MATH40228 *Intermediate Mathematics for University*
Term 3 - 2026

Profile information current as at 12/11/2026 11:37 am

All details in this unit profile for MATH40228 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
Intermediate Mathematics for University is designed to follow on from a study of introductory mathematical concepts, such as Fundamental Mathematics for University, preparing you for Technical Mathematics for University and/or undergraduate courses requiring an intermediate level of mathematics. You will complete core and elective modules, chosen according to your future study plans, including simultaneous equations; inequalities and absolute values; quadratic equations; logarithms; functions; geometry; trigonometry; variation, ratio, and proportion; sequences and series; statistics and standard deviation; probability; financial mathematics; and annuities.

Details
Career Level: *Non-award*
Credit Points: *6*
Student Contribution Band: *7*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites
There are no requisites for this unit.
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 3 - 2026
- Online

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

Recommended Student Time Commitment

Each 6-credit Non-award unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

Assessment Task	Part Weighting (% of assessment)	Assessment Security Level	Gen AI Guidance Levels
1. ASSESSMENT 1 (*50% of unit*)			
Portfolio (Portfolio)	100% of 50%	Low	AI-Assisted (Guided Collaboration)
2. ASSESSMENT 2 (*50% of unit*)			
Take Home Exam (Take Home Exam)	100% of 50%	Low	AI-Assisted (Guided Collaboration)

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

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 Unit and Teaching Evaluations

Feedback
Students liked that the live workshops scheduled on public holidays were rescheduled to be delivered live instead of pre-recorded at a later date.

Recommendation
Reschedule affected workshops so that all workshops offer a live interactive session that can be accessed by the students.

Feedback from Unit and Teaching Evaluations

Feedback
Students liked that important formulas from the IMU textbook were emphasised and established during the live workshops.

Recommendation
Highlight relevant sections of the textbook that are required for some of the novel questions that may not necessarily be directly covered in the textbook examples. Highlight the linked sections of the textbook that cover material across the topics.

Feedback from Staff and Students

Feedback
The live and recorded lectures/tutorials were valued by both staff and students.

Recommendation
Continue the bi-weekly online live lectures and tutorials and their recordings.

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Use available resources to select and apply appropriate intermediate bridging mathematics techniques to correctly solve problems
2. Adopt mathematics as a language to logically communicate solutions
3. Reflect on assessment feedback to improve mathematical comprehension
4. Implement appropriate revision techniques and strategies to improve the retention and recall of content
5. Recall, select and apply appropriate intermediate bridging mathematics procedures to correctly solve problems.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | • Introductory Level | • Intermediate Level | • Graduate Level | ◦ Professional Level | ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes				
	1	2	3	4	5
1. Assessment 1 *(50% of unit)* Portfolio	•	•	•	•	
2. Assessment 2 *(50% of unit)* Take Home Exam		•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes				
	1	2	3	4	5
1 - Self Management	—		—	—	
2 - Communication	—	—			—
3 - Information Literacy	—	—	—	—	
4 - Information Technology Competence					
5 - Problem Solving	—				—
6 - Critical Thinking		—	—	—	—
7 - Cross-Cultural Competence					
8 - Ethical Practice	—				—
9 - First Nations Knowledges					

Textbooks and Resources

Textbooks

MATH40228

Prescribed

STEPS MATH40228 Intermediate Mathematics for University
Edition: 9 (2024)
Authors: Sharon Cohalan
CQUniversity
Rockhampton , Queensland , Australia
ISBN: N/A
The textbook for Intermediate Mathematics for University (MATH40228) is divided into two separate publications, "CORE Weeks 1-8" and, "CORE and STREAM Weeks 9 - 11". Both publications are available on the unit Moodle site and can be downloaded as combined PDF files or individual modules. We advise you to print your own copy of the modules or textbook. You will need a hard copy to complete activities and take notes. The textbooks cannot be purchased from the CQUniversity Bookshop. Your Access Coordinator can provide you with advice on printing options.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Computer with a webcam - to access study materials (including instructional videos), upload assessment, and complete the Zoom-based Workbook Discussions. Access to a printer is needed for printing assessment, and a scanner (or equivalent) for uploading assessment. A headset is recommended for the Zoom-based Workbook Discussions.

Referencing Style

All submissions for this unit must use the referencing style: Harvard (author-date)
For further information, see the Assessment Tasks.

Teaching Contacts

Antony Dekkers Unit Coordinator
a.dekkers@cqu.edu.au

Schedule

Week 1 - 09 Nov 2026

Module/Topic	Chapter	Events and Submissions/Topic
SYLE Systems of Linear Equations		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.

Week 2 - 16 Nov 2026

Module/Topic	Chapter	Events and Submissions/Topic
IEAB Inequalities & Absolute Values		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.

Week 3 - 23 Nov 2026

Module/Topic	Chapter	Events and Submissions/Topic

QUAD Quadratic Equations		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term. SYLE/IEAB Workbook Due: 9.00am on Monday the 23 November (AEST). SYLE/IEAB Module Test Due: 9.00am on Wednesday the 25 November 2026 (AEST).
Week 4 - 30 Nov 2026		
Module/Topic	Chapter	Events and Submissions/Topic
QUAD Quadratic Equations GEOM Introductory Geometry		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.
Week 5 - 07 Dec 2026		
Module/Topic	Chapter	Events and Submissions/Topic
GEOM Introductory Geometry LOGS Logarithms		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.
Week 6 - 14 Dec 2026		
Module/Topic	Chapter	Events and Submissions/Topic
LOGS Logarithms		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term. QUAD/GEOM Workbook Due: 9.00am on Monday the 14 December (AEST). QUAD/GEOM Module Test Due: 9.00am on Wednesday the 16 December (AEST). The date and time of the Take Home Exam will be made available on the unit Moodle site, approximately six weeks before the Take Home Exam period.
Mid-Term Break - 21 Dec 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Week 7 - 04 Jan 2027		
Module/Topic	Chapter	Events and Submissions/Topic
TRIG Introductory Trigonometry		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.
Week 8 - 11 Jan 2027		
Module/Topic	Chapter	Events and Submissions/Topic
VRAP Variation, Ratio and Proportion		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term. LOGS/TRIG Workbook Due: 9.00am on Monday the 11 January (AEST). LOGS/TRIG Module Test Due: 9.00am on Wednesday the 13 January (AEST).
Week 9 - 18 Jan 2027		
Module/Topic	Chapter	Events and Submissions/Topic

SEQR Sequences and Series		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.

Week 10 - 25 Jan 2027

Module/Topic	Chapter	Events and Submissions/Topic
STSD Statistics and Standard Deviation		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term. VRAP/SEQR Workbook Due: 9.00am on Monday the 25 January (AEST). VRAP/SEQR Module Test Due: 9.00am on Wednesday the 27 January (AEST).

Week 11 - 01 Feb 2027

Module/Topic	Chapter	Events and Submissions/Topic
FUNC Introduction to Functions OR FINM Financial Mathematics		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term.

Week 12 - 08 Feb 2027

Module/Topic	Chapter	Events and Submissions/Topic
Review		Workbook Discussion Tutorial (Weekly): Students must attend at least 4 workbook discussion tutorials during the term. STSD/FUNC or STSD/FINM Workbook Due: 9.00am on Monday the 8 February (AEST). STSD/FUNC or STSD/FINM Module Test Due: 9.00am on Wednesday 10 February (AEST).

Exam Week - 15 Feb 2027

Module/Topic	Chapter	Events and Submissions/Topic
		Take Home Exam: The exact date and time of the Take Home Exam will be made available on the unit Moodle site approximately six weeks before the Take Home Exam period.

Term Specific Information

Unit Coordinator:
Antony Dekkers
a.dekkers@cqu.edu.au
(07) 4930935
Rockhampton, North Rockhampton Campus, Building 32, Room G40
If you have any queries, please do not hesitate to email or call me and I will get back to you within two working days.

Assessment Tasks

1. ASSESSMENT 1 (*50% of unit*)

Portfolio

Assessment Title
Portfolio

Task Description
Your Portfolio for Assessment Task 1 is made up of the following components: 5 Module Workbooks, 5 Module Tests, and 4 Workbook Discussions. The allocation of marks to each component will be available on the IMU Moodle site.
In this unit you will complete ten modules - nine CORE and one ELECTIVE - provided from the MATH40228 Moodle site.
Your ELECTIVE module can be chosen according to the available streams:
- Technical Stream - FUNC. This stream must be completed if you are required to complete MATH40252 Technical Mathematics for University.
- Science Stream - FUNC.
- Education Stream - FINM.
- Business Stream - FINM.

At the conclusion of the nominated modules you must complete the corresponding Module Workbook as well as the Module Test. These will be available on the MATH40228 Moodle site, along with the due date for each.
The Module Workbooks and Module Tests are completed as assignments and are unsupervised.
The purpose of the Module Workbooks is to show evidence of learning and to form the basis for the Workbook Discussions. The Module Tests monitor your progress throughout the term, helping you identify concepts that need further review, either individually or with your Support Tutor.
Workbook Discussions will be conducted as part of the weekly Zoom Tutorials to clarify concepts and support your learning. A minimum attendance of four (4) Workbook Discussions is required during the term. Twelve Workbook Discussion Tutorials will be offered across the term.
You must achieve an overall minimum of 50% across the Portfolio in order to be awarded a PASS for Assessment Task 1.
You must pass Assessment Task 1 in order to be eligible to pass MATH40228 provided all other conditions are met.
Use of Artificial Intelligence (AI): Guided Collaboration.
You may use AI for planning, idea development, and research. For all assessment you MUST use techniques, protocols and setting out as taught within MATH40228 to demonstrate comprehension of the learning outcomes. Zero marks will be awarded for questions answered using alternative techniques. Further information about this requirement will be provided by the teaching staff in the unit.

Assessment Due Date
You are required to submit each Module Workbook and Module Review online via the IMU Moodle site. Detailed instructions on how to complete and upload these tasks will be available on the IMU Moodle site.

Return Date to Students
Module Workbooks, Module Tests and Workbook Discussions mark will be returned via the unit's Moodle site seven (7) days from the due date or the submission date, whichever is later.

Weighting
100% of 50%

Minimum mark or grade
50%

Assessment Criteria
Module Tests:
Marks for each question in the Module Reviews will be allocated for the following:
- Using appropriate setting out as per the resources on the Moodle site
- Following correct mathematical protocols taught in this unit
- Showing all correct steps in the solution
- Answering the questions asked, where appropriate
- Finding the correct answer

Module Workbooks and Workbook Discussions:
Marks for Module Workbooks and Workbook Discussions will be awarded for the following:
- Engagement with workbooks
- Self-mark and revise/update handwritten solutions
- Mathematical communication

Referencing Style
Harvard (author-date)

Submission
Online

Submission Instructions
You are required to submit each Module Workbook and Module Review online via the IMU Moodle site. Detailed instructions on how to complete and upload these tasks will be available on the IMU Moodle site.

Learning Outcomes Assessed
- Use available resources to select and apply appropriate intermediate bridging mathematics techniques to correctly solve problems
- Adopt mathematics as a language to logically communicate solutions
- Reflect on assessment feedback to improve mathematical comprehension

- Implement appropriate revision techniques and strategies to improve the retention and recall of content

2. ASSESSMENT 2 (*50% of unit*)

Take Home Exam

Assessment Title
Take Home Exam

Task Description
The Take Home Exam will be made available via Moodle. It is anticipated that the exam should take approximately three hours to complete. You will be given a 12-hour timeframe to access and download the exam from the unit Moodle site, complete it and upload it back into Moodle. This 12 hour period will allow you to use more than three hours to complete the exam should you need it. The Take Home Exam covers material from all nine CORE modules AND the one Elective you choose to study within the unit. The Take Home Exam is an unsupervised assessment item and you are required to do your own work, maintaining academic integrity with all honesty.
The Take Home Exam is to be uploaded as one (1) pdf file via the ASSESSMENT link on the MATH40228 Moodle site. Late submissions are not accepted. Students who have a deferred assessment approved will be given a different version of the Take Home Exam to complete on a revised due date and time.
Use of Artificial Intelligence (AI): Guided Collaboration.
You may use AI for planning, idea development, and research. For all assessment you MUST use techniques, protocols and setting out as taught within MATH40228 to demonstrate comprehension of the learning outcomes. Zero marks will be awarded for questions answered using alternative techniques. Further information about this requirement will be provided by the teaching staff in the unit.

Assessment Due Date
The date and time of the Take Home Exam will be made available on the unit Moodle site approximately six weeks before the Take Home Exam period. This assessment must be submitted by the specified due date and time. Due to the nature of this task, the standard 72-hour grace period does not apply.

Return Date to Students
The Take Home Exam result will be returned via the IMU Moodle site by Certification of Grades

Weighting
100% of 50%

Minimum mark or grade
Minimum percentage of Take Home Examination marks required to pass the unit - 50%

Assessment Criteria
Marks for each question will be allocated for the following:
- Using appropriate setting out as per the resources on the Moodle site
- Following correct mathematical protocols taught in this unit
- Showing all correct steps in the solution
- Answering the question, where appropriate
- Finding the correct answer.

Referencing Style
Harvard (author-date)

Submission
Online

Submission Instructions
The Take Home Exam must be submitted via the assessment link on the MATH40228 Moodle site.

Learning Outcomes Assessed
- Adopt mathematics as a language to logically communicate solutions
- Reflect on assessment feedback to improve mathematical comprehension
- Implement appropriate revision techniques and strategies to improve the retention and recall of content
- Recall, select and apply appropriate intermediate bridging mathematics procedures to correctly solve problems.

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the Student Academic Integrity Policy and Procedure. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the Academic Learning Centre (ALC) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?

Be Honest
If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

Seek Help
If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

Produce Original Work
Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem