

# Talented Student Program and Special Studies Program

School of Mathematics and Statistics  
The University of Sydney

We have two programs catering for our best students:

- The Talented Students Program (TSP)
- The Special Studies Program (SSP)

The TSP in Mathematics and Statistics is part of the Faculty of Science TSP. To be able to participate you need an invitation from the Faculty of Science. The SSP is a program of the School of Mathematics and Statistics. To participate you need to apply. For more detail on the programs see the information below.

We rarely suggest that students replace any of the standard first year advanced units of study. They all contain material that is not covered in HSC Mathematics Extension 2, but is essential preparation for the second year program. It is in your best interests to have full mastery of this work and to achieve a high level of distinction in your student record as a result.

We do recognise, though, that as the most talented 10% of the advanced class, you can cope with the advanced units with much less effort than most and that you should have some time available to extend your mathematical experience. That is exactly what we offer through the two programs.

## The TSP in First Year

Students in the TSP can get permission to do higher year Mathematics units while in first year.

Several of the second and third year units are suitable for students with a high degree of mathematical maturity and do not require knowledge of earlier material. Handbooks covering 2nd and 3rd year units are available from the Mathematics Student Office, Carlaw 520 or on the Web at [www.maths.usyd.edu.au/u/UG/IM/](http://www.maths.usyd.edu.au/u/UG/IM/) or [www.maths.usyd.edu.au/u/UG/SM/](http://www.maths.usyd.edu.au/u/UG/SM/). Please look at this handbook and see if any units appeal to you.

Units that may be suitable include MATH3065 (Logic and Foundations) in first semester and MATH2988 (Number Theory and Cryptography) and MATH3067 (Information and Coding Theory) in second semester. If you are interested in one of these (or any others), please see the Mathematics and Statistics TSP coordinator to arrange permission from the Dean to take the units. You do not need to enrol in the unit at this stage. You can choose to complete the unit or to cease attendance if you wish.

If you complete a higher year unit satisfactorily, you can enrol retrospectively in a special Mathematics and Statistics TSP unit. This would count towards your degree as a second/third year unit (according to the level of the unit you undertook), and would give you more time in higher years to explore other areas of study.

TSP results for such units are only recorded officially if you are happy with the result. Once the result is recorded officially, it will go on your degree transcript as a TSP unit, it will contribute to your overall results for the degree, and you will pay HECS on it.

If there is sufficient interest, Mathematics TSP students may also participate in a Faculty wide project.

*Please turn over*

## The TSP in Higher Years

In higher years excellent students have the opportunity to tailor their own program. This can include taking units of study out of order, or replacing some units of study with specialist reading courses, or individual projects. There is also opportunity for interdisciplinary projects shared across departments. If you come up with something you wish to pursue, we will do our best to facilitate it.

## The Mathematics Special Studies Program (MATH1906/7)

This is separate from the TSP, but students in the Mathematics TSP may be interested to join the Special Studies Program (SSP), and most of them do. Students not in the TSP, but with an appropriate background in mathematics may also join the SSP.

Entry is by invitation. To be able to know who to invite we need to know which students are interested. For this reason you will need to apply for entry. Students interested in being selected for the Mathematics Special Studies Program can obtain an application form from the School of Mathematics and Statistics Student Services Office (Carslaw Building Level 5, Room 520) or from the MATH1906 Web site [www.maths.usyd.edu.au/u/UG/JM/MATH1906/](http://www.maths.usyd.edu.au/u/UG/JM/MATH1906/). Selection is based on

- interest in and commitment to mathematics;
- HSC (or equivalent) results.

Students selected will be given permission to change their enrolment from MATH1901 (Differential Calculus, Advanced) to MATH1906. They attend the same lectures as MATH1901 students but have their own seminar and tutorial covering specially chosen advanced topics.

There will also be an **information and selection meeting** in the first week of lectures:

**Date and time:** Thursday 5 March 2009, 10 am

**Venue:** Carslaw Room 454

Application forms are also available at the information meeting.

The times for the special classes will be Tuesday at 4pm and Thursday at 10am, starting in the second week of lectures. Students in the Mathematics Special Studies Program will need to rearrange their timetables to make these times free.

There is also a Special Studies Program for second year students.

## Further Information

For further information on the TSP or SSP in Mathematics and Statistics contact Daniel Daners:

**Office:** Room 715, Carslaw Building

**Tel:** 9351 2966

**E-mail:** [D.Daners@maths.usyd.edu.au](mailto:D.Daners@maths.usyd.edu.au)

You can also consult the School Web Site [www.maths.usyd.edu.au/](http://www.maths.usyd.edu.au/)

for information about the teaching program by following the link to Current Students.