



# MATH40237 *Fundamental Mathematics for* *University* Term 2 - 2024

Profile information current as at 29/07/2024 04:01 pm

All details in this unit profile for MATH40237 have been officially approved by CQU University 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

Fundamental Mathematics for University introduces foundational concepts, rules and methods of elementary mathematics. You will complete regular module reviews and use the feedback to develop a unified body of knowledge in the fundamentals of mathematics. Topics include operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics, and units and conversions. This provides a foundation for further study in mathematics and a broad range of other academic disciplines.

### 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 2 - 2024

- Brisbane
- Bundaberg
- Cairns
- Gladstone
- Mackay
- Online
- Rockhampton
- Townsville

### 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

#### 1. **Written Assessment**

Weighting: Pass/Fail

#### 2. **Take Home Exam**

Weighting: 40%

#### 3. **Take Home Exam**

Weighting: 60%

### 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
- 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 Unit Evaluations

**Feedback**

Positive student comments on the overall structure of the unit, including the content and structure of the Moodle site.

**Recommendation**

Continue with the current structure of the unit and the Moodle site.

#### Feedback from Unit Evaluations

**Feedback**

Students generally liked the instructional videos, but noted the audio on some of the recordings was not clear.

**Recommendation**

Continue to upgrade the instructional video resources, and continue to record live classes and make them available via Moodle.

#### Feedback from Staff

**Feedback**

Students liked the ability to attempt the module review quizzes multiple times.

**Recommendation**

Continue to enhance the bank of quiz questions to allow multiple attempts.

## Unit Learning Outcomes

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

1. Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
2. Apply appropriate mathematical techniques
3. Develop solutions to applied mathematical problems
4. Reflect on assessment to improve mathematical comprehension
5. Analyse information using mathematical techniques
6. Communicate mathematical solutions.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks            | Learning Outcomes |   |   |   |   |   |
|-----------------------------|-------------------|---|---|---|---|---|
|                             | 1                 | 2 | 3 | 4 | 5 | 6 |
| 1 - Written Assessment - 0% | •                 | • | • | • | • | • |
| 2 - Take Home Exam - 40%    |                   | • | • |   | • | • |
| 3 - Take Home Exam - 60%    | •                 | • | • |   | • | • |

### Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes                                | Learning Outcomes |   |   |   |   |   |
|--|-------------------|---|---|---|---|---|
|  | 1                 | 2 | 3 | 4 | 5 | 6 |
| 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 - Aboriginal and Torres Strait Islander Cultures |                   |   |   |   |   |   |

### Alignment of Assessment Tasks to Graduate Attributes

| Assessment Tasks            | Graduate Attributes |   |   |   |   |   |   |   |   |
|-----------------------------|---------------------|---|---|---|---|---|---|---|---|
|                             | 1                   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 - Written Assessment - 0% | —                   | — |   |   | — | — |   | — |   |
| 2 - Take Home Exam - 40%    |                     | — |   |   | — | — |   | — |   |

## Textbooks and Resources

### Textbooks

MATH40237

#### Prescribed

#### Fundamental Mathematics for University

Edition: 9 (2021)

Authors: Sharon Cohalan

CQUniversity Australia

Rockhampton , Queensland , Australia

ISBN: CQUniversity Australia

Binding: Spiral

The textbook required for Fundamental Mathematics for University (FMU) is available on the unit Moodle site. All modules can be downloaded and printed individually or together, using the link to each module or textbook publication. We strongly advise you to print out your own copy of the modules or textbook publications. 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)
- Microsoft Office or similar
- Computer- ability to access study materials, including instructional videos & upload assessment. Printer for printing assessment. Scanner or equivalent for uploading assessment.

## 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](mailto:a.dekkers@cqu.edu.au)

**Jim Andrianopoulos** Unit Coordinator

[j.andrianopoulos@cqu.edu.au](mailto:j.andrianopoulos@cqu.edu.au)

## Schedule

### Week 1 - 08 Jul 2024

| Module/Topic                                | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| <b>STMA</b> - The Study of Mathematics      |         |                              |
| <b>OPER</b> - Basic Operations with Numbers |         |                              |

### Week 2 - 15 Jul 2024

| Module/Topic                                | Chapter | Events and Submissions/Topic                          |
|---|---------|---|
| <b>OPER</b> - Basic Operations with Numbers |         | <b>STMA</b> Module Review: due Monday 15 July at 9am. |

### Week 3 - 22 Jul 2024

| Module/Topic              | Chapter | Events and Submissions/Topic                          |
|---------------------------|---------|---|
| <b>PERC</b> - Percentages |         | <b>OPER</b> Module Review: due Monday 22 July at 9am. |

#### Week 4 - 29 Jul 2024

| Module/Topic                          | Chapter | Events and Submissions/Topic                          |
|---------------------------------------|---------|---|
| <b>ALG1</b> - Introduction to Algebra |         | <b>PERC</b> Module Review: due Monday 29 July at 9am. |

#### Week 5 - 05 Aug 2024

| Module/Topic   | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| <b>ALG1</b> - Introduction to Algebra (continued)<br><b>EQN1</b> - Solving Algebraic Equations |         |                              |

#### Vacation Week - 12 Aug 2024

| Module/Topic | Chapter | Events and Submissions/Topic   |
|--------------|---------|--|
|              |         | <b>ALG1</b> Module Review: due Monday 12 August at 9am.<br><b>Assessment Test A released Friday 16 April 9:00 am.</b><br>University non-teaching week. |

#### Week 6 - 19 Aug 2024

| Module/Topic                              | Chapter | Events and Submissions/Topic  |
|---|---------|---|
| <b>EQN1</b> - Solving Algebraic Equations |         | <b>ASSESSMENT TEST A</b> Due: Week 6 Tuesday (20 Aug 2024) 9:00 am AEST |

#### Week 7 - 26 Aug 2024

| Module/Topic                              | Chapter | Events and Submissions/Topic                            |
|---|---------|---|
| <b>LINE</b> - Graphs and Linear Equations |         | <b>EQN1 Module Review:</b> due Monday 26 August at 9am. |

#### Week 8 - 02 Sep 2024

| Module/Topic  | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| <b>LINE</b> - Graphs and Linear Equations<br><b>STAT</b> - Introduction to Statistics |         |                              |

#### Week 9 - 09 Sep 2024

| Module/Topic  | Chapter | Events and Submissions/Topic                                 |
|---|---------|--|
| <b>STAT</b> - Introduction to Statistics<br><b>EXPO</b> - Exponents |         | <b>LINE</b> Module Review: due Monday 9 September at 9.00am. |

#### Week 10 - 16 Sep 2024

| Module/Topic            | Chapter | Events and Submissions/Topic                                  |
|-------------------------|---------|---|
| <b>EXPO</b> - Exponents |         | <b>STAT</b> Module Review: due Monday 16 September at 9.00am. |

#### Week 11 - 23 Sep 2024

| Module/Topic                       | Chapter | Events and Submissions/Topic                                  |
|------------------------------------|---------|---|
| <b>UNCN</b> - Units and Conversion |         | <b>EXPO</b> Module Review: due Monday 23 September at 9.00am. |

#### Week 12 - 30 Sep 2024

| Module/Topic  | Chapter | Events and Submissions/Topic                                |
|---------------|---------|---|
| <b>REVIEW</b> |         | <b>UNCN Module Review:</b> due Tuesday 1 October at 9.00am. |

## Review/Exam Week - 07 Oct 2024

| Module/Topic | Chapter | Events and Submissions/Topic  |
|--------------|---------|---|
|              |         | <b>Assessment Test B released</b><br>Wednesday 9 October 9:00 am.                     |
|              |         | <b>ASSESSMENT TEST B</b> Due:<br>Review/Exam Week Thursday (10 Oct 2024) 9:00 am AEST |

## Review/Exam Week - 14 Oct 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
|--------------|---------|------------------------------|

## Term Specific Information

Unit Coordinator: Antony Dekkers

email: a.dekkers@cqu.edu.au

Telephone (Office): 0749309355

Office: Rockhampton, North, CQUniversity, Building 32, Ground Floor, Room G38.

If you have any individual queries, please do not hesitate to email me and I will get back to you within two working days.

## Assessment Tasks

### 1 Module Reviews

#### Assessment Type

Written Assessment

#### Task Description

You will complete nine modules in MATH40237 (from the Fundamental Mathematics for University Textbook).

At the conclusion of each module you must complete the corresponding Module Review. These are available on the MATH40237 Moodle site, along with the due date for each.

The Module Reviews are completed as assignments with no supervision necessary.

The purpose of these reviews is to monitor your progress throughout the term, allowing you to identify any concepts that require further review. The reviews also provide a basis for communication between you and your tutor.

You must achieve an overall average of 50% across the nine Module Reviews in order to be awarded a PASS for Assessment Task 1.

You must pass Assessment Task 1 in order to be eligible to pass MATH40237 provided all other conditions are met.

#### Assessment Due Date

Module Reviews are due on the day specified in the Unit Profile Schedule. A detailed version of this schedule can be found on the MATH40237 Moodle site.

#### Return Date to Students

Module Reviews will be returned via the unit's Moodle site seven (7) days from the due date or the submission date, whichever is later.

#### Weighting

Pass/Fail

#### Minimum mark or grade

You must achieve an overall average of 50% across the nine Module Reviews in order to be awarded a PASS for Assessment Task 1.

#### Assessment Criteria

Marks for each question in the Module Reviews will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols

- showing all correct steps in the solution
- answering the questions asked, where appropriate
- finding the correct answer.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

Students are required to submit each Module Review online at the FMU Moodle site via the ASSESSMENT link. Detailed instructions on how to complete and upload these Module Reviews can be found on the FMU Moodle site.

### Learning Outcomes Assessed

- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Reflect on assessment to improve mathematical comprehension
- Analyse information using mathematical techniques
- Communicate mathematical solutions.

### Graduate Attributes

- Self Management
- Communication
- Problem Solving
- Critical Thinking
- Ethical Practice

## 2 ASSESSMENT TEST A

### Assessment Type

Take Home Exam

### Task Description

Assessment Test A (ATA) is in the form of a take home exam and will be made available via the MATH40237 Moodle site on Friday 16 August at 9am. Assessment Test A should take you three (3) hours to complete.

You will be given a 4 day time-frame to access and download the test from the MATH40237 Moodle site, complete it and upload it back.

Assessment Test A covers material from the STMA, OPER, PERC and ALG1 modules.

You are expected to successfully complete the relevant Module Reviews for these modules before attempting Assessment Test A.

This take home exam is not a supervised assessment item and you are required to do your own work, maintaining academic integrity and honesty at all times.

### Assessment Due Date

Week 6 Tuesday (20 Aug 2024) 9:00 am AEST

Assessment Test A is to be uploaded as one (1) pdf file via the ASSESSMENT link on the MATH40237 Moodle site. Late submissions are not accepted. Students attempting an approved deferred take home exam will attempt a different version of ATA on a different set date and time.

### Return Date to Students

Assessment Test A (mark only) will be returned via the unit's Moodle site 10 working days from the due date or the submission date, whichever is later.

### Weighting

40%

### Assessment Criteria

Assessment Criteria

Marks for each question will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols
- 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

Assessment Test A must be uploaded as one (1) pdf file through the ASSESSMENT link on the FMU Moodle site.

### Learning Outcomes Assessed

- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Analyse information using mathematical techniques
- Communicate mathematical solutions.

### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Ethical Practice

## 3 ASSESSMENT TEST B

### Assessment Type

Take Home Exam

### Task Description

Assessment Test B (ATB) is in the form of a take home exam and will be made **available** via the FMU Moodle site on Wednesday 9 October at 9am. This test should take you three (3) hours to complete.

You will be given a 24 hour time-frame to access and download the test from the FMU Moodle site, complete it and upload it back.

Assessment Test B covers material from the EQN1, LINE, STAT, EXPO and UNCN modules.

You are expected to successfully complete the relevant Module Reviews for these modules before attempting Assessment Test B.

This take home exam is not a supervised assessment item and you are required to do your own work, maintaining academic integrity and honesty at all times.

### Assessment Due Date

Review/Exam Week Thursday (10 Oct 2024) 9:00 am AEST

Assessment Test B is to be uploaded as one (1) pdf file via the ASSESSMENT link on the FMU Moodle site. Late submissions are not accepted. Students attempting an approved deferred take home exam will attempt a different version of ATB on a different set date and time.

### Return Date to Students

Assessment Test B (mark only) will be returned via the unit's Moodle site on Certification of Grades.

### Weighting

60%

### Minimum mark or grade

The minimum grade for Assessment Test B is 40%.

### Assessment Criteria

Marks for each question will be allocated for the following:

- using appropriate setting out
- following correct mathematical protocols
- 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

Assessment Test B must be uploaded as one (1) pdf file through the ASSESSMENT link on the FMU Moodle site.

## Learning Outcomes Assessed

- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Recall fundamental mathematical concepts and techniques such as operations, percentages, introductory algebra, simple equation solving, exponents, linear equations, introductory statistics and units and conversions.
- Apply appropriate mathematical techniques
- Develop solutions to applied mathematical problems
- Analyse information using mathematical techniques
- Communicate mathematical solutions.

## 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