



BLAR13054 Complex Construction

Term 1 - 2024

Profile information current as at 05/09/2024 01:37 pm

All details in this unit profile for BLAR13054 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 will introduce you to the procedures, principles and methods of construction used for complex projects up to "super tall" buildings (over 300m in height) and designated by the National Construction Code (NCC) as being within Building Class 2 to 9. You should have completed an intermediate construction unit to ensure adequate level of entry knowledge. Students who have successfully completed BLAR13049 should not enrol in this unit.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisite: BLAR12057 Commercial Construction or BLAR11048 Construction 2.

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 1 - 2024

- 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

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Written Assessment**

Weighting: 20%

2. **Written Assessment**

Weighting: 40%

3. **Written Assessment**

Weighting: 30%

4. **Online Quiz(zes)**

Weighting: 10%

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

Feedback

The name says it all - complex. But the lecturer makes sense of it all and is very supportive and good.

Recommendation

The lecturer is a specialist working in the industry and will continue to bring real-life experience and examples.

Feedback from Student

Feedback

It would be helpful if the unit used MSTeams as experienced in other units. MSTeams is very helpful in its speed of response to questions. It also allows students to discuss matters.

Recommendation

The use of MS Teams is at the lecturer's discretion, although the Moodle Q&A and Forum continue to be the main communication system. However, students enrolled in the unit are encouraged to use the MS Team between themselves for mutual support and discussion.

Feedback from Student and Lecturer

Feedback

A few links to resources (mostly YouTube videos) did not initially work in Week 1. However, all were quickly rectified or updated. It would be good to avoid this if possible in future terms.

Recommendation

Some video links can slip through pre-term testing or change after the release of the unit to students. They are repaired as soon as they are discovered.

Unit Learning Outcomes

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

1. Plan the temporary works, particularly scaffolding, formwork and falsework and plant selection processes used for complex or "super tall" construction.
2. Describe the functions, materials and details of the major components. the waste management strategies used and the regulatory inspections made when constructing a complex or "super tall" project.
3. Diagnose and plan the rectification of common building faults.
4. Explain the issues encountered by complex or "super tall" buildings including funding, ownership, design and construction.
5. Discuss the development and implementation of innovative building practices.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | | | |
|-------------------------------------|-------------------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 1 - Written Assessment - 20% | • | | | | |

Textbooks and Resources

Textbooks

BLAR13054

Prescribed

National Construction Code

Edition: Building Code of Australia Volume 1 (2016) (2016)

Authors: Australian Building Codes Board

Australian Building Codes Board

Canberra , ACT , Australia

Binding: eBook

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- MS Teams

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Kevin Stone Unit Coordinator

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Schedule

Week 1 - 04 Mar 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------------------------|---------|------------------------------|
| Introduction and Structural Systems | | |

Week 2 - 11 Mar 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|---------------------------|---------|------------------------------|
| Planning and Design Stage | | |

Week 3 - 18 Mar 2024

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

Week 4 - 25 Mar 2024

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------------|---------|------------------------------|
| Waste Management Systems | | |

Week 5 - 01 Apr 2024

Module/Topic

Chapter

Events and Submissions/Topic

Work, Health and Safety

Written Assessment 1 Due: Week 5
Friday (5 Apr 2024) 11:45 pm AEST**Vacation Week - 08 Apr 2024**

Module/Topic

Chapter

Events and Submissions/Topic

Week 6 - 15 Apr 2024

Module/Topic

Chapter

Events and Submissions/Topic

Complaint and Regulator
Management**Written Assessment 3** Due: Week 6
Friday (19 Apr 2024) 11:45 pm AEST**Week 7 - 22 Apr 2024**

Module/Topic

Chapter

Events and Submissions/Topic

High-Rise and Ultra High
Buildings**Week 8 - 29 Apr 2024**

Module/Topic

Chapter

Events and Submissions/Topic

Large Scale Projects

Week 9 - 06 May 2024

Module/Topic

Chapter

Events and Submissions/Topic

Post Completion

Week 10 - 13 May 2024

Module/Topic

Chapter

Events and Submissions/Topic

Common Building Faults
in High Rise Buildings**Week 11 - 20 May 2024**

Module/Topic

Chapter

Events and Submissions/Topic

Fire Safety Systems

Week 12 - 27 May 2024

Module/Topic

Chapter

Events and Submissions/Topic

Utilities and Services

Quiz (2 attempts allowed) Due:
Week 12 Friday (31 May 2024) 1:00
pm AEST**Review/Exam Week - 03 Jun 2024**

Module/Topic

Chapter

Events and Submissions/Topic

Exam Week - 10 Jun 2024

Module/Topic

Chapter

Events and Submissions/Topic

Term Specific Information

This unit will introduce you to the procedures, principles and methods of construction used for complex projects up to "super tall" buildings (over 300m in height) and designated by the National Construction Code (NCC) as being within Building Class 2 to 9.

Assessment Tasks

1 Written Assessment 1

Assessment Type

Written Assessment

Task Description

Temporary works assist the works stages of a development project in a variety of different ways. It is important to be able to identify the most appropriate way of supporting a construction or demolition process to assist with expediting processes, making work areas safe and improving the performance of the building systems.

Your task is to detail the role of each of the following types of temporary works, who can install them, how they are installed and where they may be used on a project site.

Assessment Due Date

Week 5 Friday (5 Apr 2024) 11:45 pm AEST

Return Date to Students

Week 7 Friday (26 Apr 2024)

Weighting

20%

Assessment Criteria

No Assessment Criteria

Referencing Style

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

Submission

Online

Submission Instructions

Submit via Turnitin

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Team Work
- Information Technology Competence

Learning Outcomes Assessed

- Plan the temporary works, particularly scaffolding, formwork and falsework and plant selection processes used for complex or "super tall" construction.

2 Written Assessment 3

Assessment Type

Written Assessment

Task Description

Building regulation is at times reactionary in nature. Incidents occur, investigations happen, lessons are learned and regulation is changed/enhanced. Large incidents at times led to changes in building regulation and more importantly, an appreciation for good fire safety practices. As building professionals, our education is largely based on reading the NCC, standards and legislation. It is a fundamental part of our professional development, however at times, learning from real incidents helps us to put the pieces together on why particular safety controls are required by the NCC. It also improves our ability to educate others about the importance of fire safety measures by being able to discuss the role these measures have and what can happen if they are not implemented or fail to activate.

Assessment Due Date

Week 6 Friday (19 Apr 2024) 11:45 pm AEST

Submitted via Turnitin

Return Date to Students

Week 8 Friday (3 May 2024)

Weighting

40%

Assessment Criteria

No Assessment Criteria

Referencing Style

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

Submission

Online

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy
- Information Technology Competence
- Ethical practice

Learning Outcomes Assessed

- Describe the functions, materials and details of the major components. the waste management strategies used and the regulatory inspections made when constructing a complex or "super tall" project.

3 Written Assessment 2

Assessment Type

Written Assessment

Task Description

Defects in buildings are nearly always inevitable, particularly for large complex projects due to the scale of the project, the range of sub-elements in the building and reliance on third-party certification for a lot of sub-elements rather than physical inspection during installation/commissioning. Your task is the research the following common building defects and to determine possible causes for the

defect, ways to investigate/assess the problem and ways to potentially remedy the problem

Conveying garbage and services in high-rise buildings is ordinarily undertaken in shafts (vertical and horizontal). Shafts play a variety of different roles in a building and are described in the NCC a number of different times. Your task for this part of the assessment is to investigate a range of different shafts (as described) in high-rise buildings.

Assessment Due Date

Week 12 Friday (31 May 2024) 11:45 pm AEST

Submitted via Turnitin

Return Date to Students

Exam Week Friday (14 June 2024)

Returned within in two weeks of submission and before certification of grades.

Weighting

30%

Assessment Criteria

No Assessment Criteria

Referencing Style

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

Submission

Online

Graduate Attributes

- Communication
- Problem Solving
- Information Literacy

- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Learning Outcomes Assessed

- Diagnose and plan the rectification of common building faults.
- Explain the issues encountered by complex or "super tall" buildings including funding, ownership, design and construction.
- Discuss the development and implementation of innovative building practices.

4 Quiz (2 attempts allowed)

Assessment Type

Online Quiz(zes)

Task Description

No Assessment Task Description

Number of Quizzes

Frequency of Quizzes

Other

Assessment Due Date

Week 12 Friday (31 May 2024) 1:00 pm AEST

Return Date to Students

Weighting

10%

Assessment Criteria

No Assessment Criteria

Referencing Style

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

Submission

Online

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Learning Outcomes Assessed

- Plan the temporary works, particularly scaffolding, formwork and falsework and plant selection processes used for complex or "super tall" construction.
- Describe the functions, materials and details of the major components. the waste management strategies used and the regulatory inspections made when constructing a complex or "super tall" project.
- Diagnose and plan the rectification of common building faults.
- Explain the issues encountered by complex or "super tall" buildings including funding, ownership, design and construction.
- Discuss the development and implementation of innovative building practices.

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