



BLCN29003 Construction Measurement

Term 3 - 2023

Profile information current as at 29/04/2024 11:54 pm

All details in this unit profile for BLCN29003 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

Construction Measurement is the measurement and quantification for cost planning and documentation of building works and associated civil engineering works. In this unit, you will learn how to measure, quantify and cost construction work including civil engineering works associated with buildings. You will be referring to Australian Standard Method of Measurement (ASMM) of Building Works as a uniform basis for the measurement of building works. With the comprehensive knowledge of measurement, you will then gain in-depth knowledge of unit rate estimating and project pricing associated with the acquisition of materials and labour on building and construction sites. Having fundamental knowledge, you will then be directed to software to perform 2D and 3D electronic measurement and estimating associated with Computer Aided Design (CAD). You will be introduced to architectural and project coordination software to signify the integral part of cost planning in a construction project.

Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisite: Construction Technology

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 - 2023

- Brisbane
- Online
- 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

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: 25%

2. **Laboratory/Practical**

Weighting: 40%

3. **Case Study**

Weighting: 35%

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 Student unit teaching evaluations

Feedback

The student feedback noted that the lecturer needed to be more mindful of student diversity.

Recommendation

Teaching staff will be advised to be mindful of student diversity and international building construction backgrounds in their home country.

Unit Learning Outcomes

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

1. Critically analyse and describe the standard method of measurement for various building components
2. Evaluate construction measurement and estimate software to select the most appropriate package for a given construction type
3. Reflect, critically evaluate and integrate technology and measurement to cost construction projects.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | |
|--------------------------------|-------------------|---|---|
| | 1 | 2 | 3 |
| 1 - Written Assessment - 25% | • | | |
| 2 - Laboratory/Practical - 40% | | • | • |
| 3 - Case Study - 35% | | • | • |

Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes | Learning Outcomes | | |
|--|-------------------|---|---|
| | 1 | 2 | 3 |
| 1 - Knowledge | ◦ | | |
| 2 - Communication | | | |
| 3 - Cognitive, technical and creative skills | | ◦ | |
| 4 - Research | | | ◦ |

| Graduate Attributes | Learning Outcomes | | |
|--|-------------------|---|---|
| | 1 | 2 | 3 |
| 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 - 25% | ○ | | | | | | | |
| 2 - Laboratory/Practical - 40% | ○ | | ○ | | | | | |
| 3 - Case Study - 35% | | | ○ | ○ | | | | |

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)
- Microsoft Office or equivalent software
- MS Teams
- Microphone and headset (and preferably a camera) to participate in Zoom sessions

Referencing Style

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

Teaching Contacts

Pushpitha Kalutara Unit Coordinator
p.kalutara@cqu.edu.au

Schedule

Week 1 - 06 Nov 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Topic 1 -Introduction to construction measurement and estimating | | |

Week 2 - 13 Nov 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Topic 2 -Measurement and take-off basics | | |

Week 3 - 20 Nov 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Topic 3 - Measurement and Construction Documentation | | |

Week 4 - 27 Nov 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------------|---------|---|
| Topic 4 - Estimating Methods | | Assessment 1 Due: Week 4 Friday (1 Dec 2023) 11:45 pm AEST |

Vacation Week - 04 Dec 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------------|---------|------------------------------|
| No classes. Enjoy the break! | | |

Week 5 - 11 Dec 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| Topic 5 - Measuring sub and super-structure | | |

Week 6 - 18 Dec 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| Topic 6 - Measuring services, furnishings, fixtures and equipment | | |

Vacation Week - 25 Dec 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------------|---------|------------------------------|
| No classes. Enjoy the break! | | |

Week 7 - 01 Jan 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------------------------|---------|------------------------------|
| Topic 7 - Pricing Labour & Materials | | Assignment hand in date |

Week 8 - 08 Jan 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|--|
| Topic 8 - Pricing and Reviewing Sub-contractor work | | Assessment 2 Due: Week 8 Friday (12 Jan 2024) 11:45 pm AEST |

Week 9 - 15 Jan 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---------|------------------------------|
| Topic 9 - Pricing Preliminaries, Overheads and Profit | | |

Week 10 - 22 Jan 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Topic 10 - Closing the bid (tendering) | | Assignment hand in date |

Week 11 - 29 Jan 2024

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

Topic 11- Measuring activities post-job award

Assessment 3 Due: Week 11 Friday (2 Feb 2024) 11:45 pm AEST

Week 12 - 05 Feb 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|--|---------|------------------------------|
| Topic 12 - Digitisation in Construction Measuring - Future trends | | |

Exam Week - 12 Feb 2024

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

Assessment Tasks

1 Assessment 1

Assessment Type

Written Assessment

Task Description

In this assignment, you will critically analyse and describe the use and application of the Australian Standard Method of Measurement for building components. When preparing your submission, it is important to follow the marking sheet and marking rubrics given. As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required.

Assessment Due Date

Week 4 Friday (1 Dec 2023) 11:45 pm AEST

Submit via Moodle Learning site

Return Date to Students

Week 6 Friday (22 Dec 2023)

Via Moodle Learning site

Weighting

25%

Assessment Criteria

The assessment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues;
- Use of quality supporting documentation as appropriate;
- Use of original thought and content;
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication; and
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Marks will be allocated as specified in the assignment brief in the 'Assessment' block in the unit Moodle.

Referencing Style

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

Submission

Online

Submission Instructions

Submission via Moodle portal

Learning Outcomes Assessed

- Critically analyse and describe the standard method of measurement for various building components

Graduate Attributes

- Knowledge

2 Assessment 2

Assessment Type

Laboratory/Practical

Task Description

In this assignment task, you will evaluate construction measurement and link this to estimating software practices in industry. You will also reflect, critically evaluate and integrate measurement for building elements.

Assessment Due Date

Week 8 Friday (12 Jan 2024) 11:45 pm AEST

Submit via Moodle Learning site

Return Date to Students

Week 10 Monday (22 Jan 2024)

via Moodle Learning site

Weighting

40%

Assessment Criteria

The assessment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues;
- Use of quality supporting documentation as appropriate;
- Use of original thought and content;
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication; and
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Marks will be allocated as specified in the assignment brief in the 'Assessment' block in the unit Moodle.

Referencing Style

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

Submission

Online

Submission Instructions

Submission via Moodle portal

Learning Outcomes Assessed

- Evaluate construction measurement and estimate software to select the most appropriate package for a given construction type
- Reflect, critically evaluate and integrate technology and measurement to cost construction projects.

Graduate Attributes

- Knowledge
- Cognitive, technical and creative skills

3 Assessment 3

Assessment Type

Case Study

Task Description

For this Assignment 3 you will apply your knowledge and skills developed across the learning topics. You will be provided with drawings from a commercial building project to critically evaluate, measure and prepare buildings rates. In addition, you will research and prepare a written reflective account of your learning approach and findings to develop your professional appreciation of construction measurement practice.

Assessment Due Date

Week 11 Friday (2 Feb 2024) 11:45 pm AEST

Submit via Moodle Learning site

Return Date to Students

Exam Week Friday (16 Feb 2024)

Via Moodle learning site

Weighting

35%

Assessment Criteria

The assessment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues;
- Use of quality supporting documentation as appropriate;
- Use of original thought and content;
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication; and
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Marks will be allocated as specified in the assignment brief in the 'Assessment' block in the unit Moodle.

Referencing Style

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

Submission

Online

Submission Instructions

Submission via Moodle portal

Learning Outcomes Assessed

- Evaluate construction measurement and estimate software to select the most appropriate package for a given construction type
- Reflect, critically evaluate and integrate technology and measurement to cost construction projects.

Graduate Attributes

- Cognitive, technical and creative skills
- Research

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