

ATAR Report 2020
Queensland Tertiary Admissions Centre

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## 1 Introduction

This report provides an overview of the calculation of the Australian Tertiary Admission Rank (ATAR) for the 2020 Queensland Year 12 student cohort.

The report includes a summary of subject enrolments, the outcomes of the inter-subject scaling process and the allocation of students to ATAR bands.

This is not intended to be a comprehensive report or interpretation of the full ATAR results.
Further information on how Queensland's ATARs are calculated may be found at www.qtac.edu.au.

## 2 Definitions

ATAR: The Australian Tertiary Admission Rank is a measure of a student's overall achievement at school. The value indicates students' position relative to the potential Year 12 population in their Australian State or Territory. ATARs are expressed on a 2000-point scale from 99.95 (highest) to 0.00 , in increments of 0.05 . ATARs equal to or below 30.00 are reported as " 30.00 or less".

General: Unless otherwise specified, references to General subjects include General, General Extension and Senior External Examination subjects.

Inter-subject scaling: The process by which raw results are converted to scaled results to allow comparability between subjects.

QCAA: Queensland Curriculum and Assessment Authority.
QCE: Queensland Certificate of Education.
QTAC: Queensland Tertiary Admissions Centre.
Raw results: The subject result achieved by a student. For General subjects, General Extension or Senior External Examination subjects, raw results have a score out of 100, as awarded by the QCAA. For Applied subjects, raw results consist of a letter grade as awarded by the QCAA.

Scaling cohort: The number of students with at least one result in a QCE senior subject (General or Applied) at Unit 3 and 4 or a completed VET qualification at Australian Qualification Framework (AQF) level 3 or above in 2020.

Scaled results: This term refers to the subject result generated via the inter-subject scaling process. Scaled results are expressed on a 100-point scale, up to 2 decimal places.

TEA: The Tertiary Entrance Aggregate is the combination of the best 5 scaled results for each student.
VET: Vocational Education and Training.

## 3 Overview of the 2020 Year 12 cohort

The Queensland Year 12 cohort this year consisted of 49,667 students, with 47,027 who were part of the scaling cohort, and 26,042 being ATAR eligible.

Other Year 12 students not included in the cohort are Year 12 students who completed their senior years through a VET provider, students who completed an alternate curriculum such as the International Baccalaureate and students who left school before the end of Year 12 (see 5.4 Participation Model).

The number of distinct senior subjects studied in 2020 was 93 , comprising 41 General subjects, 5 General Extension subjects, 22 Senior External Examination subjects and 25 Applied subjects. Subjects that were completed between 2016 and 2019 have been converted by QCAA to enable ATAR calculations.

In addition to QCAA senior subjects, there were 124 distinct Vocational Education and Training (VET) qualifications completed at Australian Qualification Framework (AQF) level 3 or higher.

The most studied subjects in 2020 for each subject type were English (General), English and Literature Extension (General Extension), Chinese (Senior External Examination) and Essential English (Applied).

The most frequently completed VET qualifications for each AQF Level were the Certificate III in Fitness, the Certificate IV in Crime and Justice Studies, the Diploma of Business and the Advanced Diploma of Business.

### 3.1 Number of subject results provided to QTAC

Table 1 provides a summary of results in different types of QCAA senior subjects and the total awarded VET qualifications (Certificate III and above) provided to QTAC in 2020.

Table 1: QCAA senior subjects and awarded VET qualifications

| Type |  |  | Results |  |
| :--- | :--- | ---: | ---: | ---: |
| Code | Description |  | Total | Percent |
| GEN | General |  | 154,608 | $61.93 \%$ |
| GEX | General Extension | 1,484 | $0.59 \%$ |  |
| SEE | Senior External Examination |  | 650 | $0.26 \%$ |
| APP | Applied | 74,495 | $29.84 \%$ |  |
| VET | Vocational Education and Training | 18,413 | $7.38 \%$ |  |
|  | Total | 249,650 | $100.00 \%$ |  |

### 3.2 QCAA senior subjects

Table 2, Table 3, Table 4 and Table 5 provide a summary of QCAA senior subject results provided to QTAC in General and Applied subjects for the 2020 Queensland Year 12 cohort.

Table 2: QCAA senior subjects - General (GEN)

| Subject |  | Results |  |
| :--- | :--- | ---: | ---: |
|  |  | Total | Percent |
| Type | Name | 38 | $0.025 \%$ |
| GEN | Aboriginal and Torres Strait Islander Studies | 2,097 | $1.356 \%$ |
| GEN | Accounting | 155 | $0.100 \%$ |
| GEN | Aerospace Systems | 472 | $0.305 \%$ |
| GEN | Agricultural Science | 2,524 | $1.633 \%$ |
| GEN | Ancient History | 12,993 | $8.404 \%$ |
| GEN | Biology | 4,623 | $2.990 \%$ |
| GEN | Business | 8,054 | $5.209 \%$ |
| GEN | Chemistry | 651 | $0.421 \%$ |
| GEN | Chinese | 1,031 | $0.667 \%$ |
| GEN | Dance | 3,596 | $2.326 \%$ |
| GEN | Design | 1,900 | $1.229 \%$ |
| GEN | Digital Solutions | 3,521 | $2.277 \%$ |
| GEN | Drama | 318 | $0.206 \%$ |
| GEN | Earth and Environmental Science | 2,266 | $1.466 \%$ |
| GEN | Economics | 1,235 | $0.799 \%$ |
| GEN | Engineering | 26,622 | $17.219 \%$ |
| GEN | English | 641 | $0.415 \%$ |
| GEN | English as an Additional Language | 2,548 | $1.648 \%$ |
| GEN | Film Television and New Media | 1,155 | $0.747 \%$ |
| GEN | Food and Nutrition | 596 | $0.385 \%$ |
| GEN | French | 19,558 | $12.650 \%$ |
| GEN | General Mathematics | 2,508 | $1.622 \%$ |
| GEN | Geography | 270 | $0.175 \%$ |
| GEN | German | 2,231 | $1.443 \%$ |
| GEN | Health | 134 | $0.087 \%$ |
| GEN | Italian | 1,350 | $0.873 \%$ |
| GEN | Japanese | 4,751 | $3.073 \%$ |
| GEN | Legal Studies | 2,628 | $1.700 \%$ |
| GEN | Literature | 835 | $0.540 \%$ |
| GEN | Marine Science | 10,020 | $6.481 \%$ |
| GEN | Mathematical Methods | 4,493 | $2.906 \%$ |
| GEN | Modern History | 480 | $1.552 \%$ |
| GEN | Music | 6,435 | $0.313 \%$ |
| GEN | Philosophy and Reason | $4.162 \%$ |  |
| GEN | Physical Education | 5,859 | $3.790 \%$ |
| GEN | Physics | 2,886 | $1.867 \%$ |
| GEN | Psychology | 223 | $0.144 \%$ |
| GEN | Spanish |  |  |
|  |  |  |  |

Table 2: QCAA senior subjects - General (GEN) (continued)

| Type | Name | Total | Percent |
| :--- | :--- | ---: | ---: |
| GEN | Specialist Mathematics | 3,219 | $2.082 \%$ |
| GEN | Study of Religion | 3,353 | $2.169 \%$ |
| GEN | Visual Art | 3,935 | $2.545 \%$ |
|  | Total | 154,608 | $100.000 \%$ |

Table 3: QCAA senior subjects - Senior External Examination (SEE)

| Subject |  | Results |  |
| :---: | :---: | :---: | :---: |
| Type | Name | Total | Percent |
| SEE | Accounting | 2 | 0.308\% |
| SEE | Ancient History | 7 | 1.077\% |
| SEE | Arabic | 46 | 7.077\% |
| SEE | Biology | 17 | 2.615\% |
| SEE | Chemistry | 8 | 1.231\% |
| SEE | Chinese | 169 | 26.000\% |
| SEE | English | 49 | 7.538\% |
| SEE | General Mathematics | 42 | 6.462\% |
| SEE | Indonesian | 32 | 4.923\% |
| SEE | Korean | 62 | 9.538\% |
| SEE | Latin | 14 | 2.154\% |
| SEE | Legal Studies | 13 | 2.000\% |
| SEE | Mathematical Methods | 18 | 2.769\% |
| SEE | Modern Greek | 5 | 0.769\% |
| SEE | Modern History | 12 | 1.846\% |
| SEE | Philosophy and Reason | 12 | 1.846\% |
| SEE | Physics | 3 | 0.462\% |
| SEE | Polish | 3 | 0.462\% |
| SEE | Punjabi | 6 | 0.923\% |
| SEE | Russian | 22 | 3.385\% |
| SEE | Vietnamese | 107 | 16.462\% |
| SEE | Visual Art | 1 | 0.154\% |
|  | Total | 650 | 100.000\% |

Table 4: QCAA senior subjects - General Extension (GEX)

| Subject |  |  | Results |  |
| :--- | :--- | :--- | :--- | ---: | ---: |
| Type | Name |  | Total | Percent |
| GEX | Chinese Extension |  | 45 | $3.032 \%$ |
| GEX | English and Literature Extension |  | 594 | $40.027 \%$ |
| GEX | French Extension |  | 20 | $1.348 \%$ |
| GEX | German Extension |  | 35 | $2.358 \%$ |
| GEX | Music Extension (Composition) |  | 189 | $12.736 \%$ |
| GEX | Music Extension (Musicology) |  | 21 | $1.415 \%$ |
| GEX | Music Extension (Performance) | 580 | $39.084 \%$ |  |
|  | Total | 1,484 | $100.000 \%$ |  |

Table 5: QCAA senior subjects - Applied (APP)

| Subject |  | Results |  |
| :---: | :---: | :---: | :---: |
| Type | Name | Total | Percent |
| APP | Agricultural Practices | 611 | 0.820\% |
| APP | Aquatic Practices | 2,161 | 2.901\% |
| APP | Arts in Practice | 238 | 0.319\% |
| APP | Building and Construction Skills | 1,632 | 2.191\% |
| APP | Business Studies | 1,020 | 1.369\% |
| APP | Dance in Practice | 327 | 0.439\% |
| APP | Drama in Practice | 506 | 0.679\% |
| APP | Early Childhood Studies | 1,163 | 1.561\% |
| APP | Engineering Skills | 1,844 | 2.475\% |
| APP | Essential English | 16,097 | 21.608\% |
| APP | Essential Mathematics | 15,164 | 20.356\% |
| APP | Fashion | 493 | 0.662\% |
| APP | Furnishing Skills | 2,608 | 3.501\% |
| APP | Hospitality Practices | 2,745 | 3.685\% |
| APP | Industrial Graphics Skills | 1,145 | 1.537\% |
| APP | Industrial Technology Skills | 2,252 | 3.023\% |
| APP | Information and Communication Technology | 1,409 | 1.891\% |
| APP | Media Arts in Practice | 1,046 | 1.404\% |
| APP | Music in Practice | 519 | 0.697\% |
| APP | Religion and Ethics | 5,805 | 7.792\% |
| APP | Science in Practice | 1,848 | 2.481\% |
| APP | Social and Community Studies | 2,412 | 3.238\% |
| APP | Sport and Recreation | 6,599 | 8.858\% |
| APP | Tourism | 1,485 | 1.993\% |
| APP | Visual Arts in Practice | 3,366 | 4.518\% |
|  | Total | 74,495 | 100.000\% |

### 3.3 VET qualifications

Table 6 provides a summary of awarded VET qualifications for the 2020 Queensland Year 12 cohort.

Table 6: Completed VET qualifications

| Vocational Education and Training qualification |  |  | Number of qualifications |  |
| :--- | :--- | ---: | ---: | ---: |
| Type | Level | Total | Percent |  |
| VET | Certificate III |  | 15,387 | $83.566 \%$ |
| VET | Certificate IV | 1,074 | $5.833 \%$ |  |
| VET | Diploma | 1,933 | $10.498 \%$ |  |
| VET | Advanced Diploma | 19 | $0.103 \%$ |  |
| Total |  | 18,413 | $100.000 \%$ |  |

## 4 Inter-subject scaling

### 4.1 Purpose of the subject scaling

Inter-subject scaling is the process used to map each QCAA senior subject and completed VET qualification to a common scale. This ensures that all the raw results achieved in different subjects can be compared fairly.

5 subject results were scaled for each Applied subject (e.g. Figure 1) and 100 raw results were scaled for each General subject.

Raw results for VET qualifications can be interpreted as binary variables of their completion status (completed or not completed). Each completed VET qualification level is awarded an independent scaled result.


Figure 1: A visual representation of the subject scaling

### 4.2 The inter-subject scaling algorithm

The algorithm used in the inter-subject scaling process performs a number of iterations to update and refine scaled results until it reaches a full calibration. The number of iterations required to achieve a solution in 2020 was 25 (Figure 2).

A full mathematical description of the process can be found in "Calculating the ATAR in Queensland" on QTAC's dedicated ATAR page at www.qtac.edu.au.


Figure 2: Maximum percentile ranks variation between iterations

### 4.3 Subject scaling results

Table 7 and Table 8 provide a selection of percentiles of the distribution of raw and scaled results for each subject cohort.

The percentiles indicate the proportion of students achieving a result less than or equal to the reported number. For example, $90 \%$ of English students achieve a raw result of 86 or less, and a raw result of 86 is equal to a scaled result of 91.16.

Table 9 provides the scaled result for each VET qualification level.
The inter-subject scaling process and results were reviewed by the ATAR Technical Committee on Scaling. The group provides technical and policy advice and oversight of the ATAR calculation.

Table 7: Distribution of raw and scaled results - General subjects

| Subject | Result | Distribution of results (percentiles) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 25\% | 50\% | 75\% | 90\% | 99\% |
| Aboriginal and Torres Strait Islander Studies (**) | Raw <br> Scaled |  |  |  |  |  |
| Accounting | Raw | 57.00 | 68.00 | 79.00 | 88.00 | 95.00 |
|  | Scaled | 60.79 | 76.56 | 87.32 | 92.68 | 95.32 |
| Aerospace Systems | Raw | 53.00 | 63.00 | 75.00 | 85.00 | 91.00 |
|  | Scaled | 44.86 | 59.23 | 74.43 | 83.86 | 88.04 |
| Agricultural Science | Raw | 61.00 | 68.00 | 76.00 | 82.00 | 89.00 |
|  | Scaled | 38.23 | 52.87 | 68.89 | 78.66 | 86.99 |
| Ancient History |  | 56.00 | 67.00 | 79.00 | 88.00 | 97.00 |
|  | Scaled | 49.95 | 68.17 | 83.13 | 90.20 | 94.50 |
| Arabic (**) | Raw <br> Scaled |  |  |  |  |  |
| Biology | Raw | 64.00 | 73.00 | 81.00 | 87.00 | 94.00 |
|  | Scaled | 58.48 | 76.12 | 86.82 | 91.91 | 95.54 |
| Business | Raw | 54.00 | 63.00 | 75.00 | 83.00 | 94.00 |
|  | Scaled | 50.95 | 63.46 | 77.52 | 84.49 | 91.08 |
| Chemistry | Raw | 67.00 | 77.00 | 85.00 | 91.00 | 97.00 |
|  | Scaled | 73.97 | 88.77 | 94.72 | 97.07 | 98.39 |
| Chinese | Raw | 77.00 | 87.00 | 93.00 | 97.00 | 100.00 |
|  | Scaled | 76.84 | 84.29 | 87.75 | 89.67 | 90.93 |
| Chinese Extension (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Dance | Raw | 66.00 | 78.00 | 88.00 | 94.00 | 100.00 |
|  | Scaled | 44.84 | 59.88 | 71.23 | 77.03 | 81.96 |
| Design | Raw | 54.00 | 66.00 | 77.00 | 87.00 | 97.00 |
|  | Scaled | 45.00 | 60.30 | 72.81 | 81.76 | 88.24 |
| Digital Solutions | Raw | 56.00 | 67.00 | 80.00 | 89.00 | 95.00 |
|  | Scaled | 56.08 | 73.04 | 86.83 | 92.43 | 94.84 |
| Drama | Raw | 60.00 | 72.00 | 83.00 | 91.00 | 99.00 |
|  | Scaled | 44.22 | 63.09 | 77.56 | 85.23 | 90.59 |
| Earth and Environmental Science | Raw | 61.00 | 68.00 | 76.00 | 83.00 | 88.00 |
|  | Scaled | 46.99 | 62.93 | 78.10 | 87.23 | 91.57 |
| Economics | Raw | 59.00 | 70.00 | 81.00 | 88.00 | 95.00 |
|  | Scaled | 67.46 | 84.17 | 93.16 | 96.13 | 97.83 |

Table 7: Distribution of raw and scaled results - General subjects (continued)

| Subject | Result | 25\% | 50\% | 75\% | 90\% | 99\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Engineering | Raw | 52.00 | 63.00 | 75.00 | 83.00 | 96.00 |
|  | Scaled | 61.26 | 77.22 | 88.62 | 93.13 | 97.09 |
| English | Raw | 53.00 | 64.00 | 76.00 | 86.00 | 97.00 |
|  | Scaled | 54.20 | 70.89 | 84.26 | 91.16 | 95.50 |
| English and Literature Extension | Raw | 73.00 | 84.00 | 92.00 | 96.00 | 100.00 |
|  | Scaled | 86.38 | 92.39 | 95.12 | 96.10 | 96.90 |
| English as an Additional Language | Raw | 50.00 | 59.00 | 69.00 | 77.00 | 91.00 |
|  | Scaled | 51.35 | 66.41 | 79.88 | 87.39 | 94.85 |
| Film Television and New Media | Raw | 57.00 | 69.00 | 81.00 | 90.00 | 99.00 |
|  | Scaled | 41.02 | 57.04 | 71.71 | 80.45 | 86.98 |
| Food and Nutrition | Raw | 53.00 | 63.00 | 74.00 | 83.00 | 94.00 |
|  | Scaled | 46.22 | 58.79 | 71.35 | 79.72 | 87.28 |
| French | Raw | 71.00 | 81.00 | 91.00 | 95.00 | 100.00 |
|  | Scaled | 84.52 | 92.81 | 96.83 | 97.73 | 98.51 |
| French Extension (**) |  |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| General Mathematics |  | $55.00$ | 64.00 | 72.00 | 80.00 | $90.00$ |
|  | Scaled | $47.66$ | 60.86 | 71.44 | 80.10 | $87.94$ |
| Geography | Raw | 53.00 | 64.00 | 74.00 | 83.00 | 94.00 |
|  | Scaled | 52.56 | 69.02 | 80.79 | 88.16 | 93.74 |
| German | Raw | 71.00 | 80.00 | 88.00 | 94.00 | 100.00 |
|  | Scaled | 83.14 | 91.15 | 95.19 | 97.00 | 98.14 |
| German Extension (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Health | Raw | $54.00$ | $64.00$ | $76.00$ | $85.00$ | $95.00$ |
|  | Scaled | $48.24$ | $61.92$ | 76.02 | $83.95$ | $90.12$ |
| Indonesian (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Italian | Raw | 69.00 | 79.00 | 92.00 | 96.00 | 100.00 |
|  | Scaled | 75.46 | 87.74 | 95.54 | 96.78 | 97.68 |
| Japanese | Raw |  | 77.00 | 88.00 | 94.00 | 100.00 |
|  | Scaled | 71.44 | 85.32 | 91.85 | 94.18 | 95.87 |
| Korean | Raw |  |  |  |  |  |
|  | Scaled | 66.52 | 72.96 | 78.57 | 80.77 | 81.30 |
| Latin (**) | Raw <br> Scaled |  |  |  |  |  |
| Legal Studies | Raw | 52.00 | 62.00 | 75.00 | 85.00 | 94.00 |
|  | Scaled | 53.24 | 67.61 | 82.11 | 89.37 | 93.55 |
| Literature | Raw | 64.00 | 76.00 | 86.00 | 93.00 | 99.00 |
|  | Scaled | 71.29 | 86.21 | 93.10 | 95.85 | 97.35 |
| Marine Science | Raw | 56.00 | 63.00 | 71.00 | 78.00 | 86.00 |
|  | Scaled | 41.21 | 55.44 | 70.55 | 80.96 | 89.12 |
| Mathematical Methods | Raw | 57.00 | 69.00 | 80.00 | 88.00 | 97.00 |
|  | Scaled | 77.12 | 88.78 | 94.53 | 96.83 | 98.30 |
| Modern Greek (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Modern History |  | 59.00 | 69.00 | 81.00 | 88.00 | 96.00 |
|  | Scaled | 56.99 | 73.96 | 87.64 | 92.36 | 95.70 |
| Music | Raw | 62.00 | 77.00 | 88.00 | 95.00 | 100.00 |
|  | Scaled | 53.49 | 73.58 | 84.19 | 88.95 | 91.53 |

Table 7: Distribution of raw and scaled results - General subjects (continued)

| Subject | Result | 25\% | 50\% | 75\% | 90\% | 99\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Music Extension (Composition) | Raw | 80.00 | 89.00 | 95.00 | 98.00 | 100.00 |
|  | Scaled | 71.13 | 81.13 | 86.18 | 88.24 | 89.47 |
| Music Extension (Musicology) (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Music Extension (Performance) | Raw | 79.00 | 88.00 | 94.00 | 98.00 | 100.00 |
|  | Scaled | 69.37 | 79.95 | 85.32 | 88.20 | 89.45 |
| Philosophy and Reason | Raw | 62.00 | 75.00 | 87.00 | 95.00 | 100.00 |
|  | Scaled | 67.52 | 84.34 | 92.84 | 95.89 | 97.11 |
| Physical Education | Raw | 54.00 | 64.00 | 75.00 | 84.00 | 94.00 |
|  | Scaled | 46.74 | 60.90 | 74.54 | 83.07 | 89.70 |
| Physics | Raw | 67.00 | 76.00 | 85.00 | 92.00 | 98.00 |
|  | Scaled | 72.68 | 87.40 | 94.76 | 97.44 | 98.63 |
| Polish (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Psychology | Raw | 66.00 | 75.00 | 83.00 | 89.00 | 96.00 |
|  | Scaled | 56.31 | 73.22 | 84.21 | 89.80 | 94.05 |
| Punjabi (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Russian (**) | Raw |  |  |  |  |  |
|  | Scaled |  |  |  |  |  |
| Spanish | Raw | 69.00 | 78.00 | 87.00 | 93.00 | 100.00 |
|  | Scaled | 72.39 | 83.15 | 90.29 | 93.41 | 95.87 |
| Specialist Mathematics | Raw | 60.00 | 73.00 | 84.00 | 91.00 | 97.00 |
|  | Scaled | 84.50 | 94.12 | 97.55 | 98.61 | 99.15 |
| Study of Religion | Raw | 59.00 | 69.00 | 79.00 | 87.00 | 96.00 |
|  | Scaled | 65.30 | 79.60 | 89.00 | 93.55 | 96.55 |
| Vietnamese | Raw | 70.00 | 79.00 | 84.00 | 89.00 | 95.00 |
|  | Scaled | 73.22 | 79.78 | 82.84 | 85.50 | 88.21 |
| Visual Art | Raw | 55.00 | 66.00 | 78.00 | 88.00 | 98.00 |
|  | Scaled | 45.95 | 61.40 | 75.91 | 84.78 | 90.78 |

Note:
${ }^{* *}$ ) Results are not reported for subjects completed by less than 50 students.

Table 8: Distribution of raw and scaled results - Applied subjects

| Subject | Result | 25\% | 50\% | 75\% | 90\% | 99\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agricultural Practices | Raw | C | B | B | A | A |
|  | Scaled | 5.72 | 18.99 | 18.99 | 47.53 | 47.53 |
| Aquatic Practices | Raw | C | B | B | A | A |
|  | Scaled | 7.73 | 20.61 | 20.61 | 44.59 | 44.59 |
| Arts in Practice | Raw | C | C | B | A | A |
|  | Scaled | 11.12 | 11.12 | 28.78 | 56.63 | 56.63 |
| Building and Construction Skills | Raw | C | B | B | A | A |
|  | Scaled | 5.73 | 15.47 | 15.47 | 35.52 | 35.52 |
| Business Studies | Raw | C | B | B | A | A |
|  | Scaled | 12.87 | 30.94 | 30.94 | 57.61 | 57.61 |
| Dance in Practice | Raw | C | B | B | A | A |
|  | Scaled | 10.37 | 25.77 | 25.77 | 51.02 | 51.02 |
| Drama in Practice | Raw | C | B | B | A | A |
|  | Scaled | 7.16 | 23.74 | 23.74 | 55.69 | 55.69 |
| Early Childhood Studies | Raw | C | B | B | A | A |
|  | Scaled | 10.02 | 26.36 | 26.36 | 53.49 | 53.49 |
| Engineering Skills | Raw | C | C | B | B | A |
|  | Scaled | 6.56 | 6.56 | 16.66 | 16.66 | 36.26 |
| Essential English | Raw | C | C | B | B | A |
|  | Scaled | 11.46 | 11.46 | 25.10 | 25.10 | 46.47 |
| Essential Mathematics | Raw | C | C | B | B | A |
|  | Scaled | 12.68 | 12.68 | 26.62 | 26.62 | 47.54 |
| Fashion | Raw | C | B | B | A | A |
|  | Scaled | 19.36 | 41.51 | 41.51 | 67.72 | 67.72 |
| Furnishing Skills | Raw | C | C | B | A | A |
|  | Scaled | 6.75 | 6.75 | 16.72 | 35.77 | 35.77 |
| Hospitality Practices | Raw | C | C | B | A | A |
|  | Scaled | 12.18 | 12.18 | 29.52 | 55.84 | 55.84 |
| Industrial Graphics Skills | Raw | C | B | B | A | A |
|  | Scaled | 9.92 | 26.29 | 26.29 | 53.60 | 53.60 |
| Industrial Technology Skills | Raw | C | B | B | A | A |
|  | Scaled | 10.55 | 23.95 | 23.95 | 45.66 | 45.66 |
| Information and Communication Technology | Raw | C | C | B | A | A |
|  | Scaled | 13.52 | 13.52 | 31.98 | 58.59 | 58.59 |
| Media Arts in Practice | Raw | C | B | B | A | A |
|  | Scaled | 11.68 | 27.26 | 27.26 | 51.48 | 51.48 |
| Music in Practice | Raw | C | B | B | A | A |
|  | Scaled | 8.71 | 23.26 | 23.26 | 49.06 | 49.06 |
| Religion and Ethics | Raw | C | B | B | A | A |
|  | Scaled | 28.40 | 58.24 | 58.24 | 83.06 | 83.06 |
| Science in Practice | Raw | C | C | B | B | A |
|  | Scaled | 11.94 | 11.94 | 27.93 | 27.93 | 52.55 |
| Social and Community Studies | Raw | C | C | B | A | A |
|  | Scaled | 10.27 | 10.27 | 26.11 | 52.17 | 52.17 |
| Sport and Recreation | Raw | C | B | B | A | A |
|  | Scaled | 8.45 | 24.94 | 24.94 | 54.46 | 54.46 |
| Tourism | Raw | C | B | B | A | A |
|  | Scaled | 12.93 | 27.18 | 27.18 | 48.42 | 48.42 |
| Visual Arts in Practice | Raw | C | B | B | A | A |
|  | Scaled | 10.40 | 26.15 | 26.15 | 51.91 | 51.91 |

Table 9: Scaled results - Completed VET qualification levels

| Level | Scaled Result |
| :--- | ---: |
| Certificate III | 40.76 |
| Certificate IV | 52.20 |
| Diploma | 56.01 |
| Advanced Diploma (**) |  |
| Note: |  |
| (**) Results are not reported for VET qualification levels completed by less than 50 students. |  |

## 5 ATAR

### 5.1 Tertiary Entrance Aggregate

The inter-subject scaling outputs are used to determine each student's Tertiary Entrance Aggregate (TEA). The TEA is a measure of a student's "overall performance" and it's used to derive an order rank. The TEA is determined from the scaled results achieved by students, but it is also dependent on a combination of policy rules which determine:

- the eligibility of a student for a TEA and subsequently an ATAR; and
- the subject results that should be used to compose each individual TEA.


### 5.2 Eligibility criteria

In order to be eligible for an ATAR, students are required to satisfactorily complete (i.e. attain a letter grade of "C" or better) in one of the following QCAA English senior subjects:

- English
- English as an Additional Language
- Literature
- English and Literature Extension
- Essential English.

The TEAs and subsequently the ATARs are determined from the 5 scaled results or the best 5 scaled results attained between 2016 and 2020, excluding precluded subject combinations. The TEAs can include either:

- 5 General subjects at Units 3 and 4, or
- 4 General subjects at Units 3 and 4 and 1 Applied subject at Units 3 and 4, or
- 4 General subjects at Units 3 and 4 and 1 completed VET qualification at AQF Certificate III level or higher.

Table 10 shows a summary of the 2020 Queensland Year 12 cohort by ATAR eligibility.

Table 10: ATAR eligibility in 2020 Year 12 cohort

| ATAR eligibility | Students | Percent |
| :--- | ---: | ---: |
| Ineligible | 23,625 | $47.57 \%$ |
| Eligible | 26,042 | $52.43 \%$ |
| Total | 49,667 | $100.00 \%$ |

### 5.3 Subject schemes

Table 11 shows the number of students eligible for an ATAR in 2020 by subject scheme.

Table 11: ATAR composition by subject scheme

| Scheme | Students | Percent |
| :--- | ---: | ---: |
| 5 General | 18,878 | $72.49 \%$ |
| 4 General, 1 VET | 2,970 | $11.40 \%$ |
| 4 General, 1 Applied | 4,194 | $16.10 \%$ |
| Total | 26,042 | $100.00 \%$ |

### 5.4 Participation Model

As each state jurisdiction uses different ATAR eligibility rules and subject scaling methods, Queensland's scaled results and TEAs cannot be compared directly to those of other jurisdictions.

ATAR bands form the basis of comparison of overall student achievement across different states and territories. In order to achieve this, each jurisdiction employs a participation model to allocate ATAR eligible students within the entire potential Year 12 population (which includes, but is not limited to, students who left school and students who completed an alternative curriculum such as the International Baccalaureate).

The participation model is defined as a cubic spline function parametrised by the participation rate, where the participation rate is the number of ATAR eligible students on the potential Year 12 population in Queensland ${ }^{1}$. Figure 3 shows the participation model used in Queensland in 2020.


Figure 3: Participation Model

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### 5.5 ATAR distribution

This section includes a summary of the allocation of students into bands, according to the participation model used in 2020. Figure 4 shows the number of students allocated to each ATAR band.


Figure 4: Summary of student allocations to ATAR bands in 2020

Students receiving an ATAR of 99.95 did so with 13 different combinations of subjects and 16 distinct General subjects: Biology, Chemistry, Economics, Engineering, English, English and Literature Extension, French, German, Italian, Latin, Literature, Mathematical Methods, Modern History, Philosophy and Reason, Physics and Specialist Mathematics.

Table 12 shows the number of students allocated in the first 20 bands (from 99.00 to 99.95 ) and Table 13 provides a summary of students' allocations in 20-band intervals.

Table 12: ATAR distribution, top 20 bands

| ATAR | Number of Students | Cumulative percentage of students |
| :--- | ---: | ---: |
| 99.95 | 30 | $0.12 \%$ |
| 99.90 | 33 | $0.24 \%$ |
| 99.85 | 32 | $0.36 \%$ |
| 99.80 | 31 | $0.48 \%$ |
| 99.75 | 31 | $0.60 \%$ |
| 99.70 | 32 | $0.73 \%$ |
| 99.65 | 30 | $0.84 \%$ |
| 99.60 | 33 | $0.97 \%$ |
| 99.55 | 31 | $1.09 \%$ |
| 99.50 | 29 | $1.20 \%$ |
| 99.45 | 34 | $1.33 \%$ |
| 99.40 | 31 | $1.45 \%$ |
| 99.35 | 30 | $1.56 \%$ |
| 99.30 | 32 | $1.69 \%$ |
| 99.25 | 33 | $1.81 \%$ |
| 99.20 | 32 | $1.94 \%$ |
| 99.15 | 31 | $2.05 \%$ |
| 99.10 | 32 | $2.18 \%$ |
| 99.05 | 32 | $2.30 \%$ |
| 99.00 | 30 | $2.42 \%$ |
|  |  |  |

Table 13: ATAR distribution, 20-band groups

| ATAR | Number of Students | Cumulative percentage of students |
| ---: | ---: | ---: |
| $99.00-99.95$ | 629 | $2.42 \%$ |
| $98.00-98.95$ | 631 | $4.84 \%$ |
| $97.00-97.95$ | 629 | $7.25 \%$ |
| $96.00-96.95$ | 626 | $9.66 \%$ |
| $95.00-95.95$ | 632 | $12.08 \%$ |
| $94.00-94.95$ | 629 | $14.50 \%$ |
| $93.00-93.95$ | 627 | $16.91 \%$ |
| $92.00-92.95$ | 627 | $19.31 \%$ |
| $91.00-91.95$ | 628 | $21.73 \%$ |
| $90.00-90.95$ | 628 | $24.14 \%$ |
| $89.00-89.95$ | 621 | $26.52 \%$ |
| $88.00-88.95$ | 623 | $28.91 \%$ |
| $87.00-87.95$ | 617 | $31.28 \%$ |
| $86.00-86.95$ | 618 | $33.66 \%$ |
| $85.00-85.95$ | 612 | $36.01 \%$ |
| $84.00-84.95$ | 608 | $38.34 \%$ |
| $83.00-83.95$ | 603 | $40.66 \%$ |
| $82.00-82.95$ | 602 | $42.97 \%$ |
| $81.00-81.95$ | 592 | $45.24 \%$ |

Table 13: ATAR distribution, 20-band groups (continued)

| ATAR | Number of Students | Cumulative percentage of students |
| :---: | :---: | :---: |
| 80.00-80.95 | 586 | 47.49\% |
| 79.00-79.95 | 577 | 49.71\% |
| 78.00-78.95 | 574 | 51.91\% |
| 77.00-77.95 | 559 | 54.06\% |
| 76.00-76.95 | 551 | 56.17\% |
| 75.00-75.95 | 544 | 58.26\% |
| 74.00-74.95 | 533 | 60.31\% |
| 73.00-73.95 | 519 | 62.30\% |
| 72.00-72.95 | 509 | 64.26\% |
| 71.00-71.95 | 491 | 66.14\% |
| 70.00-70.95 | 478 | 67.98\% |
| 69.00-69.95 | 464 | 69.76\% |
| 68.00-68.95 | 443 | 71.46\% |
| 67.00-67.95 | 427 | 73.10\% |
| 66.00-66.95 | 407 | 74.66\% |
| 65.00-65.95 | 387 | 76.15\% |
| 64.00-64.95 | 373 | 77.58\% |
| 63.00-63.95 | 355 | 78.95\% |
| 62.00-62.95 | 335 | 80.23\% |
| 61.00-61.95 | 325 | 81.48\% |
| 60.00-60.95 | 305 | 82.65\% |
| 59.00-59.95 | 294 | 83.78\% |
| 58.00-58.95 | 276 | 84.84\% |
| 57.00-57.95 | 265 | 85.86\% |
| 56.00-56.95 | 251 | 86.82\% |
| 55.00-55.95 | 237 | 87.73\% |
| 54.00-54.95 | 222 | 88.58\% |
| 53.00-53.95 | 214 | 89.41\% |
| 52.00-52.95 | 200 | 90.17\% |
| 51.00-51.95 | 192 | 90.91\% |
| 50.00-50.95 | 178 | 91.59\% |
| 49.00-49.95 | 167 | 92.24\% |
| 48.00-48.95 | 159 | 92.85\% |
| 47.00-47.95 | 148 | 93.41\% |
| 46.00-46.95 | 141 | 93.96\% |
| 45.00-45.95 | 132 | 94.46\% |
| 44.00-44.95 | 121 | 94.93\% |
| 43.00-43.95 | 116 | 95.37\% |
| 42.00-42.95 | 109 | 95.79\% |
| 41.00-41.95 | 99 | 96.17\% |
| 40.00-40.95 | 91 | 96.52\% |
| 39.00-39.95 | 86 | 96.85\% |
| 38.00-38.95 | 81 | 97.16\% |
| 37.00-37.95 | 74 | 97.45\% |

Table 13: ATAR distribution, 20-band groups (continued)

| ATAR | Number of Students | Cumulative percentage of students |
| ---: | ---: | ---: |
| $36.00-36.95$ | 68 | $97.71 \%$ |
| $35.00-35.95$ | 63 | $97.95 \%$ |
| $34.00-34.95$ | 56 | $98.16 \%$ |
| $33.00-33.95$ | 52 | $98.36 \%$ |
| $32.00-32.95$ | 49 | $98.55 \%$ |
| $31.00-31.95$ | 44 | $98.72 \%$ |
| $30.00-30.95$ | 39 | $98.87 \%$ |
| $0.00-29.95$ | 294 | $100.00 \%$ |


[^0]:    ${ }^{1}$ See "Modelling the participation function with a one-parameter family of cubic splines" (Harrison and Hyndman, 2015).

