

In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



CHEM11043 Atoms, Molecules and Matter

Term 2 - 2026

Profile information current as at 05/12/2025 02:06 pm

All details in this unit profile for CHEM11043 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

Atoms, Molecules and Matter will provide you with an understanding of the basic principles of chemistry and how they apply to daily life. This unit will present fundamental chemical principles that are central to all sciences, including healthcare, biology, environmental science and agriculture. This unit will provide the foundation for further study in chemistry, biochemistry and molecular sciences. You will learn about matter and atomic structure, chemical bonding and the forces and chemical interactions between molecules. You will be introduced to the chemistry of electrolytes, acids, bases and buffers and enabled to perform calculations relating concentrations to the pH of strong and weak acids, bases and buffers. Understanding the naming and classification of chemical compounds will allow you to communicate effectively and precisely with your colleagues in science and industry. Basic nuclear radiation safety will be presented. This unit has a compulsory residential school. The residential school will emphasise laboratory safety and introduce you to skills relating to the preparation of standard solutions and volumetric procedures, titrimetric and spectrophotometric analyses and scientific report writing.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Anti-requisite: CHEM11041

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 2 - 2026

- Mixed Mode

Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Information for Class and Assessment Overview has not been released yet.

This information will be available on Monday 18 May 2026

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from SUTE Unit Comments Report.

Feedback

Some students commented that the residential school was challenging but the teaching staff were helpful and knowledgeable.

Recommendation

Continue to support the students with experienced and enthusiastic academic staff members during the residential school.

Feedback from SUTE Unit Comments Report and personal observation.

Feedback

Some students with prior chemistry experience completed some of the practical tasks in a shorter time frame than allocated and at a faster rate than the majority of the cohort.

Recommendation

If a similar occurrence is observed in T1 2026, then work with the Head of Course and other relevant staff (e.g. teaching, technical, and timetabling teams) to determine if future measures could be taken to address this.

Feedback from SUTE Unit Comments Report and personal observation.

Feedback

The answers to a few of the questions in couple of the tutorial videos were slightly obscured by the tutor's hand.

Recommendation

Review these videos and update when possible.

Feedback from SUTE Unit Comments Report and personal observation.

Feedback

The drop-in sessions (Zoom Q&A) were successful but were not always well attended. One student recommended offering the session later in the day.

Recommendation

Review the attendance at Zoom Sessions during Term 2 2025 and consider offering e.g., alternating morning and afternoon sessions during T1 2026.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.

This information will be available on Monday 18 May 2026

Alignment of Learning Outcomes, Assessment and Graduate Attributes

Information for Alignment of Learning Outcomes, Assessment and Graduate Attributes has not been released yet.

This information will be available on Monday 18 May 2026

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 22 June 2026

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.