

*The Senior Chemistry program offered at Northpine Christian College engages students in an exciting and dynamic investigation of the material universe. Chemistry provides a platform and conduit in which humankind can interact with and explore matter.*

### **Curriculum Overview**

At Northpine Christian College we understand the importance of providing opportunities to develop students' understanding and appreciation of Chemistry in real world and relevant contexts. It will encourage students to think creatively and rationally about Chemistry. Students will be challenged to understand and act responsibly on Chemistry-related problems and issues and to communicate effectively in a range of modes.

## Course focus

There are four formative assessment items in Year 11, which model the four summative assessment items in Year 12. The two assessment items in Unit 1 are a Data Test (10%) and Student Experiment (20%). The two assessment items in Unit 2 are a Student Investigation (20%) and examination (50%).

There is one assessment item per term.

### Year 11

#### Unit 1: Chemical fundamentals—structure, properties and reactions

- Topic 1: Properties and structure of atoms
- Topic 2: Properties and structure of materials
- Topic 3: Chemical reactions—reactants, products and energy change

#### Unit 2: Molecular interactions and reactions

- Topic 1: Intermolecular forces and gases
- Topic 2: Aqueous solutions and acidity
- Topic 3: Rates of chemical reactions

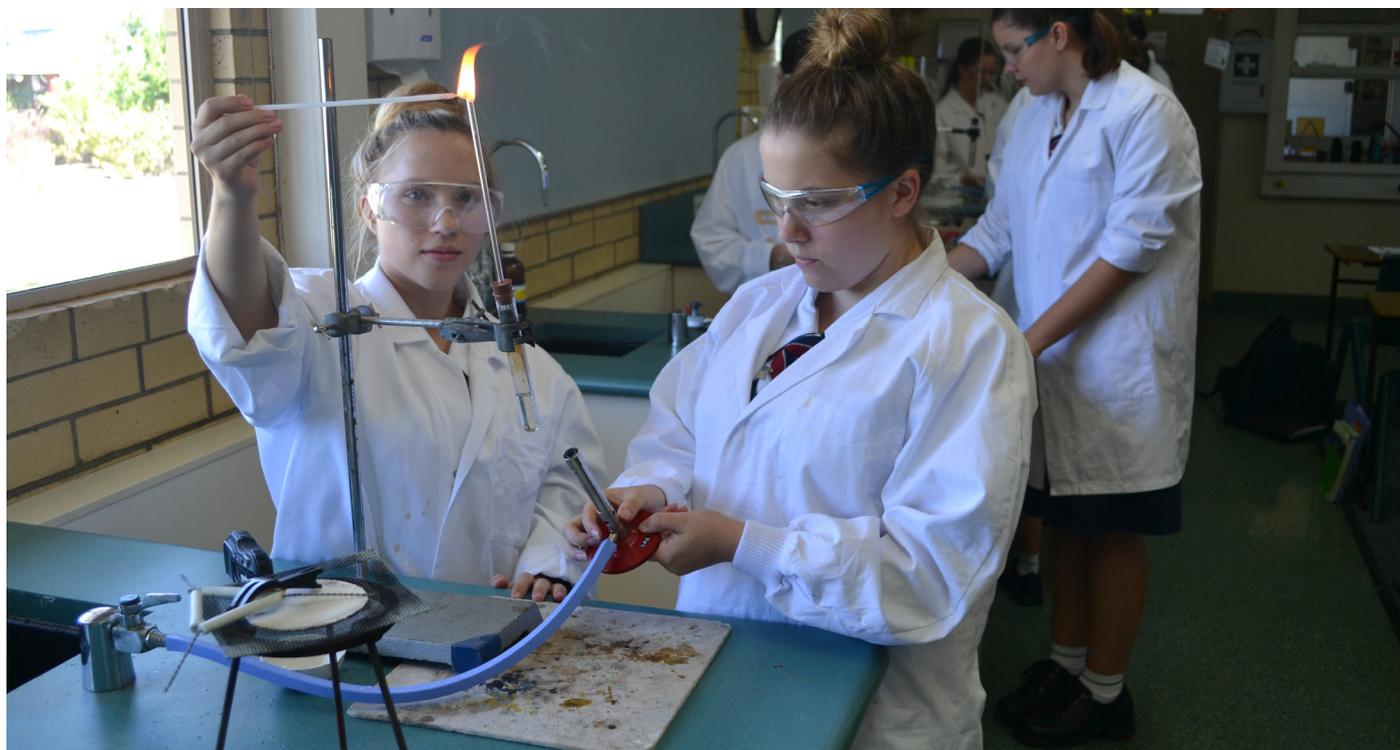
### Year 12

#### Unit 3: Equilibrium, acids and redox reactions

- Topic 1: Chemical equilibrium systems
- Topic 2: Oxidation and reduction

#### Unit 4: Structure, synthesis and design

- Topic 1: Properties and structure of organic materials
- Topic 2: Chemical synthesis and design



## Career Opportunities

The Senior Chemistry Course is useful for those students wanting to enter the field of medicine, forensic science, engineering, pharmacy, food science and sport science.

## Enquiries

For more information contact:  
Northpine Christian College  
29 Hughes Road East, Dakabin QLD 4503  
Telephone: +61 7 3204 6511 Fax: +61 7 3886 1405  
Email: [office@northpine.qld.edu.au](mailto:office@northpine.qld.edu.au) Website: [www.northpine.qld.edu.au](http://www.northpine.qld.edu.au)