BLAR11033 *Building Materials 1*
Term 1 - 2017

Profile information current as at 02/05/2024 03:27 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 - 2017
- Distance

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 Moodle course evaluaton

Feedback

• BEST ASPECTS: Rema was willing to help and replied to any questions in a timely manner. The Collaborate Live sessions were extremely valuable! • This course was a great foundation unit, were the study guide allowing us to look at basic materials, their usage in construction and some of their basic properties, which were fairly comprehensive and useful • Like the assessments and having two of the three broken into two parts with one being a quiz is a good idea.

Recommendation

Good to know that the content is useful and the assessment items were suitable. Thank you for your feedback. Will continue to do my level best.

Feedback from Moodle course evaluaton

Feedback

ASPECTS NEED ATTENTION • Links in the study materials didn’t work. • Prefer to have an introduction to the Australian Standards, particularly as some people don't come from a Building background and assignment required standards references.

Recommendation

Thanks for the feedback. Will check the links in the study guide. Will try to include an introductory session on library and standards references.

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

BLAR11033

Prescribed

Fundamental Building Materials
Edition: 4th (2009)
Authors: Ward-Harvey, K
Universal-Publishers
Florida , USA
Binding: Hardcover

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microsoft Office

Referencing Style

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

Teaching Contacts

Remadevi Dhanasekar Unit Coordinator
r.dhanasekar@cqu.edu.au

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Timber and timber products		Begin Workbook

Week 2 - 13 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Timber and timber products		

Week 3 - 20 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Timber and timber products		

Week 4 - 27 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Concrete and introduction to blocks		

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic

Concrete and introduction to blocks		**Assessment item-1** Due: Week 5 Wednesday (5 Apr 2017) 11:45 pm AEST

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 17 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Concrete and introduction to blocks		

Week 7 - 24 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Concrete and introduction to blocks		

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Metallic material		

Week 9 - 08 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Metallic material		**Assessment item-2** Due: Week 9 Wednesday (10 May 2017) 11:45 pm AEST

Week 10 - 15 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Metallic material		

Week 11 - 22 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Resource efficiency		

Week 12 - 29 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Resource efficiency		

Review/Exam Week - 05 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic
Program review period (30 May 11 - 1 June 11)		**Assessment item-3** Due: Review/Exam Week Wednesday (7 June 2017) 11:45 pm AEST

Exam Week - 12 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Assessment item-1

Assessment Type
Written Assessment

Task Description
This assessment questions cover timber as a building material including its grading, properties, testing, selection and usage in construction. This assessment has two parts namely Part-A (assignment) and Part-B (online multiple choice test). Part-A weighting is 20 marks and Part-B weighting is 10 marks.

Assessment Due Date
Week 5 Wednesday (5 Apr 2017) 11:45 pm AEST

Return Date to Students
Week 7 Wednesday (26 Apr 2017)

Weighting
30%

Assessment Criteria
Part A
Content 90 % - Demonstration of understanding of the above building material's properties, behaviour and the suitability for usage in construction, selection of the material to solve problems with scientific reasoning, application of material related theory to practice.
Presentation 5% - Appropriate use of information technology to present the assignment in the required format. Demonstration of student's ability to communicate effectively in writing.
Reference 5% - Demonstration of student's ability to collect information from text, standards, publications and web including & other than the given references from the study materials.
Part B
Content 100 % Select the correct answer from the multiple choices

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Assessment item-1 Part A, must be submitted as "one single word file" ; Assessment item-1 Part B is an online multiple choice test

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 question cover the content including properties of and selection of concrete, testing of concrete ingredients, fresh and hardened concrete, and durability of concrete as building material.
This Assessment needs case study. **Case study** stands for the observation and analysis of an ongoing construction (option 1) or recently finished construction (option 2). *Examples from literature can be used only as reference material to support the case study information of this assessment item*.

Assessment Due Date
Week 9 Wednesday (10 May 2017) 11:45 pm AEST

Return Date to Students
Week 11 Wednesday (24 May 2017)

Weighting
30%

Assessment Criteria
Content 90 % - Demonstration of understanding of the above building material's properties, behaviour and the suitability

for usage in construction, selection of the material to solve problems with scientific reasoning, application of material related theory to practice.
Presentation 5% - Appropriate use of information technology to present the assignment in the required format. Demonstration of student's ability to communicate effectively in writing.
Reference 5% - Demonstration of student's ability to collect information from text, standards, publications and web including & other than the given references from the study materials.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Assignment item-2 must be submitted as "one single word file"

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 item has questions from the metal manufacturing process, properties, selection and application of ferrous and non-ferrous metals in construction and also including the content of life cycle analysis and resource efficiency of building materials. This assessment has two parts namely Part-A (assignment) and Part-B (online multiple choice test). Part-A weighting is 25 marks and Part-B weighting is 15 marks.

Assessment Due Date
Review/Exam Week Wednesday (7 June 2017) 11:45 pm AEST

Return Date to Students

5.00PM on 06 July Wednesday - University Vacation period

Weighting
40%

Assessment Criteria
Part A
Content 90 % - Demonstration of understanding of the above building material's properties, behaviour and the suitability for usage in construction, selection of the material to solve problems with scientific reasoning, application of material related theory to practice.
Presentation 5% - Appropriate use of information technology to present the assignment in the required format. Demonstration of student's ability to communicate effectively in writing.
Reference 5% - Demonstration of student's ability to collect information from text, standards, publications and web including & other than the given references from the study materials.
Part B
Content 100 % Select the correct answer from the multiple choices

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Assessment item-1 Part A, must be submitted as "one single word file" ; Assessment item-1 Part B is an online multiple choice test

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