



# BLSV12023 Fire Safety Design

## Term 3 - 2019

Profile information current as at 25/04/2024 03:48 am

All details in this unit profile for BLSV12023 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 provides an understanding of issues and methods used in fire safety design, develop an appreciation of the role of fire safety engineering in the building industry and be prepared to communicate effectively with professionals in the building industry about fire safety design.

#### 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

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 3 - 2019

- 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: 20%

#### 3. **Written Assessment**

Weighting: 60%

#### 4. **Written Assessment**

Weighting: Pass/Fail

### 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**

The lecture provided clear feedback which helped students to improve if needed on the next assignment.

**Recommendation**

Continue to provide constructive feedback on students' assessment submissions.

## Unit Learning Outcomes

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

1. assess prescriptive and performance-based solutions for fire safety design using an industry standard software package
2. explain causes of fire and smoke in buildings
3. understand behaviour of structures and materials in fires, toxic gases, cost and risk, fire fighting, detection and control systems, active and passive fire protection systems and fire compliance requirements and responsibilities

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes		
	1	2	3
1 - Written Assessment - 20%	•	•	•
2 - Written Assessment - 20%	•	•	•
3 - Written Assessment - 60%	•	•	•
4 - Written Assessment - 0%	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes		
	1	2	3
1 - Communication	•	•	•
2 - Problem Solving	•	•	•
3 - Critical Thinking	•	•	•

Graduate Attributes	Learning Outcomes		
	1	2	3
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 - 20%	•	•	•	•		•		•		
2 - Written Assessment - 20%	•	•	•	•		•		•		
3 - Written Assessment - 60%	•	•	•	•		•		•		
4 - Written Assessment - 0%	•	•	•	•		•		•		

## 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)

## Referencing Style

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

## Teaching Contacts

**Bill Zhao** Unit Coordinator  
[b.zhao@cqu.edu.au](mailto:b.zhao@cqu.edu.au)

## Schedule

### Week 1 - 11 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Introduction and Regulatory Compliance for Design		

### Week 2 - 18 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Portable Fire Extinguishers, Fire Hose Reels and Fire Blankets		

### Week 3 - 25 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Emergency Lighting and Illuminated Exit Signs		

### Week 4 - 02 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Fire Detection Systems		

### Vacation Week - 09 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
There is no online session this week. Enjoy the term break!		

### Week 5 - 16 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Smoke Hazard Management Systems		<b>Assessment item 1 (A1)</b> Due: Week 5 Monday (16 Dec 2019) 11:45 pm AEST

### Week 6 - 23 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Passive Fire Safety Systems		

### Week 7 - 06 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Emergency Lifts and Egress Systems		

### Week 8 - 13 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Bushfire Protection		

### Week 9 - 20 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Fire Hydrant Systems		<b>Assessment item 2 (A2)</b> Due: Week 9 Monday (20 Jan 2020) 11:45 pm AEST

### Week 10 - 27 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
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Sprinkler Systems

**Week 11 - 03 Feb 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Fire Engineered Systems		

**Week 12 - 10 Feb 2020**

Module/Topic	Chapter	Events and Submissions/Topic
Inspections and Audits		

**Exam Week - 17 Feb 2020**

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Assessment item 3 (A3)</b> Due: Exam Week Monday (17 Feb 2020) 11:45 pm AEST <b>Online quiz</b> Due: Exam Week Wednesday (19 Feb 2020) 11:45 pm AEST

## Assessment Tasks

### 1 Assessment item 1 (A1)

**Assessment Type**

Written Assessment

**Task Description**

Assessment task 1 will focus on the correct referencing of performance and design standards. This assessment will assess students' knowledge on the importance of correctly citing relevant performance standards when evaluating systems and providing defect lists to clients. You will need access to the NCC and Australian Standards in order to complete this assignment. Australian Standards can be accessed through the CQU library.

**Assessment Due Date**

Week 5 Monday (16 Dec 2019) 11:45 pm AEST

**Return Date to Students**

Week 7 Monday (6 Jan 2020)

**Weighting**

20%

**Assessment Criteria**

For all assessments, formatting and presentation are really important.

Technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as a single word-processed document, or a single pdf format document.

The assignment 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
- Demonstration of core knowledge and demonstration of appropriate application of knowledge

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Submit a single word-processed document, or a single pdf format document.

**Learning Outcomes Assessed**

- assess prescriptive and performance-based solutions for fire safety design using an industry standard software package
- explain causes of fire and smoke in buildings
- understand behaviour of structures and materials in fires, toxic gases, cost and risk, fire fighting, detection and control systems, active and passive fire protection systems and fire compliance requirements and responsibilities

**Graduate Attributes**

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

## 2 Assessment item 2 (A2)

**Assessment Type**

Written Assessment

**Task Description**

Assessment task 2 will ask you a range of questions seeking you to read and determine results from Standards and the BCA. This assignment relates to fire safety measures and bushfire protection.

This assessment will assess students' knowledge on the importance of checklists for records, commissioning reports for final sign off's and bushfire attack level valuations.

\* Late submission penalty will be 5% of the marks allotted for the assignment per day.

\* Late submission will not be accepted after the feedback is released to the class.

**Assessment Due Date**

Week 9 Monday (20 Jan 2020) 11:45 pm AEST

**Return Date to Students**

Week 11 Monday (3 Feb 2020)

**Weighting**

20%

**Assessment Criteria**

For all assessments, formatting and presentation are really important.

Technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as a single word-processed document, or a single pdf format document.

The assignment 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
- Demonstration of core knowledge and demonstration of appropriate application of knowledge

**Referencing Style**

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

**Submission**

Online

**Submission Instructions**

Submit a single word-processed document, or a single pdf format document.

## Learning Outcomes Assessed

- assess prescriptive and performance-based solutions for fire safety design using an industry standard software package
- explain causes of fire and smoke in buildings
- understand behaviour of structures and materials in fires, toxic gases, cost and risk, fire fighting, detection and control systems, active and passive fire protection systems and fire compliance requirements and responsibilities

## Graduate Attributes

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

## 3 Assessment item 3 (A3)

### Assessment Type

Written Assessment

### Task Description

While our role is often educating our external customers about the importance of fire safety, internal customers also need to be educated at times. This assessment will place you in the position of educating, guiding and convincing a work colleague on the benefits of fire safety. This type of communication can be challenging from experience, as you will soon find out when drafting your response. As a specialist consultant in fire safety and regulatory matters, you are often placed in the position of encouraging some regulatory authorities to consider the adoption of a harder-line approach regarding fire safety in buildings. Some regulatory authorities operate in a reactive manner towards regulatory matters and fail to see the benefits of a proactive fire safety program. For the purposes of this assessment, you have been asked to prepare a report for the executive management team of a local council to consider the development of a fire safety regulatory team and program at their council.

\* Late submission penalty will be 5% of the marks allotted for the assignment per day.

\* Late submission will not be accepted after the feedback is released to the class.

### Assessment Due Date

Exam Week Monday (17 Feb 2020) 11:45 pm AEST

### Return Date to Students

Exam Week Friday (21 Feb 2020)

### Weighting

60%

### Assessment Criteria

For all assessments, formatting and presentation are really important.

Technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as a single word-processed document, or a single pdf format document.

The assignment 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
- Demonstration of core knowledge and demonstration of appropriate application of knowledge

### Referencing Style

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

### Submission

Online



**Submission Instructions**

Submit single word-processed document, or a single pdf format document.

**Learning Outcomes Assessed**

- assess prescriptive and performance-based solutions for fire safety design using an industry standard software package
- explain causes of fire and smoke in buildings
- understand behaviour of structures and materials in fires, toxic gases, cost and risk, fire fighting, detection and control systems, active and passive fire protection systems and fire compliance requirements and responsibilities

**Graduate Attributes**

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

## 4 Online quiz

**Assessment Type**

Written Assessment

**Task Description**

It is a fail/pass quiz. There will be 20 multi-choice questions. You need to answer at least 10 questions correctly to pass this quiz.

In order to pass this unit, you need to obtain 50% overall mark from A1, A2 and A3 along with a pass mark (50%) to A4.

**Assessment Due Date**

Exam Week Wednesday (19 Feb 2020) 11:45 pm AEST

**Return Date to Students**

Exam Week Wednesday (19 Feb 2020)

The results will be returned by the system after completion of the quiz

**Weighting**

Pass/Fail

**Minimum mark or grade**

Pass

**Assessment Criteria****Referencing Style**

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

**Submission**

Online

**Learning Outcomes Assessed**

- assess prescriptive and performance-based solutions for fire safety design using an industry standard software package
- explain causes of fire and smoke in buildings
- understand behaviour of structures and materials in fires, toxic gases, cost and risk, fire fighting, detection and control systems, active and passive fire protection systems and fire compliance requirements and responsibilities

**Graduate Attributes**

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

## 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