

## What's the UAI?

### Introduction

This brochure provides an explanation of the Universities Admission Index (UAI) and of the processes used in its calculation by the ACT Board of Senior Secondary Studies.

### What is the UAI?

The UAI is a **percentile ranking** used by universities to assist in the selection of school leavers for entry to their undergraduate courses. The universities use it as an indication of a student's suitability for entry into any given course. The UAI is a ranking of a student relative to the full age cohort i.e. relative to the set of students who would be in the group if all students stayed on and completed Year 12. It is reported with a range from 100.00 for the highest ranked students down to 30.00. For example, a student with above average results might have a UAI of 85.00 indicating a performance better than 85% of the population eligible to be in Year 12 or in the top 15% in relation to all the students who started school at the same times as he or she did.

### How is the UAI reported?

The UAI is reported on the Tertiary Entrance Statement. A Tertiary Entrance Statement is produced for each student who meets the requirements set down by the ACT Board of Senior Secondary Studies for eligibility to apply for entry to university.

### How is the UAI calculated ?

The UAI is calculated from students' performances in their best **T** course (refer to the brochure *What certificates could you obtain?*).

The main steps in the process are:

1. Colleges calculate a course score for each student completing a **T** course.
2. The Board of Senior Secondary Studies scales the college course against the AST result, using the OCS scaling method (see Appendix A). This ensures that all course scores can be meaningfully compared. This process can also be referred to as statistical moderation.
3. The scaled course scores are used to produce an Aggregate Score for each student. This is done by adding together the scaled scores in the best three **T** majors plus 0.6 of the next best **T** score, whether a major or a minor.
4. The aggregate Scores for all students who have met the appropriate requirements are listed in order from highest to lowest. Starting from the top of the list, students are given a candidate rank.
5. This rank is then converted to an age rank by using a **look up table** supplied by the NSW Technical Committee on Scaling.

### Means and Standard Deviations

You can meaningfully compare your scores in your various courses only if you know the mean and standard deviation of the scores of

the group studying each course. The mean of a group is the **average**, the standard deviation of the group is a measure of how spread out the group is. A group with a low standard deviation will have the majority of students getting scores close to the mean. A group with a large standard deviation will have students getting a wide range of scores. If your group is large and the results are fairly **normal** in their distribution, then about 70% of all scores are within one standard deviation of the mean. Virtually all scores are within one standard deviations of the mean. Outstanding students could have scores as much as two and a half standard deviations above the group mean.

In making an informed decision about your choice of courses, you should take into account:

- Your relative performance in each of your courses, based on the mean and spread of scores archived by the group studying the course;
- The likely effect of Other Course Score (OCS) scaling (see below) on your scores;
- Your interests and abilities; and
- Likely prerequisites for educational opportunities you may wish to access after leaving school.

You should seek advice on these matters from staff at your college.

## **The Calculation of the UAI**

### *Step 1: Course scores*

Colleges calculate a course score for each student in each **T** course from relevant unit scores. A course score indicates how well a student performed in a particular course compared to all other students in that course's moderation group at the college. It is not necessarily an indicator of achievement in that course, only a way of comparing students' performances. A moderation group is the group of students completing **T** courses in a particular area.

The students may all have completed the same course, or they may have completed related courses. For example, a college may group students from their Accounting and Business Studies courses in a single moderation group. This will allow course scores for those courses to be directly compared. Course scores are not percentages but rankings and typically lie between 30 and 110.

### *Step 2: Scaling*

Course scores are only useful in the calculation of the Aggregate Score if they are reported on the same scale. The scale is determined when the course scores are adjusted by the OCS scaling procedure. Scaling is an adjustment of the course scores to bring them to a mean and standard deviation related to the student's performance on the AST and on their best 4 courses. A brief explanation of the OCS procedure may be found near the end of this pamphlet in Appendix A.

The scaling procedure changes the score used to represent each student's rank in a particular moderation group, but it does not alter the ranking of students. For example, if student A is above Student B in Economics, Student A will still be above Student B after scaling.

*Step 3: Using scaled scores to produce an Aggregate Score*

Once course scores are scaled, they can be added. The Aggregate Score is the number produced by adding the best three scaled scores from **T** major courses, and 0.6 of the next best **T** course score (either major or minor).

*Step 4: Calculating the UAI*

The Aggregates Scores for all students who have met the requirements are listed in order from highest to lowest. The students are then given a rank called the **rank by candidature**. This rank is then converted to an age rank by using a **lookup table** supplied by the NSW Technical Committee on Scaling. (The NSW mapping of candidate ranking to age ranking is based on the distribution of Year 10 student results for those students who meet the requirements for the UAI in NSW). This gives rank for ACT students as if they were part of the NSW age cohort.

The ACT, because of its size and demographic nature, can be more readily considered to be within the NSW age cohort for comparison to the states. By using this method the relativities that have been in place for ACT students for a number of years are maintained.

The UAI calculated in the ACT is directly comparable to the UAI calculated in NSW and the same cutoffs at NSW and ACT universities apply to both ACT and NSW students. If you are applying to interstate universities, that state's admissions centre will use the UAI for entry to its universities. All Australian universities have agreed to use the ranking based on the age cohort for each

state. This means that most interstate applicants will be able to directly compare their ranks with university cut offs irrespective of their state of origin.

**Appendix A: The Other Course Score (OCS) scaling method**

Briefly, the stages in the process are:

1. For each student, a measure of General Achievement (GA) is calculated from an average of his/her AST score and four best course scores. The course from the best 3 majors and the next best course score – either major or minor – are used.
2. The average and the spread of the GA scores in each moderation group are calculated, and the course scores are then adjusted so that they have the same average and spread as the GA scores (a further adjustment is made to allow for the degree of association between scores in a moderation group and the GA scores).
3. The AST and the adjusted course scores are used to calculate revised GA values.
4. The course scores are adjusted again (as in step 2) using these revised GA values.

The process continues working through steps 3 and 4 until the adjustments made to the course scores from one step to the next are no longer significant. In practice this usually takes less than twenty cycles.

Note:

- An individual student's performance on the AST is not used directly in adjusting his/her own course scores; nor is the individual student's GA score used directly. It is the group GA scores that are used throughout the process for adjustment of the course scores.
- The AST scores are not altered during any part of the process.
- The final stage in the process produces course scores which are on the same scale across all courses and across all colleges. The course scores can be added together to produce Aggregate Scores, which are then used in the calculation of the Universities Admission Index.

### **More Information**

Remember, your college is keen to help you. There are staff members who can explain and give advice on this brochure or any others in this series.

Other pamphlets in this series that are available from your college are:

### **What's the AST?**

Explains the ACT Scaling Test and its role in your assessment.

### **What certificates could you obtain?**

Explains all the different certificates you could be awarded at the end of year 12, and what's on them.

### **Your rights to appeal**

A guide to what your rights are in appealing against results, and procedures for determining your scores and grades.

### **What's Moderation?**

Outlines the course moderation process that takes place in Canberra twice a year.

### **Equitable Assessment and Special Consideration in Assessment in Years 11 and 12**

Explains the rights of students with disabilities, including physical, intellectual, psychiatric, sensory, neurological or learning disabilities, and special needs.

Further information may be obtained at :

<http://www.bsss.act.gov.au>

Enquiries could also be directed to the:

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