	192	76.6	43.8	17.7	7.8	3.1
	2022	237	76.4	49.8	19.8	2.1	0.8
Spanish Continuers	2023	128	78.9	39.8	10.2	0.8	
	2022	148	85.1	41.9	14.9	0.7	
Tamil Continuers	2023	42	38.1				
	2022	48	25.0				
Vietnamese Continuers	2023	110	94.5	54.5	7.3	0.9	0.9
	2022	155	92.3	50.3	15.5	5.8	1.3
Automotive Exam	2023	229	97.4	82.5	59.0	21.4	3.5
	2022	211	95.7	90.0	55.0	14.7	4.3
Business Services Exam	2023	1,032	97.6	73.0	25.1	6.7	0.7
	2022	1,176	97.1	68.2	32.1	8.3	0.5
Construction Exam	2023	1,551	94.6	56.5	23.3	3.7	0.3
	2022	1,709	92.3	58.9	23.5	3.1	0.3
Electrotechnology Exam	2023	251	96.8	84.1	43.8	9.6	0.8
	2022	236	98.3	91.1	67.4	35.6	6.8
Entertainment Industry Exam	2023	691	85.2	55.6	22.1	6.9	1.3
	2022	651	80.5	52.8	19.0	3.8	0.3
Financial Services Exam	2023	81	92.6	67.9	34.6	11.1	
	2022	77	97.4	77.9	46.8	5.2	1.3
Hospitality Exam	2023	4,424	94.1	68.1	28.1	5.6	0.9
	2022	4,300	94.1	60.3	24.1	6.1	0.5
Human Services Exam	2023	652	97.9	81.6	34.7	5.2	0.2
	2022	599	99.0	87.3	35.7	3.0	0.2
Information & Digital Technology Exam	2023	366	93.4	64.5	24.3	1.9	0.5
	2022	383	99.5	79.1	33.4	8.1	1.3
Primary Industries Exam	2023	498	97.6	73.5	30.1	3.2	0.2
	2022	549	96.9	70.9	29.3	4.6	0.4
Retail Services Exam	2023	751	97.7	83.6	45.4	14.8	2.0
	2022	745	99.9	90.3	50.2	11.0	1.2
Tourism, Travel & Events Exam	2023	67	97.0	70.1	16.4	3.0	
	2022	79	96.2	74.7	45.6	8.9	1.3

Table A5 Distributions of scaled marks by course: 2022 and 2023

Notes: (i)   The **Number** column shows the number of students who completed the course in the given year.

(ii) **Columns 45, 40, 35, 30, 25, 20 and 15** show the percentage of the course candidature with a scaled mark less than the specified mark.

(iii) The table excludes courses with less than 40 students in either year.

Course	Year	Number	Percentage of students with scaled mark less than						
			45	40	35	30	25	20	15
Aboriginal Studies	2023	781	99.6	95.9	89.5	82.1	75.8	66.6	55.2
	2022	737	99.2	92.8	87.4	81.3	76.4	69.3	55.9
Agriculture	2023	1,417	99.7	96.8	88.6	79.9	68.2	56.4	42.8
	2022	1,464	99.3	95.0	87.2	76.6	66.3	54.2	39.1
Ancient History	2023	6,682	99.0	93.1	83.0	70.9	56.4	41.6	27.7
	2022	6,336	98.9	93.3	83.9	70.7	56.3	40.8	26.8
Biology	2023	19,382	98.3	90.2	77.3	61.8	46.3	31.2	17.5
	2022	18,891	99.0	91.6	77.8	61.6	45.6	29.9	16.1
Business Studies	2023	18,705	99.0	92.4	81.5	68.0	54.2	40.2	26.1
	2022	17,950	99.2	92.3	81.8	68.9	55.7	41.3	25.7
Chemistry	2023	9,892	94.4	76.4	56.2	39.2	25.9	15.5	7.6
	2022	9,929	94.5	77.0	56.0	38.4	24.7	14.8	7.3
Community & Family Studies	2023	9,099	100.0	98.2	91.4	81.9	70.3	56.9	41.6
	2022	8,964	100.0	97.8	91.5	82.5	72.7	59.0	42.8
Dance	2023	777	98.8	92.4	81.2	66.8	53.4	38.1	25.6
	2022	840	97.7	90.5	78.6	66.4	52.9	36.0	21.8
Design & Technology	2023	3,783	98.3	93.7	85.5	73.9	58.4	42.2	26.1
	2022	3,622	98.8	94.1	85.4	73.9	59.0	42.8	25.7
Drama	2023	3,324	96.9	90.2	79.7	68.0	53.6	39.5	23.9
	2022	3,231	97.2	90.7	81.2	68.3	54.9	39.4	24.3
Earth & Environmental Science	2023	2,553	99.0	93.6	83.7	71.3	57.9	43.6	29.3
	2022	2,224	99.7	95.4	85.9	72.7	57.5	42.4	27.2
Economics	2023	5,515	96.6	80.4	59.0	39.9	24.8	14.7	7.8
	2022	5,378	95.6	79.2	58.0	40.0	25.3	14.5	7.0
Engineering Studies	2023	2,557	98.7	91.4	80.4	64.2	45.3	26.9	13.9
	2022	2,346	98.4	91.9	79.3	63.2	44.5	29.3	14.6
English Studies Exam	2023	1,230		100.0	99.8	99.6	98.9	95.9	82.8
	2022	1,273		100.0	99.8	99.6	99.1	94.5	83.7
English Standard	2023	31,696	100.0	99.4	96.2	87.9	72.9	52.2	29.6
	2022	30,643	100.0	99.1	95.7	87.0	72.3	51.3	29.2
English Advanced	2023	25,102	96.8	80.8	57.1	34.5	17.7	7.8	2.7
	2022	24,661	97.1	81.9	58.8	36.6	19.8	9.0	3.1
English EALD	2023	1,204	98.2	93.6	85.5	77.7	63.8	52.3	36.5
	2022	1,487	98.5	93.5	86.1	78.1	65.8	53.1	38.4
English Extension 1	2023	3,671	94.7	69.2	36.3	14.9	5.5	2.0	0.8
	2022	3,427	93.5	67.9	37.9	16.5	6.4	2.5	0.8
English Extension 2	2023	1,408	90.7	70.0	38.9	17.6	6.0	1.4	0.3
	2022	1,242	91.9	69.4	42.7	18.6	7.3	2.4	0.6
Food Technology	2023	3,743	99.9	97.4	90.3	80.8	70.3	57.4	43.6
	2022	3,639	99.9	95.5	87.5	78.5	69.1	57.7	44.1

Course	Year	Number	Percentage of students with scaled mark less than						
			45	40	35	30	25	20	15
Geography	2023	4,025	97.9	90.3	77.0	60.8	44.5	31.2	18.8
	2022	4,053	98.6	91.4	77.9	62.9	46.4	31.7	19.8
Industrial Technology	2023	5,808	100.0	98.7	92.9	84.6	74.4	61.0	46.7
	2022	5,673	100.0	99.5	93.9	85.7	74.0	60.9	45.0
Information Processes & Technology	2023	1,739	98.7	93.4	83.2	70.2	55.7	42.3	27.1
	2022	1,808	99.1	94.0	85.1	73.3	60.0	42.5	27.8
Investigating Science	2023	2,875	99.7	96.4	88.8	78.2	66.6	51.1	36.4
	2022	2,695	99.9	98.0	91.6	81.5	67.9	52.7	38.8
Legal Studies	2023	10,244	98.1	90.2	78.1	63.5	48.8	35.0	22.3
	2022	10,225	98.9	91.1	79.0	64.0	49.0	34.6	22.0
Mathematics Standard 1 Exam	2023	1,608		100.0	99.9	95.5	86.5	74.4	58.6
	2022	1,410			100.0	95.2	87.9	76.9	62.7
Mathematics Standard 2	2023	30,805	99.8	95.0	85.1	72.8	59.0	44.4	29.0
	2022	29,874	99.9	96.4	87.0	74.3	60.2	44.9	28.9
Mathematics Advanced	2023	16,428	93.7	77.8	58.5	39.8	24.0	12.4	5.4
	2022	16,865	93.7	77.8	59.1	40.6	24.9	13.1	5.1
Mathematics Extension 1	2023	8,390	69.7	38.0	19.5	9.9	5.5	2.8	1.2
	2022	8,679	69.9	38.3	20.3	11.4	6.3	2.9	1.1
Mathematics Extension 2	2023	3,273	41.1	13.8	5.6	2.5	0.9	0.3	0.2
	2022	3,271	42.7	13.4	5.3	2.8	1.3	0.7	0.4
Modern History	2023	10,456	98.7	91.1	77.9	62.5	47.2	32.9	20.5
	2022	10,153	98.2	90.9	78.8	62.8	46.1	31.1	19.4
History Extension	2023	1,730	95.8	79.8	56.0	29.7	13.6	5.6	1.4
	2022	1,532	95.3	80.0	55.6	29.8	12.0	4.4	1.2
Music 1	2023	4,380	99.5	95.1	87.0	76.4	61.9	46.5	31.5
	2022	4,263	99.8	96.0	88.1	76.6	62.6	46.4	29.9
Music 2	2023	727	91.3	71.3	50.6	32.2	16.2	6.5	1.2
	2022	684	92.1	73.7	48.5	27.8	14.9	6.0	2.3
Music Extension	2023	386	80.8	62.2	43.5	26.4	15.8	7.5	1.8
	2022	353	76.8	61.8	41.9	22.9	9.9	5.1	1.1
PDH&PE	2023	16,873	99.8	96.1	85.3	71.1	56.1	41.6	27.4
	2022	15,883	99.6	94.8	84.9	72.4	58.5	42.8	26.1
Physics	2023	7,921	94.8	79.2	61.1	43.0	28.0	16.4	7.7
	2022	7,633	95.2	77.4	58.4	42.3	28.5	17.6	9.2
Science Extension	2023	794	96.9	86.6	62.6	35.3	15.0	6.5	1.6
	2022	658	97.7	81.0	55.0	24.6	10.9	5.2	1.7
Society & Culture	2023	5,040	98.9	94.2	83.7	70.4	55.5	39.8	24.2
	2022	4,614	98.7	93.0	83.6	70.8	56.3	41.0	26.0
Software Design & Development	2023	1,648	96.1	87.2	75.7	61.2	44.7	30.3	17.1
	2022	1,806	96.8	87.1	73.6	58.6	42.6	28.3	17.4
Studies of Religion I	2023	8,239	99.3	92.0	76.5	58.2	39.0	21.8	9.9
	2022	8,433	98.9	91.0	77.4	59.6	40.6	23.2	10.4
Studies of Religion II	2023	5,734	98.5	89.6	73.7	55.8	36.9	22.3	11.7
	2022	6,091	98.5	89.6	74.3	56.7	40.7	25.7	14.5
Textiles & Design	2023	1,401	99.1	93.0	83.1	71.1	56.0	41.5	28.5
	2022	1,485	99.4	93.9	83.0	68.9	55.0	41.8	29.0

Course	Year	Number	Percentage of students with scaled mark less than						
			45	40	35	30	25	20	15
Visual Arts	2023	8,631	98.6	93.5	85.3	74.1	61.7	47.4	32.5
	2022	8,177	98.7	93.4	85.1	73.3	60.8	46.5	30.9
Arabic Continuers	2023	192	99.0	93.2	87.5	79.2	68.2	58.9	45.8
	2022	294	100.0	98.0	92.9	86.1	73.5	63.9	52.7
Arabic Extension	2023	59	98.3	94.9	84.7	61.0	50.8	30.5	16.9
	2022	70		100.0	94.3	82.9	50.0	27.1	8.6
Chinese Continuers	2023	193	91.2	77.2	54.9	37.3	20.7	9.8	6.2
	2022	207	89.9	73.4	49.3	31.4	16.9	6.8	3.4
Chinese Extension	2023	52	90.4	69.2	44.2	15.4	3.8	1.9	
	2022	61	88.5	62.3	29.5	8.2	1.6	1.6	
Chinese & Literature	2023	261	98.9	93.1	82.8	67.8	51.7	35.6	22.2
	2022	330	97.6	92.1	78.8	65.2	49.1	36.1	24.8
Chinese in Context	2023	128	93.8	86.7	66.4	41.4	24.2	12.5	5.5
	2022	152	96.7	82.9	59.9	40.8	26.3	17.1	9.2
French Beginners	2023	298	98.3	90.3	78.5	64.4	52.3	34.6	19.1
	2022	323	98.1	90.4	79.6	65.9	51.4	36.5	18.6
French Continuers	2023	511	92.0	73.8	51.3	30.5	14.5	5.9	1.4
	2022	514	91.2	72.6	49.8	28.6	16.3	8.0	3.1
French Extension	2023	113	82.3	54.0	20.4	8.0	0.9		
	2022	98	87.8	39.8	13.3	3.1			
German Beginners	2023	77	94.8	89.6	80.5	66.2	53.2	36.4	24.7
	2022	91	97.8	89.0	80.2	62.6	52.7	35.2	18.7
German Continuers	2023	162	86.4	67.9	55.6	35.8	19.1	7.4	3.1
	2022	143	90.9	69.9	51.0	25.2	13.3	7.0	3.5
Indonesian Continuers	2023	48	95.8	85.4	66.7	45.8	29.2	16.7	6.3
	2022	45	95.6	77.8	57.8	35.6	26.7	15.6	8.9
Italian Beginners	2023	232	95.3	87.5	78.0	63.8	47.4	30.6	14.7
	2022	282	97.2	87.9	76.6	65.2	48.2	32.3	17.7
Italian Continuers	2023	167	93.4	82.0	57.5	36.5	22.2	12.6	4.2
	2022	181	95.0	81.2	65.2	44.2	19.9	8.3	4.4
Japanese Beginners	2023	525	99.4	93.1	81.7	64.4	52.2	39.4	27.2
	2022	636	97.5	92.5	82.7	67.3	55.7	40.3	27.7
Japanese Continuers	2023	659	96.2	78.8	60.8	42.0	28.1	16.4	8.2
	2022	746	94.0	79.4	62.2	42.5	25.6	13.1	5.4
Japanese Extension	2023	145	92.4	62.8	34.5	12.4	5.5	1.4	
	2022	161	86.3	59.6	28.0	8.7	3.1	1.2	
Japanese in Context	2023	51	94.1	88.2	66.7	51.0	31.4	15.7	9.8
	2022	44	97.7	93.2	72.7	54.5	43.2	27.3	18.2
Korean Beginners	2023	129	99.2	94.6	81.4	64.3	45.7	27.9	13.2
	2022	110	95.5	88.2	75.5	59.1	42.7	28.2	15.5
Korean in Context	2023	56	94.6	87.5	75.0	48.2	35.7	19.6	5.4
	2022	51	94.1	86.3	72.5	43.1	29.4	19.6	9.8
Latin Continuers	2023	160	70.0	36.9	13.8	8.1	5.0		
	2022	141	77.3	43.3	20.6	7.8	2.8	2.8	0.7
Latin Extension	2023	92	65.2	26.1	6.5	4.3	2.2	2.2	
	2022	83	60.2	34.9	13.3	6.0	4.8	2.4	1.2

Course	Year	Number	Percentage of students with scaled mark less than						
			45	40	35	30	25	20	15
Modern Greek Beginners	2023	86	96.5	91.9	82.6	62.8	47.7	31.4	19.8
	2022	75	96.0	86.7	68.0	58.7	45.3	22.7	10.7
Modern Greek Continuers	2023	67	97.0	85.1	67.2	59.7	46.3	26.9	6.0
	2022	80	95.0	81.3	70.0	61.3	46.3	33.8	17.5
Spanish Beginners	2023	192	93.2	83.3	74.0	62.0	46.4	33.9	19.8
	2022	237	96.2	86.1	75.5	65.0	52.7	35.0	20.7
Spanish Continuers	2023	128	97.7	89.1	77.3	61.7	45.3	23.4	10.2
	2022	148	98.0	87.8	72.3	58.8	43.9	29.1	16.2
Tamil Continuers	2023	42	92.9	83.3	81.0	71.4	61.9	45.2	35.7
	2022	48	87.5	70.8	62.5	50.0	39.6	27.1	14.6
Vietnamese Continuers	2023	110	100.0	96.4	91.8	81.8	70.9	55.5	36.4
	2022	155	97.4	92.9	84.5	76.1	67.7	52.3	36.8
Automotive Exam	2023	229		100.0	98.3	92.1	86.5	75.1	55.5
	2022	211			100.0	94.3	90.0	76.3	61.6
Business Services Exam	2023	1,032	100.0	97.6	91.4	83.1	70.2	52.5	36.0
	2022	1,176	100.0	98.6	93.7	83.8	71.2	55.5	37.3
Construction Exam	2023	1,551	100.0	99.9	97.0	89.4	76.4	64.2	50.7
	2022	1,709	100.0	99.8	95.4	88.2	77.1	64.6	47.6
Electrotechnology Exam	2023	251		100.0	95.6	90.0	78.9	64.9	39.0
	2022	236		100.0	95.8	87.3	77.1	61.9	37.7
Entertainment Industry Exam	2023	691	99.9	96.8	89.9	78.7	65.3	49.2	28.8
	2022	651	100.0	98.5	90.0	78.5	65.0	46.4	27.6
Financial Services Exam	2023	81	98.8	92.6	84.0	70.4	63.0	49.4	22.2
	2022	77	97.4	89.6	77.9	68.8	57.1	45.5	20.8
Hospitality Exam	2023	4,424	100.0	98.2	91.9	84.1	71.7	53.3	40.2
	2022	4,300	100.0	98.5	92.0	84.3	70.7	57.2	39.1
Human Services Exam	2023	652	100.0	99.2	94.8	84.2	71.3	54.0	34.8
	2022	599	100.0	97.8	92.5	82.1	68.9	52.6	32.9
Information & Digital Technology Exam	2023	366	100.0	98.1	91.8	81.7	67.8	50.3	29.2
	2022	383	100.0	99.0	94.3	84.9	70.0	52.7	36.0
Primary Industries Exam	2023	498		100.0	95.4	90.0	79.5	67.7	49.2
	2022	549		100.0	96.9	88.2	78.3	66.3	45.7
Retail Services Exam	2023	751	100.0	97.7	94.0	86.3	75.5	63.5	52.3
	2022	745	100.0	98.7	93.2	88.3	75.4	65.2	50.2
Tourism, Travel & Events Exam	2023	67	97.0	92.5	89.6	77.6	70.1	52.2	32.8
	2022	79	98.7	94.9	86.1	74.7	70.9	55.7	39.2

Table A6 Courses that contribute to the ATAR (more than 10 units)

Notes: (i) This table shows the percentage of the course candidature who completed more than 10 units of ATAR courses and for whom *all* units of that course contributed to their ATAR.

(ii) The **Number receiving ATAR** column shows the number of students who did the course in 2023 or a previous year, and received an ATAR in 2023.

(iii) The **ATAR students with > 10 units** columns show the number and percentage of ATAR students who completed more than 10 units of ATAR courses.

(iv) The **Percentage who counted course** column shows the percentage of the ATAR students who completed more than 10 units of ATAR courses for whom all units of that course contributed towards their ATAR.

(v) The **Maximum ATAR including the course** column shows the maximum ATAR of any student doing the course in any year and including all units from that course in their ATAR calculation.

(vi) The table excludes courses with less than 10 students.

Course	Number receiving ATAR	ATAR students with > 10 units		Percentage who counted course	Maximum ATAR including the course
		Number	Percentage		
Aboriginal Studies	471	130	28	82	99.35
Agriculture	1,082	418	39	78	99.90
Ancient History	6,060	2,185	36	85	99.90
Biology	18,650	7,461	40	84	99.95
Business Studies	17,246	5,342	31	85	99.90
Chemistry	9,788	5,458	56	75	99.95
Community & Family Studies	7,477	2,054	27	88	99.00
Dance	700	228	33	61	99.35
Design & Technology	3,420	1,122	33	73	99.85
Drama	2,920	1,038	36	72	99.95
Earth & Environmental Science	2,356	770	33	86	99.80
Economics	5,436	2,585	48	77	99.95
Engineering Studies	2,471	1,089	44	76	99.85
English Studies Exam	587	107	18	100	92.60
English Standard	28,880	7,494	26	100	99.60
English Advanced	24,977	11,535	46	99	99.95
English EALD	1,079	286	27	100	99.95
English Extension 1	3,665	2,410	66	88	99.95
English Extension 2	1,406	817	58	85	99.95
Food Technology	3,061	813	27	85	99.45
Geography	3,764	1,434	38	84	99.95
Industrial Technology	4,191	1,262	30	74	99.10
Information Processes & Technology	1,592	632	40	75	99.95
Investigating Science	2,416	852	35	83	99.45
Legal Studies	9,757	3,441	35	83	99.95
Mathematics Standard 1 Exam	1,037	268	26	62	91.75
Mathematics Standard 2	28,581	7,729	27	71	99.75
Mathematics Advanced	15,439	8,207	53	73	99.95
Mathematics Extension 1	8,321	5,815	70	91	99.95
Mathematics Extension 2	3,265	1,745	53	98	99.95
Modern History	9,618	3,797	39	82	99.95
History Extension	1,717	1,332	78	84	99.95
Music 1	3,634	1,197	33	60	99.20
Music 2	699	459	66	68	99.95

Course	Number receiving ATAR	ATAR students with > 10 units		Percentage who counted course	Maximum ATAR including the course
		Number	Percentage		
Music Extension	379	275	73	70	99.95
PDH&PE	15,290	4,509	29	85	99.75
Physics	7,873	4,187	53	74	99.95
Science Extension	784	650	83	75	99.95
Society & Culture	4,644	1,396	30	84	99.90
Software Design & Development	1,568	703	45	68	99.95
Studies of Religion I	8,042	6,920	86	80	99.95
Studies of Religion II	5,681	1,402	25	82	99.95
Textiles & Design	1,228	322	26	80	99.75
Visual Arts	7,251	2,193	30	74	99.95
Arabic Continuers	162	62	38	76	99.30
Arabic Extension	42	33	79	97	99.30
Armenian Continuers	23	11	48	64	98.65
Chinese Beginners	32	15	47	60	99.05
Chinese Continuers	195	122	63	66	99.95
Chinese Extension	51	44	86	89	99.75
Chinese & Literature	257	88	34	60	99.85
Chinese in Context	130	72	55	58	99.75
Classical Greek Continuers	18	17	94	59	99.95
Classical Hebrew Continuers	15	7	47	86	98.10
French Beginners	272	110	40	86	99.60
French Continuers	506	336	66	64	99.95
French Extension	115	99	86	83	99.95
German Beginners	65	25	38	72	98.50
German Continuers	154	94	61	50	99.85
German Extension	40	36	90	89	99.50
Hindi Continuers	33	26	79	58	99.45
Hungarian Continuers	12	9	75	56	97.60
Indonesian Beginners	21	3	14	67	90.70
Indonesian Continuers	51	30	59	67	97.70
Italian Beginners	210	95	45	71	99.95
Italian Continuers	166	112	67	71	99.90
Italian Extension	32	29	91	79	99.85
Japanese Beginners	482	150	31	69	99.70
Japanese Continuers	649	358	55	64	99.75
Japanese Extension	139	109	78	78	99.70
Japanese in Context	50	23	46	61	97.35
Khmer Continuers	12	3	25	67	82.90
Korean Beginners	126	33	26	79	99.25
Korean Continuers	13	5	38	60	90.55
Korean & Literature	28	7	25	86	99.70
Korean in Context	56	20	36	65	99.90
Latin Continuers	162	141	87	67	99.95

Course	Number receiving ATAR	ATAR students with > 10 units		Percentage who counted course	Maximum ATAR including the course
		Number	Percentage		
Latin Extension	93	84	90	70	99.95
Macedonian Continuers	10	7	70	57	95.55
Modern Greek Beginners	82	26	32	65	97.35
Modern Greek Continuers	67	39	58	62	95.95
Modern Greek Extension	22	20	91	90	95.95
Modern Hebrew Continuers	17	3	18	100	99.90
Persian Continuers	20	9	45	67	81.25
Polish Continuers	14	6	43	50	91.15
Portuguese Continuers	15	7	47	43	87.20
Punjabi Continuers	23	14	61	64	96.10
Russian Continuers	27	14	52	50	96.05
Serbian Continuers	26	6	23	50	87.25
Spanish Beginners	177	72	41	71	99.50
Spanish Continuers	128	67	52	73	98.85
Spanish Extension	31	25	81	96	97.00
Swedish Continuers	12	8	67	13	94.75
Tamil Continuers	45	28	62	61	99.55
Turkish Continuers	35	9	26	89	99.25
Vietnamese Continuers	104	29	28	66	99.70
Automotive Exam	134	49	37	45	83.15
Business Services Exam	925	384	42	77	97.40
Construction Exam	1,160	351	30	81	95.35
Electrotechnology Exam	183	67	37	72	93.80
Entertainment Industry Exam	591	196	33	77	97.45
Financial Services Exam	71	48	68	71	91.25
Hospitality Exam	3,790	1,100	29	76	99.15
Human Services Exam	585	215	37	66	96.30
Information & Digital Technology Exam	324	121	37	64	95.10
Primary Industries Exam	365	146	40	68	95.45
Retail Services Exam	640	224	35	61	95.65
Tourism, Travel & Events Exam	64	21	33	76	94.70

Table A7 ATAR distribution

Note: (i) This table shows the number of students receiving each ATAR from 99.95 to 99.00 and the number corresponding to the stated ATAR ranges down to 30.00–30.95.

(ii) The median ATAR in 2023 was 71.05.

ATAR	Number	Number on or above	Percentage on or above
99.95	49	49	0.1
99.90	48	97	0.2
99.85	48	145	0.3
99.80	48	193	0.3
99.75	46	239	0.4
99.70	51	290	0.5
99.65	47	337	0.6
99.60	51	388	0.7
99.55	48	436	0.8
99.50	49	485	0.9
99.45	49	534	1.0
99.40	49	583	1.1
99.35	50	633	1.1
99.30	48	681	1.2
99.25	51	732	1.3
99.20	46	778	1.4
99.15	48	826	1.5
99.10	43	869	1.6
99.05	51	920	1.7
99.00	54	974	1.8
99.00 – 99.95	974	974	1.8
98.00 – 98.95	971	1,945	3.5
97.00 – 97.95	973	2,918	5.3
96.00 – 96.95	965	3,883	7.0
95.00 – 95.95	980	4,863	8.8
94.00 – 94.95	982	5,845	10.5
93.00 – 93.95	977	6,822	12.3
92.00 – 92.95	972	7,794	14.0
91.00 – 91.95	969	8,763	15.8
90.00 – 90.95	969	9,732	17.5
89.00 – 89.95	967	10,699	19.3
88.00 – 88.95	983	11,682	21.0
87.00 – 87.95	977	12,659	22.8
86.00 – 86.95	967	13,626	24.5
85.00 – 85.95	975	14,601	26.3
84.00 – 84.95	956	15,557	28.0
83.00 – 83.95	962	16,519	29.8
82.00 – 82.95	969	17,488	31.5
81.00 – 81.95	961	18,449	33.2
80.00 – 80.95	957	19,406	35.0
79.00 – 79.95	943	20,349	36.6
78.00 – 78.95	962	21,311	38.4

ATAR	Number	Number on or above	Percentage on or above
77.00 – 77.95	945	22,256	40.1
76.00 – 76.95	937	23,193	41.8
75.00 - 75.95	942	24,135	43.5
74.00 – 74.95	927	25,062	45.1
73.00 – 73.95	929	25,991	46.8
72.00 – 72.95	936	26,927	48.5
71.00 – 71.95	897	27,824	50.1
70.00 – 70.95	926	28,750	51.8
69.00 – 69.95	896	29,646	53.4
68.00 – 68.95	908	30,554	55.0
67.00 – 67.95	887	31,441	56.6
66.00 – 66.95	885	32,326	58.2
65.00 – 65.95	876	33,202	59.8
64.00 – 64.95	859	34,061	61.3
63.00 – 63.95	849	34,910	62.9
62.00 – 62.95	853	35,763	64.4
61.00 – 61.95	826	36,589	65.9
60.00 – 60.95	831	37,420	67.4
59.00 – 59.95	804	38,224	68.8
58.00 – 58.95	797	39,021	70.3
57.00 – 57.95	808	39,829	71.7
56.00 – 56.95	784	40,613	73.1
55.00 – 55.95	763	41,376	74.5
54.00 – 54.95	740	42,116	75.9
53.00 – 53.95	735	42,851	77.2
52.00 – 52.95	735	43,586	78.5
51.00 – 51.95	726	44,312	79.8
50.00 – 50.95	704	45,016	81.1
49.00 – 49.95	689	45,705	82.3
48.00 – 48.95	681	46,386	83.5
47.00 – 47.95	645	47,031	84.7
46.00 – 46.95	628	47,659	85.8
45.00 – 45.95	608	48,267	86.9
44.00 – 44.95	580	48,847	88.0
43.00 – 43.95	548	49,395	89.0
42.00 – 42.95	526	49,921	89.9
41.00 – 41.95	498	50,419	90.8
40.00 – 40.95	471	50,890	91.7
39.00 – 39.95	444	51,334	92.5
38.00 – 38.95	410	51,744	93.2
37.00 – 37.95	385	52,129	93.9
36.00 – 36.95	356	52,485	94.5
35.00 – 35.95	314	52,799	95.1
34.00 – 34.95	300	53,099	95.6
33.00 – 33.95	282	53,381	96.1
32.00 – 32.95	241	53,622	96.6
31.00 – 31.95	225	53,847	97.0
30.00 – 30.95	209	54,056	97.4

Table A8 ATAR percentiles: 2019–2023

Note: This table shows the ATAR at selected percentiles of the ATAR cohort.

Percentile	ATAR 2019	ATAR 2020	ATAR 2021	ATAR 2022	ATAR 2023
100	99.95	99.95	99.95	99.95	99.95
99	99.40	99.40	99.40	99.40	99.40
98	98.80	98.80	98.80	98.85	98.85
95	97.00	97.05	97.05	97.15	97.10
90	94.00	94.10	94.15	94.30	94.25
85	91.05	91.15	91.20	91.50	91.40
80	88.05	88.25	88.30	88.65	88.55
75	85.05	85.30	85.35	85.80	85.70
70	82.05	82.30	82.40	82.95	82.85
60	75.95	76.3	76.50	77.20	77.00
50	69.75	70.15	70.40	71.25	71.05
40	63.25	63.75	64.05	65.10	64.85
30	56.35	56.90	57.25	58.50	58.20

Table A9 Relationship between the ATAR and aggregates: 2019–2023

Note: This table shows the lowest aggregate of scaled marks corresponding to each of the selected ATARs.

| ATAR | Lowest aggregate | | | | |
	2019	2020	2021	2022	2023
99.95	476.7	478.1	478.8	478.1	479.8
99.50	454.5	458.8	458.7	459.9	459.3
99.00	443.8	447.8	448.0	449.1	449.5
98.00	429.6	433.8	433.7	434.3	435.0
95.00	402.0	404.2	404.8	404.6	405.5
90.00	370.0	370.1	369.8	368.9	370.0
85.00	342.2	341.8	340.2	338.9	340.2
80.00	316.3	315.8	313.5	310.9	313.0
75.00	291.7	290.8	288.0	285.2	287.4
70.00	268.6	267.2	263.8	259.5	261.8
65.00	245.9	244.1	239.8	234.4	236.8
60.00	223.5	221.1	217.2	210.4	212.5
55.00	200.2	198.3	195.4	186.4	188.2
50.00	176.8	175.5	172.8	162.8	164.3

Report on the Scaling of the 2023 NSW Higher School Certificate

About this publication

This report contains information on the calculation of the Australian Tertiary Admission Rank (ATAR) in 2023. It includes an overview of the HSC and the ATAR, a breakdown of the scaling process, analysis of HSC and ATAR statistics and notes on trends for the year.

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