



BLAR11043 *Building Systems and Services 1*

Term 2 - 2023

Profile information current as at 20/04/2024 03:33 pm

All details in this unit profile for BLAR11043 have been officially approved by CQU University 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 building ergonomics, including its effects on human performance and comfort; "universal access" design considerations; and engineering services associated with residential, low rise commercial and industrial building projects. Using industry regulations, standards and codes of practice, students will examine the principles of building services requirements, installation, operation and maintenance relating to: energy usage and needs; natural, extractive and air conditioning ventilation; natural and artificial lighting; security and communications, hydraulic service supply and disposal systems; fire protection; and acoustics.

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 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

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Written Assessment**

Weighting: 25%

2. **Written Assessment**

Weighting: 35%

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 Student feedback

Feedback

Students appreciated the assignment's clear directions.

Recommendation

The assignments will continue to be clearly written.

Feedback from Student Feedback

Feedback

The course lacked engagement and pre-recorded lectures would be preferably supported by live tutorials.

Recommendation

The lecturer will continue to encourage engagement during the live lectures.

Feedback from Studnet Feedback

Feedback

The amount of assessment was too much, more than other units and the questions were dull.

Recommendation

The subject is a core requirement of most students' courses and by nature technical.

Feedback from Student Feedback

Feedback

I really enjoyed this unit. The lecturer was very knowledgeable and engaging.

Recommendation

The lecturer will continue to support students with current technical information.

Unit Learning Outcomes

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

1. Describe building ergonomic factors affecting human performance and comfort
2. Identify "universal access" service amenities required for the physically disabled
3. Discuss energy usage and needs for residential, low rise commercial and industrial building projects
4. Explain natural, extractive and air conditioning ventilation, natural and artificial lighting, security and communications, and hydraulic service supply and disposal systems using industry regulations, standards and codes
5. Identify fire protection measures used in residential, low rise commercial and industrial building projects
6. Interpret building acoustic requirements using industry regulations, standards and codes

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks | Learning Outcomes | | | | | |
|------------------------------|-------------------|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1 - Written Assessment - 25% | • | • | | | | |
| 2 - Written Assessment - 35% | | • | • | • | | |
| 3 - Written Assessment - 40% | | | • | • | • | • |

Alignment of Graduate Attributes to Learning Outcomes

| Graduate Attributes | 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 | | | | | | |

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)
- Microphone and headset
- Microsoft Office
- Webcam
- Microsoft 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

Pushpitha Kalutara Unit Coordinator

p.kalutara@cqu.edu.au

Schedule

Week 1 - 10 Jul 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------|---------|------------------------------|
| Ergonomics | Topic 1 | |

Week 2 - 17 Jul 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|-------------------------------|---------|------------------------------|
| Universal access design needs | Topic 2 | |

Week 3 - 24 Jul 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|--------------------------------|---------|------------------------------|
| Responses in stress situations | Topic 3 | |

Week 4 - 31 Jul 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------------|---------|---|
| Energy usage and needs | Topic 4 | 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 |
|------------------------------------|---------|------------------------------|
| Energy usage and needs (Continued) | Topic 4 | |

Vacation Week - 14 Aug 2023

| Module/Topic | Chapter | Events and Submissions/Topic |
|------------------|---------|------------------------------|
| Enjoy the break! | | |

| Week 6 - 21 Aug 2023 | | |
|---|----------------|--|
| Module/Topic | Chapter | Events and Submissions/Topic |
| Building ventilation and internal climate control | Topic 5 | |
| Week 7 - 28 Aug 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Building ventilation and internal climate control (Continued) | Topic 5 | |
| Week 8 - 04 Sep 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Lighting and electrical services | Topic 6 | Assessment 2 Due: Week 8 Friday (8 Sept 2023) 11:45 pm AEST |
| Week 9 - 11 Sep 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Lighting and electrical services (Continued) | Topic 6 | |
| Week 10 - 18 Sep 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Water supply and hydraulic services | Topic 7 | |
| Week 11 - 25 Sep 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Fire protection and services | Topic 8 | |
| Week 12 - 02 Oct 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| Acoustic impacts of building services | Topic 9 | |
| Review/Exam Week - 09 Oct 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |
| | | Assessment 3 Due: Review/Exam Week Friday (13 Oct 2023) 11:45 pm AEST |
| Exam Week - 16 Oct 2023 | | |
| Module/Topic | Chapter | Events and Submissions/Topic |

Assessment Tasks

1 Assessment 1

Assessment Type

Written Assessment

Task Description

This assessment covers Learning outcomes 1 and 2. The assessment will include a number of questions from Topics 1 to Topic 3. The students are required to conduct further research in addition to the unit learning.

Assessment Due Date

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

Please submit via the assessment portal on the Moodle home page .

Return Date to Students

Week 6 Friday (25 Aug 2023)

Review of the assessment will be returned within two weeks of the submission due date.

Weighting

25%

Assessment Criteria

The assessment will be assessed on the following criteria:

- Clarity and succinctness of expression.
- Adequate coverage of topics discussed.
- Use of supporting information where appropriate and associated references.
- Original thought.
- Overall presentation and the ability to communicate using correct spelling, grammar and punctuation.
- Where appropriate the use of graphs, illustrations and other diagrams that visually support the context of your submission.
- Demonstration of the core knowledge associated with this unit and appropriate application of this knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Describe building ergonomic factors affecting human performance and comfort
- Identify “universal access” service amenities required for the physically disabled

2 Assessment 2

Assessment Type

Written Assessment

Task Description

This assessment covers Learning outcomes 2,3 and 4. The assessment will include a number of questions from Topics 4 and 5. The students are required to conduct further research in addition to the unit learning.

Assessment Due Date

Week 8 Friday (8 Sept 2023) 11:45 pm AEST

Please submit via the assessment portal on the Moodle home page .

Return Date to Students

Week 10 Friday (22 Sept 2023)

Review of the assessment will be returned within two weeks of the submission due date.

Weighting

35%

Assessment Criteria

The assessment will be assessed on the following criteria:

- Clarity and succinctness of expression.
- Adequate coverage of topics discussed.
- Use of supporting information where appropriate and associated references.
- Original thought.
- Overall presentation and the ability to communicate using correct spelling, grammar and punctuation.
- Where appropriate the use of graphs, illustrations and other diagrams that visually support the context of your submission.
- Demonstration of the core knowledge associated with this unit and appropriate application of this knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Identify “universal access” service amenities required for the physically disabled
- Discuss energy usage and needs for residential, low rise commercial and industrial building projects
- Explain natural, extractive and air conditioning ventilation, natural and artificial lighting, security and communications, and hydraulic service supply and disposal systems using industry regulations, standards and codes

3 Assessment 3

Assessment Type

Written Assessment

Task Description

This assessment covers Learning outcomes 3,4,5 and 6. The assessment will include a number of questions from Topics 6 to Topic 9. The students are required to conduct further research in addition to the unit learning.

Assessment Due Date

Review/Exam Week Friday (13 Oct 2023) 11:45 pm AEST

Please submit via the assessment portal on the Moodle home page .

Return Date to Students

Exam Week Friday (20 Oct 2023)

Within two weeks of submission due date but before the certification of grades

Weighting

40%

Minimum mark or grade

Must achieve a mark of 40% (16/40) or more for this assessment.

Assessment Criteria

The assessment will be assessed on the following criteria:

- Clarity and succinctness of expression.
- Adequate coverage of topics discussed.
- Use of supporting information where appropriate and associated references.
- Original thought.
- Overall presentation and the ability to communicate using correct spelling, grammar and punctuation.
- Where appropriate the use of graphs, illustrations and other diagrams that visually support the context of your submission.
- Demonstration of the core knowledge associated with this unit and appropriate application of this knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for submission instructions.

Learning Outcomes Assessed

- Discuss energy usage and needs for residential, low rise commercial and industrial building projects
- Explain natural, extractive and air conditioning ventilation, natural and artificial lighting, security and communications, and hydraulic service supply and disposal systems using industry regulations, standards and codes
- Identify fire protection measures used in residential, low rise commercial and industrial building projects
- Interpret building acoustic requirements using industry regulations, standards and codes

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