



# BLCN14041 Construction Project Planning

## Term 2 - 2024

Profile information current as at 05/09/2024 02:30 pm

All details in this unit profile for BLCN14041 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 leads you to learn major areas of planning of a construction project including construction planning and scheduling; the role of the construction planning consultant; developing an initial job using labour, materials, plant and time units from design documentation; estimates and/or Bills of Quantities; using construction planning methodologies and tools such as bar charts, critical path methods, line of balance, cash flow projections; least cost optimization; flagging approval and detailed schedules of sub-contract activities. The choice of software for scheduling and network analysis will be examined as a further added learning experience.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 4*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Pre-requisites: BLAR11049: Built Environment Communications and Skills or COMM11003: Professional and Technical Communication or ENEG11005: Fundamentals of Professional Engineering

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 - 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: 35%

#### 3. **Online Quiz(zes)**

Weighting: 10%

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

Weighting: 35%

### 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 The lecturer and the Built Environment Team

**Feedback**

The current unit name does not reflect the actual learning delivered by the unit. It has now become more confusing as Project Management has a unit with the same name—PPMP11002. Hence, a new unit name is proposed as ' Construction Project Planning'.

**Recommendation**

An Update Unit Proposal will need to be actioned to change the unit name.

#### Feedback from An email from a student

**Feedback**

One student informed that the online session time is clashing with another unit. So, the student can only make the unit session every other week.

**Recommendation**

It is recommended to arrange the unit timetable minimizing clashes with other units. The unit teaching team will collaborate with the Head of Course - Built Environment and the college administration team to successfully perform the timetabling task.

## Unit Learning Outcomes

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

1. Outline the role of the construction planning consultant
2. Develop an initial job using labour, materials, plant and time units based on design documentation, estimates and/or Bills of Quantities
3. Explain construction planning methodologies and tools
4. Prepare detailed schedules of sub-contract activities and perform cash flow projection using scheduling and network analysis computer software.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks             | Learning Outcomes |   |   |   |
|------------------------------|-------------------|---|---|---|
|                              | 1                 | 2 | 3 | 4 |
| 1 - Written Assessment - 20% | •                 | • |   |   |
| 2 - Written Assessment - 35% |                   | • | • |   |
| 3 - Online Quiz(zes) - 10%   | •                 | • | • | • |
| 4 - Written Assessment - 35% |                   |   | • | • |

### 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 |                   |   |   |   |

## Textbooks and Resources

### Textbooks

BLCN14041

#### Prescribed

##### Modern Construction Management

Edition: 8th (2021)

Authors: Frank Harris, Ronald McCaffer, Andrew Baldwin, Francis Edum-Fotwe

John Wiley & Sons Ltd

Hoboken , NJ , USA

ISBN: 9781119488347

Binding: Paperback

#### Additional Textbook Information

eBook of Textbook's 7th edition is available in the library.

### IT Resources

#### You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microphone and headset
- MS Office or equivalent software
- Webcam
- 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

**Pushpitha Kalutara** Unit Coordinator

[p.kalutara@cqu.edu.au](mailto:p.kalutara@cqu.edu.au)

## Schedule

### Week 1 - 08 Jul 2024

| Module/Topic  | Chapter                                     | Events and Submissions/Topic |
|---|---|------------------------------|
| Introduction to construction planning and history of PM | Refer to Moodle for additional information. |                              |

### Week 2 - 15 Jul 2024

| Module/Topic                     | Chapter                                     | Events and Submissions/Topic |
|----------------------------------|---|------------------------------|
| Preliminary project appreciation | Refer to Moodle for additional information. |                              |

### Week 3 - 22 Jul 2024

| Module/Topic               | Chapter                                     | Events and Submissions/Topic |
|----------------------------|---|------------------------------|
| Critical Path Method (CPM) | Refer to Moodle for additional information. |                              |

**Week 4 - 29 Jul 2024**

| Module/Topic       | Chapter                                     | Events and Submissions/Topic |
|--------------------|---|------------------------------|
| Bar (Gantt) charts | Refer to Moodle for additional information. |                              |

**Week 5 - 05 Aug 2024**

| Module/Topic                                   | Chapter                                     | Events and Submissions/Topic                                      |
|--|---|---|
| Project evaluation - PERT and project crashing | Refer to Moodle for additional information. | <b>Assessment 1</b> Due: Week 5 Monday (5 Aug 2024) 11:45 pm AEST |

**Vacation Week - 12 Aug 2024**

| Module/Topic          | Chapter | Events and Submissions/Topic |
|-----------------------|---------|------------------------------|
| No class- term break. |         |                              |

**Week 6 - 19 Aug 2024**

| Module/Topic                              | Chapter                                     | Events and Submissions/Topic |
|---|---|------------------------------|
| Repetitive works, flow and linear methods | Refer to Moodle for additional information. |                              |

**Week 7 - 26 Aug 2024**

| Module/Topic  | Chapter                                     | Events and Submissions/Topic |
|---|---|------------------------------|
| Planning repetitive works and Line of Balance (LoB) | Refer to Moodle for additional information. |                              |

**Week 8 - 02 Sep 2024**

| Module/Topic                                   | Chapter                                     | Events and Submissions/Topic                                       |
|--|---|--|
| Planning philosophies, methodologies and tools | Refer to Moodle for additional information. | <b>Assessment 2</b> Due: Week 8 Friday (6 Sept 2024) 11:45 pm AEST |

**Week 9 - 09 Sep 2024**

| Module/Topic                           | Chapter                                     | Events and Submissions/Topic |
|--|---|------------------------------|
| Planning techniques in decision making | Refer to Moodle for additional information. |                              |

**Week 10 - 16 Sep 2024**

| Module/Topic                             | Chapter                                     | Events and Submissions/Topic |
|--|---|------------------------------|
| Cash flow monitoring and working capital | Refer to Moodle for additional information. |                              |

**Week 11 - 23 Sep 2024**

| Module/Topic                                      | Chapter                                     | Events and Submissions/Topic |
|---|---|------------------------------|
| Construction contracts and development procedures | Refer to Moodle for additional information. |                              |

**Week 12 - 30 Sep 2024**

| Module/Topic | Chapter                                     | Events and Submissions/Topic  |
|--------------|---|---|
| Revision     | Refer to Moodle for additional information. | <b>Assessment 3 (Quiz)</b> Due: Week 12 Friday (4 Oct 2024) 11:45 pm AEST |

**Review/Exam Week - 07 Oct 2024**

| Module/Topic               | Chapter | Events and Submissions/Topic  |
|----------------------------|---------|---|
| Review period- no classes. |         | <b>Assessment 4</b> Due: Review/Exam Week Monday (7 Oct 2024) 11:45 pm AEST |

**Exam Week - 14 Oct 2024**

| Module/Topic                     | Chapter | Events and Submissions/Topic |
|----------------------------------|---------|------------------------------|
| Relax - there is no examination. |         |                              |

## Assessment Tasks

### 1 Assessment 1

**Assessment Type**

Written Assessment

**Task Description**

Assessment 1 will require you to research and answer a number of questions that explore general project planning and network analysis.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your submission must be done, via the assessment link in Moodle, by uploading your file, following the on-screen instructions.

**Assessment Due Date**

Week 5 Monday (5 Aug 2024) 11:45 pm AEST

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

**Return Date to Students**

Week 6 Monday (19 Aug 2024)

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

**Weighting**

20%

**Assessment Criteria**

The assessment 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**

Please submit a single Word or PDF file via the assessment portal on the Moodle home page before the due date.

**Learning Outcomes Assessed**

- Outline the role of the construction planning consultant
- Develop an initial job using labour, materials, plant and time units based on design documentation, estimates and/or Bills of Quantities

### 2 Assessment 2

**Assessment Type**

Written Assessment

**Task Description**

Assessment 2 will require you to research and answer a number of questions that explore Program Evaluation and Review Techniques (PERT) analysis, critical path method, and Line of Balance (LoB) method.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your submission must be done, via the assessment link in Moodle, by uploading your file, following the on-screen instructions.

**Assessment Due Date**

Week 8 Friday (6 Sept 2024) 11:45 pm AEST

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

**Return Date to Students**

Week 10 Friday (20 Sept 2024)

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 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**

Please submit a single Word or PDF file via the assessment portal on the Moodle home page before the due date.

**Learning Outcomes Assessed**

- Develop an initial job using labour, materials, plant and time units based on design documentation, estimates and/or Bills of Quantities
- Explain construction planning methodologies and tools

### 3 Assessment 3 (Quiz)

**Assessment Type**

Online Quiz(zes)

**Task Description**

Assessment 3 is a quiz which will require you to answer 20 multiple choice questions based on the study content presented during the term.

**Number of Quizzes**

1

**Frequency of Quizzes**

Other

**Assessment Due Date**

Week 12 Friday (4 Oct 2024) 11:45 pm AEST

Please refer to the instructions on Moodle page.

**Return Date to Students**

Review/Exam Week Monday (7 Oct 2024)

Results of the quiz will be returned within 24 hours of due date or submission date (whichever is the latest).

**Weighting**

10%

**Assessment Criteria**

The quiz will be assessed based on the understanding of core knowledge and application areas of project planning/management.



## Referencing Style

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

### Submission

Online

### Submission Instructions

Please refer to Moodle for more information.

### Learning Outcomes Assessed

- Outline the role of the construction planning consultant
- Develop an initial job using labour, materials, plant and time units based on design documentation, estimates and/or Bills of Quantities
- Explain construction planning methodologies and tools
- Prepare detailed schedules of sub-contract activities and perform cash flow projection using scheduling and network analysis computer software.

## 4 Assessment 4

### Assessment Type

Written Assessment

### Task Description

Assessment 4 will require you to research and answer a number of questions that explore key project planning methods, monitoring financial resources and the use of budget to control a project, and check the feasibility.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. Your submission must be done, via the assessment link in Moodle, by uploading your file, following the on-screen instructions.

### Assessment Due Date

Review/Exam Week Monday (7 Oct 2024) 11:45 pm AEST

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

### Return Date to Students

Exam Week Friday (18 Oct 2024)

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

### Weighting

35%

### Minimum mark or grade

Must achieve 50% (17.5/35) in this assessment and an overall cumulative result of 50% or more from all assessments to pass this unit.

### Assessment Criteria

The assessment 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

Please submit a single Word or PDF file via the assessment portal on the Moodle home page before the due date.

### Learning Outcomes Assessed

- Explain construction planning methodologies and tools
- Prepare detailed schedules of sub-contract activities and perform cash flow projection using scheduling and network analysis computer software.

## 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