



# ENMM20023 *Introduction to Asset and Maintenance Management*

## Term 2 - 2019

Profile information current as at 19/04/2024 03:19 pm

All details in this unit profile for ENMM20023 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

This unit is designed to introduce students to maintenance strategies, philosophies and procedures, including the basic principles of asset management systems. Students will investigate and report on key concepts relating to asset and maintenance management in their organisation. They will analyse causes and develop solutions to asset and maintenance management problems and recognise and apply quality control procedures and quality assurance systems. This unit also helps students to develop the multi-literacy skills they will require to be a successful learner.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 8*

Credit Points: 6

Student Contribution Band: 8

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 - 2019

- 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).

### Residential Schools

This unit has a Optional Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

### 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 Postgraduate 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: 10%

#### 2. **Written Assessment**

Weighting: 30%

#### 3. **Presentation and Written Assessment**

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 moodle and via phone

##### Feedback

Navigation of Moodle website needs to be easier.

##### Recommendation

Students will be encouraged to attend the Residential school in which these aspects are covered very well at a slow pace.

#### Feedback from Lecturer

##### Feedback

Students evaluation participation rate needs to be high.

##### Recommendation

More notifications will be issued at the end of the term so that more students take part in the evaluation of the unit.

## Unit Learning Outcomes

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

1. Develop multi-literacy skills required to become a successful learner, including reflection, communication, referencing and presentation skills.
2. Investigate and report on the key concepts relating to asset and maintenance management in your organisation.
3. Explain the management of maintenance from a business centred perspective.
4. Analyse the causes and develop solutions to asset and maintenance management problems.
5. Apply asset and maintenance management principles to improve organisational effectiveness.
6. Recognise and apply quality control procedures and quality assurance systems.

n/a

## 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
<b>1 - Written Assessment - 10%</b>	•	•				
<b>2 - Written Assessment - 30%</b>	•		•	•	•	•
<b>3 - Presentation and Written Assessment - 60%</b>	•			•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Knowledge	○	○	○	○	○	○
2 - Communication	○	○	○		○	○
3 - Cognitive, technical and creative skills		○	○	○	○	○
4 - Research		○	○	○	○	○
5 - Self-management	○	○			○	○
6 - Ethical and Professional Responsibility			○	○	○	○
7 - Leadership			○	○	○	○
8 - 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
1 - Written Assessment - 10%	○	○			○			
2 - Written Assessment - 30%	○	○	○		○			
3 - Presentation and Written Assessment - 60%	○	○	○	○	○	○	○	

## Textbooks and Resources

### Textbooks

There are no required textbooks.

### IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Learning guide in the form of a Moodle book uploaded on the moodle web page
- Online lectures via zoom

## Referencing Style

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

## Teaching Contacts

**Subhash Sharma** Unit Coordinator  
[s.sharma2@cqu.edu.au](mailto:s.sharma2@cqu.edu.au)

## Schedule

### Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 1- Introduction to University Study & Writing Skills	Study all chapters and practise self check activities	First Online Lecture via Zoom software will be delivered to provide an overview of the unit activities. For weekly zoom sessions keep a <b>track of email</b> from the lecturer and Moodle. Students must give choice of Residential School. For details visit Moodle Web page of this unit two weeks before the term starts.

### Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 2- Introduction to maintenance	Study all chapters and practice self check activities	Highly recommended 1-Day Face-to-Face Residential School, for details visit Moodle Web-page of this unit and for schedule: <a href="https://handbook.cqu.edu.au/facet/residential-schools/index/ENMM20023">https://handbook.cqu.edu.au/facet/residential-schools/index/ENMM20023</a>

### Week 3 - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 3- Introduction to Asset Management	Study all chapters, practice self check activities. Collect information for assignment analyse it and prepare assignment.	Attend Zoom session and clarify questions on relevant chapters.

### Week 4 - 05 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Review Module 1-3	Study all chapters and practice self check activities and Finalize Assignment 1.	Attend Zoom Session and ask questions about Assignment 1.

### Week 5 - 12 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 4- Principles of Management	Assignment due on Monday. Study all chapters and practice self check activities	Clarify your questions in the Zoom session <b>Assignment 1-</b> Due: Week 5 Monday (12 Aug 2019) 10:00 am AEST

### Vacation Week - 19 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Vacation		

### Week 6 - 26 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 5- Financial analysis and maintenance management	Study all chapters , practice self check activities and start preparing assignment	ask questions about your assignment on the tutorial evening

### Week 7 - 02 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Module 1-5 revise	Analyse collected data and prepare assignment	Discussion forum activities on forthcoming Assignment-2

<b>Week 8 - 09 Sep 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Module 6- Maintenance Management Techniques - Analytical	study module 6, practice self check activities finalize Assignment 2.	Attend Zoom Session and ask questions about Assignment 2.
<b>Week 9 - 16 Sep 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Module 7- Maintenance management techniques - Statistical	Assignment 2 is due on Monday. Study all chapters , practice self check activities and start collecting information for Assignments 3	Plan your assignment and discuss questions on the discussion forum  <b>Assignment 2-</b> Due: Week 9 Monday (16 Sept 2019) 11:59 pm AEST
<b>Week 10 - 23 Sep 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Module 8- Maintenance Quality, Safety & Environment	Study all chapters and revise Chapter 1, practice self check activities, analyse information and start preparing assignment 3.	Ask assignment related questions in the Zoom session
<b>Week 11 - 30 Sep 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Module 1,6, 7 & 8	Analyse information, finalise assignment and prepare outlines of Power Point slides	Attend zoom session on Assignment 3 discussions
<b>Week 12 - 07 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Module 1,6,7& 8	Prepare Power Point slides for assignment Part B and finalise Assignment 3.	Attend Zoom Session and ask questions about Assignment 3.
<b>Review/Exam Week - 14 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
	Assignment 3 is due on Monday	<b>Assignment 3-</b> Due: Review/Exam Week Monday (14 Oct 2019) 10:00 am AEST
<b>Exam Week - 21 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>

## Assessment Tasks

### 1 Assignment 1-

#### Assessment Type

Written Assessment

#### Task Description

The assignment question/s will be uploaded on the Moodle web page of this unit two weeks prior to start of the term. This assessment relates to Module 1,2 and 3 of this unit. The objective of this assignment is to :

- demonstrate the concept of using models to relate theory to practical application
- develop multi-literacy skills through the concept of assignment writing, referencing and submission
- Explore some of the fundamental concepts of maintenance and asset management
- Explain the management of maintenance from a business centered perspective

Your assignment is to be submitted in 'report format.' You will find an 'example assignment report template' in your Module 1. Use standard format for choosing a file name of your assignment.

Academic writing is different from other types of writings, please follow these guideline as given in Module 1. Please note that the assignment has a word limit and is subjected to penalty.

There are 2 questions in this assignment, these are available on Moodle web site.

For further information please visit the Moodle Website of this unit..

**Assessment Due Date**

Week 5 Monday (12 Aug 2019) 10:00 am AEST  
Assignment Due on Monday Week 5

**Return Date to Students**

Week 7 Monday (2 Sept 2019)  
Please check your moodle website for feedback

**Weighting**

10%

**Assessment Criteria**

Marks for each part of question will be available from the moodle website. However, the following assessment criteria will be used for marking the assignment:

- Demonstration of knowledge and understanding of concepts
- Evidence of research beyond own experience and unit
- Clarity of expression, including use of terminology, ease of reading, spelling and grammar, orderly and logical presentation and use of diagrams to illustrate points.
- Quality of technical presentation including neatness, appropriate use of figures and tables and references.
- Use of correct and accurate referencing.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Please submit word file only no PDF document will be accepted. The required standard file name format, Example -'John Smith\_ENMM20023\_Assignment 1

**Learning Outcomes Assessed**

- Develop multi-literacy skills required to become a successful learner, including reflection, communication, referencing and presentation skills.
- Investigate and report on the key concepts relating to asset and maintenance management in your organisation.

**Graduate Attributes**

- Knowledge
- Communication
- Self-management

## 2 Assignment 2-

**Assessment Type**

Written Assessment

**Task Description**

The assignment question/s will be uploaded on the moodle web page of this unit two weeks prior to start of the term. This assignment has three questions which relate to Module 1,4 & 5 of Learning Guide. This will require collection of information from your own company either from company reports or by interviewing other employees and resources beyond Learning Guide. The objective of the assessment are to:

- Develop multi-literacy skills through reflection, written communication and referencing
- Explore some of the fundamental concepts of management
- Introduce the concept of asset life cycles and maintenance financial analysis models
- Apply asset and maintenance management principles to improve organisational effectiveness

**Assessment Due Date**

Week 9 Monday (16 Sept 2019) 11:59 pm AEST

Please submit word file only, no PDF files will be accepted. The required standard file name format, Example -'John Smith\_ENMM20023\_Assignment 2

**Return Date to Students**

Week 11 Monday (30 Sept 2019)

## Weighting

30%

## Assessment Criteria

This is a criterion-based assessment item. Please note that it is highly recommended that you read beyond the unit materials to complete assessment items. Your submission for this assessment will be evaluated by the following criteria:

- Demonstration of knowledge and understanding of concepts.
- Evidence of research beyond own experience and unit
- Clarity of expression, including use of terminology, ease of reading, spelling and grammar, orderly and logical presentation and use of diagrams to illustrate points.
- Quality of technical presentation including neatness, appropriate use of figures and tables and references.
- Use of correct and accurate referencing.

For further information and marking guide please visit Moodle web site.

## Referencing Style

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

## Submission

Online

## Submission Instructions

The required standard file name format, Example -'John Smith\_ENMM20023\_Assignment 2

## Learning Outcomes Assessed

- Develop multi-literacy skills required to become a successful learner, including reflection, communication, referencing and presentation skills.
- Explain the management of maintenance from a business centred perspective.
- Analyse the causes and develop solutions to asset and maintenance management problems.
- Apply asset and maintenance management principles to improve organisational effectiveness.
- Recognise and apply quality control procedures and quality assurance systems.

## Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Self-management

## 3 Assignment 3-

### Assessment Type

Presentation and Written Assessment

### Task Description

The assignment question/s will be uploaded on the moodle web page of this unit two weeks prior to start of the term. This assignment has Part A and Part B. There are three questions in Part A. Part B requires the preparation of power Point slides for presentation of your mini-project. This report is based on the information collected from your own company and from resources beyond Learning Guide. If required, your organisation information may be altered to protect confidentiality provided it is still reasonably close to real life assumptions. Besides the content and the formatting of the report, correct referencing is of utmost importance. Use standard file name format and follow the word count limit.

The objectives of Assignment 3 are also to:

- Develop multi-literacy skills including reflection, communication and presentation skills
- Explore some of the fundamental concepts of maintenance analysis technique and their application to practical problems
- Analyse the causes and develop solutions to asset and maintenance management problems
- Introduce the maintenance safety through quality control and assurance systems and procedures
- Prepare a PowerPoint Presentation

Key notes to consider when writing your report are:

- Ensure that you write in full sentence structure ensuring you use the correct tense and grammar
- Your paragraphs (especially in your discussion) need to have a cohesive flow of the topic being discussed
- In academic writing, avoid the use of first person (e.g. I, my, ours). That is, reports are to be written in third person (e.g. 'In the author's opinion, maintenance management can be described as...' instead of 'my understanding of maintenance management is...')

- Be sure to clearly and accurately reference other's ideas, words, figures/tables etc. in accordance with the CQUniversity's Harvard referencing guide

**Assessment Due Date**

Review/Exam Week Monday (14 Oct 2019) 10:00 am AEST

Please submit word file only no PDF document will be accepted. The required standard file name format, Example -'John Smith\_ENMM20023\_Assignment 3

**Return Date to Students**

Exam Week Friday (25 Oct 2019)

Marks will not be officially uploaded on the moodle until approved by the committee.

**Weighting**

60%

**Assessment Criteria**

This is a criterion-based assessment item. Please note that it is highly recommended that you read beyond the unit materials to complete assessment items. Your submission will be evaluated by the following criteria:

- Selection of problem, description of problem and supporting evidence.
- Plan for the solution of the problem, including selection of relevant techniques and use of resources.
- application of analysis to the problem.
- Conclusion.
- Quality of technical presentation including neatness of presentation, appropriate use of figures and tables and referencing.
- Marks will be PowerPoint Presentation.

Marks will be allocated using a marking scheme that will be available on the moodle web site when the assignment has been marked.

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

The required standard file name format, Example -'John Smith\_ENMM20023\_Assignment 3

**Learning Outcomes Assessed**

- Develop multi-literacy skills required to become a successful learner, including reflection, communication, referencing and presentation skills.
- Analyse the causes and develop solutions to asset and maintenance management problems.
- Apply asset and maintenance management principles to improve organisational effectiveness.
- Recognise and apply quality control procedures and quality assurance systems.

**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

## 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