MEDS12001 *Physics of Ultrasound*
Term 1 - 2026

Profile information current as at 05/12/2025 02:48 pm

General Information

Overview

In this unit, you will be introduced to the principles of ultrasound physics and instrumentation. Ultrasound safety, quality assurance and recognition of artifacts will also be covered. The knowledge and skills learnt from this unit are integral to all concurrent and subsequent sonography and echocardiography units and forms the foundation from which you will build your image acquisition, recognition and assessment skills. You will apply your knowledge and skills of physics principles in the laboratory setting using ultrasound equipment.

Details

Career Level: *Undergraduate*
Unit Level: *Level 2*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Prerequisite MEDI11002 Physics for Health Sciences Co requisite MEDS12003 Superficial Structures in Ultrasound or ECHO12006 Cardiac Science
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 - 2026

- Brisbane
- Mackay
- Melbourne
- Sydney

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 12 January 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 Feedback

Feedback
Assessment 1 (mid-term quiz) was not allocated adequate time based on the number of questions. Additionally, the question format was difficult to maneuver on some devices.

Recommendation
Review assessment timing and the use of 'drag and drop' questions to reduce student stress and improve quiz accessibility across devices.

Feedback from SUTE Feedback

Feedback
Lab manual 3 has too many tasks for the two-hour session, and this causes students to feel rushed. Clearer passing criteria are also needed given the absence of a marking rubric.

Recommendation
Lab manual 3 has already been amended in previous offerings to include less tasks. Tasks cannot be moved to lab 2 as the concepts are not delivered at that time in the learning journey. However, increasing the lab session time or providing additional lab time elsewhere can be reviewed to alleviate student stress. Additionally, create a marking rubric to provide students with specific requirements regarding achieving a passing grade.

Feedback from SUTE Feedback

Feedback
The Moodle site was difficult to navigate in the table format as tasks could not be "checked off". This also made it difficult to determine if content had been released on time and if all links were working appropriately.

Recommendation
Investigate options to improve Moodle layout and navigation.

Feedback from SUTE Feedback

Feedback
Tutorials should review lecture content at the beginning, then review questions using Kahoot.

Recommendation
Consider splitting tutorial time between content review and a Kahoot session to keep students engaged.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 12 January 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 12 January 2026

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 16 February 2026

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.