

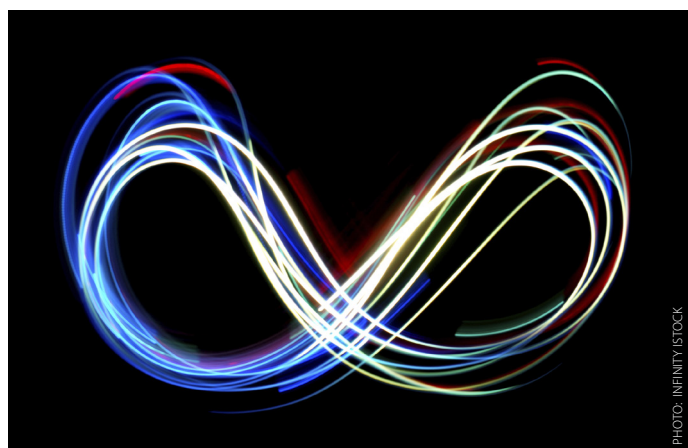
# Bridging Courses 2015

CHEMISTRY, MATHS & PHYSICS



Bridging courses are offered in chemistry, mathematics and physics to prepare you for studies in these disciplines. They provide learning support, a useful refresher and a solid foundation for your university studies in science.

## Preparatory Course in Mathematics



An intensive course for students from diverse mathematical backgrounds who need to enrol in first year mathematics courses, or require a review of introductory mathematical concepts. The following two streams are offered:

### The Foundation Stream

Highly recommended for students who have completed HSC General Mathematics or who have no mathematics and are including maths units such as MATH123, MATH130 or economics units at 100 level in their programs of study. It covers an introduction to algebra, functions and mathematical concepts useful in preparation for mathematics and science. Students who are intending to enrol in statistics or science units should enrol in at least four days of the Foundation Stream.

### The Extension Stream

A ten day course for students who have not studied maths for some time and need to refresh their skills before commencing MATH135. It is a bridge to HSC Mathematics Extension 1 for students who are using their HSC Mathematics results for entry into MATH135.

**Morning:** Monday 9 February to Friday 20 February

**Evening:** Monday 9 February to Saturday 21 February

**Cost:** \$160 for 10 day course

\$90 for first 5 days

\$70 for first 4 days

**Registration closing date:** Thursday 5 February

### Mathematics Bridging Course content enquiries to:

Carolyn Kennett or Dilshara Hill  
Department of Mathematics  
E: [sci.numeracy@mq.edu.au](mailto:sci.numeracy@mq.edu.au)  
T: 02 9850 8924  
W: [maths.mq.edu.au](http://maths.mq.edu.au)

## Find out more

### NUMERACY CENTRE

Building C5A, room 225

Macquarie University

North Ryde, NSW, 2113

W: [maths.mq.edu.au/numeracy](http://maths.mq.edu.au/numeracy)

Important note: If there are financial constraints that prevent you from enrolling in the courses advertised, please contact Carolyn Kennett.

All prices are inclusive of GST.

 Register via links at:  
[science.mq.edu.au/bridging-courses](http://science.mq.edu.au/bridging-courses)

## Chemistry Bridging Course



The Chemistry Bridging Course is for students who are studying science at university but did not study chemistry at HSC level; for those needing to gain confidence in chemistry; and for those students who want a refresher course in chemistry. It is excellent preparation for CBMS101 (Foundations of Chemistry) and CBMS102 (General Chemistry). This bridging course covers chemical reactions and atoms, molecules and compounds, moles and molarity.

Recommended reference text: *Introductory Chemistry* by Nivaldo J Tro, 4<sup>th</sup> edition (text for CBMS101 2015).

**Monday 16 February to Thursday 19 February**

9:30 am - 3:30 pm

**Friday 20 February**

9:30 am - 12:30 pm

**Cost:** \$160 (including GST)

**Registration closes:** Monday 16 February

### Chemistry Bridging Course content enquiries to:

Michelle Kang  
Building F7B, Room 220  
Department of Chemistry and Biomolecular Sciences  
E: michelle.kang@mq.edu.au  
T: 02 9850 8275

Alternatively, you can also contact Maree Nelson:

E: maree.nelson@mq.edu.au  
T: 02 9850 8295

## Physics Bridging Course



If you have not completed physics to HSC level, this course is recommended to give you background knowledge to support your study in PHYS143, PHYS140, PHYS149. It covers the following topics:

- **Waves:** Sound, optics, electromagnetic spectrum, orders of magnitude and scientific notation
- **Matter and molecules:** Thermal properties of matter, pressure in fluids and ideal gases
- **Forces:** Vectors, forces in equilibrium, dynamics and motion, Newton's laws, gravity, energy and power
- **Electricity:** Static electricity, electric circuits/fields/potential, magnetic fields and electromagnetic induction
- **Atomic and nuclear physics:** Electrons, nuclei, atomic structure, radioactive decay and nuclear energy

**Monday 16 February to Thursday 19 February**

9:30 am - 4:30 pm

**Friday 20 February**

9:30 am - 12:30 pm

**Cost:** \$160 (including GST)

**Registration closes:** Monday 16 February

### Physics Bridging Course content enquiries to:

Carol McNaught  
Department of Physics and Astronomy  
E: carol.mcnaught@mq.edu.au  
T: 02 9850 8911  
W: physics.mq.edu.au

 Register via links at:  
**[science.mq.edu.au/bridging-courses](https://science.mq.edu.au/bridging-courses)**