

BLCN12038 Project Estimating Term 2 - 2023

Profile information current as at 03/05/2024 11:56 am

All details in this unit profile for BLCN12038 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

In this unit, you will learn about the history of the building and construction industry, the importance of preparing accurate cost estimates, the basic cost components integral to building projects and the development of cost estimates for projects at different stages of their life cycle including feasibility studies, procurement, retrofitting and 'change of use'. You will have the opportunity to prepare partial cost estimates for competitive tenders, use tendering strategies, discuss successful and unsuccessful tenders, and capture tendering data into cost monitoring systems.

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

Pre-requisites: BLAR11049: Built Environment Communications and Skills or COMM11003: Professional and Technical Communication or ENEG11005: Fundamentals of Professional Engineering

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 <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

Offerings For Term 2 - 2023

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 Undergraduate 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

<u>Metropolitan Campuses</u> Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

 Written Assessment Weighting: 30%
Written Assessment Weighting: 30%
Online Test Weighting: 40%

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 <u>University's Grades and Results Policy</u> for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the <u>CQUniversity Policy site</u>.

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 <u>CQUniversity Policy site</u>.

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 evaluation

Feedback

Students lacking construction industry experience expressed difficulty with industry specific terminology.

Recommendation

Via the CQU library, students have access to Australian Standards HB50 Glossary of building terms. A reminder note will be added under the "learning community" tile in Moodle.

Feedback from Student evaluation

Feedback

University library (to) have access to the latest version of the textbook.

Recommendation

CQU library has e-book access to 4th and 5th editions of the Brook text.

Feedback from Student evaluation

Feedback

A beneficial aspect of the unit was learning about and using the Rawlinsons cost guide.

Recommendation

Access to and using construction industry-based cost books are part of the unit's learning journey.

Unit Learning Outcomes

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

- 1. Explain the general history of the construction industry and the role of estimators in the construction industry
- 2. Apply cost planning principles and develop construction cost estimates for building practice
- 3. Evaluate typical building life cycles and the application of different types of building cost estimates at different times in the cycle
- 4. Assess activities involved in the preparation of a detailed building estimate and its development into a building tender
- 5. Apply bidding and tendering principles to appraise tender strategies and formulate actions for successful and unsuccessful tenders
- 6. Judge the relationship(s) between project outcomes and tenders ensuring the lessons learned are incorporated into a contractor's intellectual capital.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

	N/A	Introductory	Intermediate	Graduate	
_	Level	Level	Level	Level	

Professional Level Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks		Learning Outcomes								
	1	2	3	4	5	6				
1 - Communication	•	•								
2 - Problem Solving		•	•	•	•	•				
3 - Critical Thinking			•	•	•	•				
4 - Information Literacy	•	•	•	•	•	•				
5 - Team Work										
6 - Information Technology Competence										
7 - Cross Cultural Competence										
8 - Ethical practice										
9 - Social Innovation										
10 - 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	10	
1 - Written Assessment - 30%	•	•	•	•							
2 - Written Assessment - 30%	•	•	•	•							
3 - Online Test - 40%	•	•	•	•							

Textbooks and Resources

Textbooks

BLCN12038

Prescribed

Estimating and Tendering for Construction Work

5th edition (2017) Authors: Martin Brook Taylor & Francis Group New York , New York , USA ISBN: 978-1-138-83806-2 Binding: Paperback

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Access to printer and scanner
- Computer headset (microphone speaker combo)
- Microsoft Office or equivalent software
- Web camera (webcam)

Referencing Style

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

Teaching Contacts

Peter F Lawrence (Engineering) Unit Coordinator p.lawrence1@cqu.edu.au

Schedule

Week 1 - 10 Jul 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 1 Introduction to project estimating	Refer to Moodle for further information.	
Week 2 - 17 Jul 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 2 Tender documentation, contractor selection, and project appreciation	Refer to Moodle for further information.	
Week 3 - 24 Jul 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 3 Building Life Cycle Cost Analysis (LCCA)	Refer to Moodle for further information.	

Week 4 - 31 Jul 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 4 Conceptual and square metre estimating	Refer to Moodle for further information.	Assessment 1 Due: Week 4 Friday (4 Aug 2023) 11:45 pm AEST
Week 5 - 07 Aug 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 5 Quantity takeoff and detailed estimating	Refer to Moodle for further information.	
Vacation Week - 14 Aug 2023		
Module/Topic	Chapter	Events and Submissions/Topic
No class	Use the time as a wellness break, to catch-up or work on an assessment.	
Week 6 - 21 Aug 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 6 - Building areas, elements, trades and measuring standards.	Refer to Moodle for further information.	
Week 7 - 28 Aug 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 7 - Measurement using standards for building information modelling	Refer to Moodle for further information.	
Week 8 - 04 Sep 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 8 Cost of labour, materials and plants including unit rates	Refer to Moodle for further information.	
Week 9 - 11 Sep 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 9 Pricing the bill of quantities and preliminaries	Refer to Moodle for further information.	Assessment 2 Due: Week 9 Friday (15 Sept 2023) 11:45 pm AEST
Week 10 - 18 Sep 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 10 Overheads and profit	Refer to Moodle for further information.	
Week 11 - 25 Sep 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Topic 11 Tendering strategies and post tender activities	Refer to Moodle for further information.	Day and time for the A3 online test during the Exam Week released by Saturday.
Week 12 - 02 Oct 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Revision	Refer to Moodle for further information.	
Review/Exam Week - 09 Oct 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Unit review and exam period begins		
Exam Week - 16 Oct 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Exam period concludes		A3 online test as advised in Week 11.

Assessment Tasks

1 Assessment 1

Assessment Type

Written Assessment

Task Description

This assessment covers topics 1-3 in the study guide and will require research to answer questions exploring estimating practices and building life cycle cost analysis (LCCA) principles.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

Assessment Due Date

Week 4 Friday (4 Aug 2023) 11:45 pm AEST

It is recommended the Moodle submission remain in draft form until you have viewed the Turnitin report and made any necessary amendments before lodging by the due date and time.

Return Date to Students

Vacation Week Friday (18 Aug 2023) Students will be advised if a delay emerges.

Weighting

30%

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.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit a single PDF file.

Learning Outcomes Assessed

- Explain the general history of the construction industry and the role of estimators in the construction industry
- Apply cost planning principles and develop construction cost estimates for building practice
- Evaluate typical building life cycles and the application of different types of building cost estimates at different times in the cycle

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

2 Assessment 2

Assessment Type

Written Assessment

Task Description

This assessment covers topics 4-8 in the study guide and will require research to answer questions exploring conceptual and square metre estimating, quantity take-off and detailed estimating.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

Assessment Due Date

Week 9 Friday (15 Sept 2023) 11:45 pm AEST It is recommended the Moodle submission remain in draft form until you have viewed the Turnitin report and made any necessary amendments before lodging by the due date and time.

Return Date to Students

Week 11 Friday (29 Sept 2023) Students will be advised if a delay emerges.

Weighting

30%

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.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit a single PDF file.

Learning Outcomes Assessed

- Assess activities involved in the preparation of a detailed building estimate and its development into a building tender
- Apply bidding and tendering principles to appraise tender strategies and formulate actions for successful and unsuccessful tenders

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

3 Online test

Assessment Type

Online Test

Task Description

This assessment covers topics 1-11 in the study guide and will require you to research and answer questions exploring the learning content presented during the term. The online test will be held during Exam Week on a date and time advised by the end of Week 11.

The duration of test will be 150 minutes.

The test will be Open Book and will require the use of a calculator - non-programmable, no text retrieval, silent only. Your submission will be uploaded via the assessment link in Moodle.

Assessment Due Date

Day and time during Exam Week (16-20 October 2023) as advised in Week 11

Return Date to Students

Saturday 28/10/2023. Students will be advised if a delay emerges.

Weighting

40%

Minimum mark or grade 20/40 (50%)

Assessment Criteria

The test 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.

Referencing Style

• Harvard (author-date)

Submission

Online

Submission Instructions

Submit a single PDF file.

Learning Outcomes Assessed

- Explain the general history of the construction industry and the role of estimators in the construction industry
- Apply cost planning principles and develop construction cost estimates for building practice
- Evaluate typical building life cycles and the application of different types of building cost estimates at different times in the cycle
- Assess activities involved in the preparation of a detailed building estimate and its development into a building tender
- Apply bidding and tendering principles to appraise tender strategies and formulate actions for successful and unsuccessful tenders
- Judge the relationship(s) between project outcomes and tenders ensuring the lessons learned are incorporated into a contractor's intellectual capital.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

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 <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?





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