

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 1 - 2027

Profile information current as at 07/09/2026 09:46 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 1 - 2027

- Mixed Mode
- Rockhampton

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 11 January 2027

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
- Academic Progression Policy and Procedure
- Student Refund and Credit Balance Policy and Procedure
- 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

Feedback

Students expressed mixed views about the residential school. Many found it valuable and engaging, while others felt the duration was too long or that activities did not cater well to students with differing levels of prior chemistry knowledge.

Recommendation

Review the structure and pacing of the residential school and explore opportunities to better accommodate students with varying levels of prior chemistry knowledge while maintaining learning outcomes.

Feedback from SUTE

Feedback

Some students indicated that the tutorial delivery could be more engaging, with additional explanation of worked examples and more support for students who are new to chemistry.

Recommendation

Review tutorial delivery with teaching staff to encourage more detailed explanations of worked examples and strategies to support students with limited chemistry background.

Feedback from SUTE

Feedback

A small number of students suggested that greater flexibility in the mode and timing of teaching would improve their learning experience, including preferences for in-person classes.

Recommendation

Continue to monitor student feedback regarding teaching delivery and consider feasible opportunities to enhance student engagement within the existing delivery model.

Feedback from SUTE

Feedback

A small number of students commented on the consistency of teaching staff and the availability of the unit coordinator during the term and residential school.

Recommendation

Review communication and staffing arrangements to ensure students have clear points of contact and a consistent learning experience throughout the unit.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 11 January 2027

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 11 January 2027

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 15 February 2027

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.
This unit profile has not yet been finalised.