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

The main TSP activity for first year TSP students in mathematics is the TSP showcase. The TSP Showcase consists of Faculty wide group projects, and most Schools and Departments offer one or more, including Mathematics and Statistics. The projects are advertised centrally through the Faculty, and you will be informed by email on how exactly they work (make sure you read your university email!).

Some of the best mathematics TSP students may be able to get permission to enrol in higher year Mathematics units while in first year. Suitable units are second or third year units which require a high degree of mathematical maturity but do not require knowledge of earlier material beyond high school mathematics. Units that may be suitable include MATH3065 (Logic and Foundations), MATH2969 (Discrete Mathematics and Graph Theory) or MATH2962 (Real and Complex Analysis) in first semester, and MATH2988 (Number Theory and Cryptography) in second semester. Look at the handbooks on the Web following the links to Senior or Intermediate Mathematics from www.maths.usyd.edu.au/u/UG/, and see if any units appeal to you. Please speak to the TSP coordinator in the School of Mathematics and Statistics to discuss any possibilities. You may also be interested in joining the Special Studies Program (see over).

Note: In the past it was possible to do units without formal enrolment and claim them later if desired. Due to changes in legislation and University rules this is no longer possible. Hence the only possibility to complete such units is to enrol by getting special permission. Contact the TSP coordinator in the School of Mathematics and Statistics for that.

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 similar as in first year, 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 formally 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/JN/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 7 March 2013, 10 am  
**Venue:** Carslaw Room 359

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

You can also consult the School Web Site www.maths.usyd.edu.au/ for information about the teaching program by following the link to Current Students.

D.D, January 21, 2013