BLAR11033 *Building Materials 1*
Term 1 - 2020

Profile information current as at 13/12/2025 03:56 pm

General Information

Overview
This unit will develop your knowledge on the properties of building materials. You will also examine testing (both destructive and non-destructive) of timber, concrete, and metals in relation to: Timber - grading, strength tests, durability and protection of timber products; Concrete - tests on aggregates, fresh and hardened concrete properties, durability studies and test methods, and concrete protection; and Metal - ferrous and non-ferrous metal and its alloys, corrosion of metals and protection, and strength properties tests. This unit also develops your understanding of: Protection from corrosion and destruction; Identifying the suitable grade material for the site conditions; and Relevant Australian and international Standards. You will be provided with an introduction to: the development and application of materials from industry by-products and re-cycling of materials and life-cycle analysis of materials.

Details
Career Level: *Undergraduate*
Unit Level: *Level 1*
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 1 - 2020

- 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: 30%
2. **Written Assessment**
Weighting: 30%
3. **Written Assessment**
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 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 Evaluation Survey

Feedback

Learning material and structure was easy to follow making my study plan and time management simple.

Recommendation

We continue to use the new textbook introduced in 2019 offering and incorporate additional readings relevant to the Australian context where required.

Feedback from Unit Evaluation Survey

Feedback

The lecturer was clear about the requirements and standards needed for the unit and assessments.

Recommendation

We continue to provide clear descriptions of the requirements of assessment items and marking criteria.

Unit Learning Outcomes

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

1. Explain building materials, including the types, manufacturing process, properties, usage in construction and the life cycle analysis.
2. Apply the Australian and international standards relevant to building materials.
3. Conduct a literature review to answer specific questions related to building materials.
4. Report on building materials through effective written communication.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | ◦ Introductory Level | • Intermediate Level | • Graduate Level | ◦ Professional Level | ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Written Assessment - 30%	•	•	•	•
2 - Written Assessment - 30%	•	•	•	•
3 - Written Assessment - 40%	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - Written Assessment - 40%	•	•	•	•		•	•			

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)
- Endnote (available through Library - see Moodle link)

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 - 09 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Building Materials	Mitchell's Materials, 5th ed, Chapter 1: General Properties	

Week 2 - 16 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Brick and Brickwork	Materials for Architects and Builders, 5th ed, Chapter 1: Brick and brickwork	

Week 3 - 23 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Block and Blockwork	Materials for Architects and Builders, 5th ed, Chapter 1: Block and blockwork	

Week 4 - 30 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Blockwork	Materials for Architects and Builders, 5th ed, Chapter 2: Block and blockwork	**Assessment item-1** Due: Week 4 Friday (3 Apr 2020) 11:55 pm AEST

Week 5 - 06 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Timber and Timber Products	Materials for Architects and Builders, 5th ed, Chapter 4: Timber and timber products	

Vacation Week - 13 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 20 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lime, Cement, and Concrete	Materials for Architects and Builders, 5th ed, Chapter 4: Timber and timber products	

Week 7 - 27 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Lime, Cement, and Concrete	Materials for Architects and Builders, 5th ed, Chapter 3: Lime, cement and concrete	**Assessment item-2** Due: Week 7 Friday (1 May 2020) 11:55 pm AEST

Week 8 - 04 May 2020

Module/Topic	Chapter	Events and Submissions/Topic

Metallic materials	Materials for Architects and Builders, 5th ed, Chapter 3: Lime, cement and concrete	

Week 9 - 11 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Plastics	Materials for Architects and Builders, 5th ed, Chapter 5: Ferrous and non-ferrous metals	

Week 10 - 18 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Glass	Materials for Architects and Builders, 5th ed, Chapter 5: Ferrous and non-ferrous metals	

Week 11 - 25 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Other Materials	Materials for Architects and Builders, 5th ed, Chapter 17: Recycled and ecological materials	

Week 12 - 01 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic
Sustainability in Material Use	Materials for Architects and Builders, 5th ed, Chapter 18: Sustainability	**Assessment item-3** Due: Week 12 Friday (5 June 2020) 11:55 pm AEST

Review/Exam Week - 08 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 15 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Assessment item-1

Assessment Type
Written Assessment

Task Description
This assessment questions and exercises cover topics of "Brick and Brickwork" and "Block and Blockwork."

Assessment Due Date
Week 4 Friday (3 Apr 2020) 11:55 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted marks.

Return Date to Students
Vacation Week Friday (17 Apr 2020)

Marks and feedback will be available via Moodle

Weighting
30%

Assessment Criteria
Assessment criteria are set in the assessment description sheet under a section called "Marking Rubrics."
These criteria cover the following aspects:
Presentation and layout—includes demonstrated ability to prepare a professional technical report as part of the audit process, use of grammar, the selection of typeface, written and general appearance of the document or assignment,

attention to detail and quality of arrangement with regard to page numbering, headings, margins, footnotes and similar details to provide a professional document presentation.
Content—includes the accuracy and relevance of the information supplied in relation to the set task, using an 'easy to read' language style.
References—includes the use of the Harvard Referencing System to reference information, data, tables or images used when preparing a response to the set task.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
via turnitin

Learning Outcomes Assessed

- Explain building materials, including the types, manufacturing process, properties, usage in construction and the life cycle analysis.
- Apply the Australian and international standards relevant to building materials.
- Conduct a literature review to answer specific questions related to building materials.
- Report on building materials through effective written communication.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence

2 Assessment item-2

Assessment Type
Written Assessment

Task Description
This assessment questions and exercises cover the topic of "Timber and Timber Products."

Assessment Due Date
Week 7 Friday (1 May 2020) 11:55 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted marks.

Return Date to Students
Week 10 Monday (18 May 2020)

via turnitin

Weighting
30%

Assessment Criteria
Assessment criteria are set in the assessment description sheet under a section called "Marking Rubrics."
These criteria cover the following aspects:
Presentation and layout—includes demonstrated ability to prepare a professional technical report as part of the audit process, use of grammar, the selection of typeface, written and general appearance of the document or assignment, attention to detail and quality of arrangement with regard to page numbering, headings, margins, footnotes and similar details to provide a professional document presentation.
Content—includes the accuracy and relevance of the information supplied in relation to the set task, using an 'easy to read' language style.
References—includes the use of the Harvard Referencing System to reference information, data, tables or images used when preparing a response to the set task.

Referencing Style

- Harvard (author-date)

Submission
Online

Learning Outcomes Assessed

- Explain building materials, including the types, manufacturing process, properties, usage in construction and the life cycle analysis.
- Apply the Australian and international standards relevant to building materials.
- Conduct a literature review to answer specific questions related to building materials.
- Report on building materials through effective written communication.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence

3 Assessment item-3

Assessment Type
Written Assessment

Task Description
This assessment questions and exercises cover topics of "Lime, Cement, and Concrete" and "Metallic Materials."

Assessment Due Date
Week 12 Friday (5 June 2020) 11:55 pm AEST

Submit the assessment item on or before the due date and time. Late submission penalty is 5% per day of the allotted marks.

Return Date to Students

Exam week

Weighting
40%

Assessment Criteria
No Assessment Criteria

Referencing Style

- Harvard (author-date)

Submission
No submission method provided.

Learning Outcomes Assessed

- Explain building materials, including the types, manufacturing process, properties, usage in construction and the life cycle analysis.
- Apply the Australian and international standards relevant to building materials.
- Conduct a literature review to answer specific questions related to building materials.
- Report on building materials through effective written communication.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence

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