Healthy, Wealthy and Wise

Maths at UNSW

Michael Cowling

• Why healthy?

• Why wealthy?

• How can I be wise?

• What can I do if I do Maths at UNSW?

• What is first year Maths at UNSW like?

• What is available for Talented Students?
Doing Maths is good for your health

Surveys of professional people in the USA regularly find that mathematicians are in the top group for career satisfaction.

Career satisfaction is correlated with a happy and healthy life.

Information about this:

Google Jobs Rated Almanac
Doing Maths will make you wealthy.

A UK study of school subjects and income found that there is no correlation between high school study and income, with one notable exception. Those who took Maths earned, on average, 10% per annum more than those who did not.

Source: Does Education Matter, Alison Wolf
The wise do Maths at UNSW.

The UNSW School of Mathematics is the leader in Australia. According to Science Watch, UNSW is rated 14th in the world and top in Australia on research impact.

UNSW Maths prepares graduates for work in a broad range of careers, from finance through government and private research bodies to television.
We are especially strong in several areas of Mathematical Analysis, Financial Maths, Climate Modelling, and Statistics, and building strength in Biomedical Maths.

Source: See UNSW Maths website.
How do I study Maths at UNSW?

On its own in a Science degree or with other subjects in a double degree.

Advanced Science has programs in Pure Maths, Applied Maths, Stats, Maths and Finance, Physical Oceanography/Meteorology, and Maths and Computer Science.

There are similar programs in the regular Science degree.
What is First Year Maths about?

Anyone who studies Maths at UNSW takes some first year Maths courses. Some are for people who are not going on in Maths, such as Maths for Life Sciences and Stats for Life Sciences. The usual courses are called Maths IA and Maths IB (or Higher Maths IA and Higher Maths IB).
These review and extend HSC level Maths, and deal with topics such as differentiation and integration, infinite series, and differential equations in the Calculus strand, and complex numbers, vectors and matrices in the Algebra strand. There is also Discrete Maths, particularly relevant for anybody interested in computer science, with topics such as algorithms.
What do we offer Talented Students?

Talented students are welcome in our Talented Students Program, which includes the possibility of taking some higher year courses as well. Contact Daniel Chan if you are interested (DanielC@unsw.edu.au).
For the very talented, we have the Advanced Mathematics program in Advanced Science where you get to choose what you do, in consultation with an advisor from the School. If you are interested, contact me directly (M.Cowling@unsw.edu.au).