

## Course Description

Chemistry is the study of the physical and chemical properties of matter, with a focus on substances and their interactions. Chemistry attempts to provide chemical explanations and to predict events at the atomic and molecular level.

The Preliminary course develops a knowledge of atomic structure, chemical changes, rates of reaction and relationships between substances by focusing on increasing students' understanding of the Earth's resources, the development of increasingly sophisticated methods to extract and use metals, the importance of water on Earth and high energy carbon compounds.

The HSC course builds on the concepts developed in the Preliminary course, expanding on areas such as the search for new sources of traditional materials, the design and production of new materials, the management and monitoring of chemicals that have been developed and/or released as a result of human technological activity and the way in which environmental problems could be reversed or minimised. The options cover a variety of interest areas and draw on the increased information and understanding provided by improved technology to examine areas of current research.

## Main Topics Covered

### Preliminary

The Chemical Earth  
Metals  
Water  
Energy

### HSC Course

Production of Materials  
The Acidic Environment  
Chemical Monitoring and Management

## Particular Course Requirements

Students will complete a minimum of 80 indicative hours of practical experiences across Preliminary and HSC course time with no less than 35 hours in the HSC course. Practical experiences must include at least one open-ended investigation in both the Preliminary and HSC Courses.

**Faculty:** Science

**BOS Course No:** 15050

2 units for each of Preliminary and HSC Board Developed Course.

**Exclusions:** Senior Science (Preliminary only)

