

Computer Science STAR Programme
Department of Computer Science & Software Engineering
University of Canterbury

1. Overview

This programme is designed primarily for students whose demonstrated academic ability or aptitude for Computer Science would allow them direct entry into 200 level Computer Science courses from year 13. It gives students the opportunity to study Computer Science while still at school, and provides the background in programming for students who could attain direct entry and who will be attending university in the following year. Students will only be admitted to direct entry if they do well both in the STAR programme and in their other Year 13 examinations, and have a good mark in Mathematics.

2. Recommended preparation

About 20 credits of mathematics with a good proportion of excellences at level2 or level3 NCEA, or the equivalent for students not doing a full NCEA programme. While prior programming experience is not essential some basic familiarity with computers will be needed and prior programming experience may be an advantage. These requirements are flexible and the department will consider individual cases on their merits. The department reserves the right to invite students into the programme and to exclude students whom it decides will not benefit from this course. In particular, students who do not have a strong mathematical background are unlikely to be accepted for the STAR programme. The department may require applicants to sit practical and/or written examinations before confirming enrolment in the programme. Normally, students will not be admitted if they are not intending to proceed to university enrolment in the following year.

3. Credit

Upon successful completion of the programme, students will be given a Record of Achievement with their grade for the course. On subsequently achieving University Entrance and enrolling at the University of Canterbury, the student will be credited with COSC121 and COSC122 (18 points each) towards a University of Canterbury degree. Note: credit towards a degree at another university is not automatic, but can be applied for. COSC121 and COSC122 are currently pre-requisites for entry to 200 level Computer Science courses. The other pre-requisite is 18 points of Mathematics or Statistics. Some students may already have attained comparable qualifications through the Mathematics department's STAR programme and students lacking the mathematics pre-requisite may apply for a waiver of prerequisite. The outcome of such applications is based on performance in related subjects (NCEA results, particularly mathematics) and the recommendation of the head of department. Students granted direct entry to 200 level courses need not have passed pre-requisite courses, but they will be expected to pass 36 points of Mathematics/Statistics in their first year. This will enable them to have passed the Math/Stat prerequisite for 300-level Computer Science.

4. Course content

COSC121 (Computer Science 1A) is an introduction to computer programming. COSC122 (Computer Science 1B) is an introduction to Computer Science and covers more formal topics such as data structures, recursion and computability. The object-oriented language Java is used in both COSC121 and COSC122.

5. Enrolment

Please note that acceptance into the STAR programme does not constitute enrolment at the University of Canterbury. The UC brochure for the STAR programme may be consulted online at <http://www.canterbury.ac.nz/liaison/star.shtml>. Confirmation of acceptance into the programme will normally take a week from the receipt of enrolment applications via the schools' STAR liaison contacts. Schools will subsequently be invoiced and payments are due by the end of the first school term.

6. Course arrangements

The course covers the same material as COSC121 and COSC122 and has exactly the same assessment.

COSC121 is taught in the first half of the year. COSC122 is taught in the second half of the year. STAR students will have their own lecturer for the program. Lectures will be held in the department on Mondays from 4-6 pm. Labs will be held in the Department on Wednesday from 5-7pm.

Students will have the same due dates for assignments, tests, exams and practical work as COSC121 and COSC122 students. N.B. These dates may not coincide with school terms. A variety of support material will be made available to participating students. Students will also have access to lecture-related material such as OHP slides—much of this material is also available via the Internet (follow “Courses” links from <http://www.cosc.canterbury.ac.nz> for further information).

Much of the communication between students, and between students and lecturers, takes place electronically via electronic mail, notices and web pages. Consequently, it is highly desirable that students have Internet access at school.

7. Costs

The Computer Science STAR program is a (36 point) full year program. It is not possible to do just one semester. Normally, students attending schools which have obtained STAR funding will have their costs met from those funds.

Schools will be invoiced and payments are due by the end of the first school term. Schools are responsible for recovering fees from students who do not have STAR funding.

Students will be responsible for meeting any incidental costs (e.g. transport) associated with the course. Schools may wish to purchase sets of textbooks, or individual students may prefer to own personal copies.

8. Resources

Resources and services provided by the department to participants in the programme will include:

- Lectures and Laboratory classes with a specialist tutor.
- Queries (email or in person) and discussion with lecturer and tutors outside normal contact hours.
- Marking of assessment items, recording marks, administration.
- Access to electronic course materials.
- Technical support including:
 - setting up and administering student computer accounts
 - providing Internet access1.
 - Computer usage & laboratory hire.
 - Assistance with obtaining software needed for the course.

9. School support

In order for the programme to be successful, participating schools should provide the following resources:

- a STAR liaison person who can act as co-ordinator for the students and provide an interface between school and department.
- access to school computers. Within reason, the particular system configuration is not important but at least these services should be available:
 - Internet connection
 - Electronic mail
 - Java software (the minimum suitable would be Sun's Java Development Kit (JDK) which is available on a disk from the department)
- technical support for day-to-day hardware and software problems.

10. Further information

Further information about the Computer Science STAR programme may be obtained by writing to: Heather Dickie, Academic Policy Manager, University of Canterbury, Private Bag 4800, Christchurch. She can also be contacted by telephone (364-2950) or email (heather.dickie@ canterbury.ac.nz).

Online versions of this document and related information are available at:

<http://www.cosc.canterbury.ac.nz/open/teaching/classes/star/>

Students are responsible for any charges resulting from use of these accounts for international email or WWW access