

# Diploma of Construction Management

## Course Outline

|                         |   |
|-------------------------|---|
| <b>Campus</b>           | Geelong Waterfront Campus   |
| <b>Intake</b>           | March, June, October  |
| <b>CRICOS</b>           | 097892A   |
| <b>Course Duration</b>  | The duration of the Diploma course is three trimesters (12 months). There is an option, however, to do the course and complete it in two trimesters (8 months).   |
| <b>Teaching Methods</b> | Instruction for all units is classroom and/or computer lab, site visits, workshop. Generally, four hours of class contact per week are allocated to each unit.  |
| <b>Assessment</b>       | Assessment for all units is ongoing and continuous consisting of tests, assignments, reports and case study analysis, with some units also have a final examination.  |
| <b>Course Structure</b> | 8 single credit point units, plus 2 x 0 credit point units must be completed and passed to be awarded the Diploma.  |
| <b>Units</b>            | <p>SRE170 Construction Finance</p> <p>SRT141 Building Safety</p> <p>SRT153 Building Materials Science</p> <p>SRT159 Construction Projects 1</p> <p>SRA010 Safety Induction Program</p> <p>STP050 Academic Integrity</p> <p>SRE270 Building Economics</p> <p>SRM165 Introduction to Building Information Modelling</p> <p>SRT151 Construction and Structures 1</p> <p>SRT259 Construction Projects 2</p> |

## Unit Availability per Trimester

| Subject   | Trimester 1<br>2019 | Trimester 2<br>2019 | Trimester 3<br>2019 |
|---|---------------------|---------------------|---------------------|
| SRE170<br>Construction Finance<br>(must be passed prior to attempting SRE270) | √                   | √                   | √                   |
| SRT141<br>Building Safety   | √                   | √                   | √                   |
| SRT153<br>Building Materials Science  | √                   | √                   | √                   |
| SRT159<br>Construction Projects 1   | √                   | √                   | √                   |
| SRA010<br>Safety Induction Program (0 credit point)                           | √                   | √                   | √                   |
| STP050<br>Academic Integrity (0 credit point)                                 | √                   | √                   | √                   |
| SRE270<br>Building Economics<br>(SRE170 must be completed first)              |                     | √                   | √                   |
| SRM165<br>Introduction to Building Information Modelling                      |                     | √                   | √                   |
| SRT151<br>Construction and Structures 1                                       |                     | √                   | √                   |
| SRT259<br>Construction Projects 2   |                     | √                   | √                   |

### In addition to these units, you are required to attend:

1. The **COMPULSORY** workshop safety induction on Wednesday March 20<sup>th</sup> from 1.30pm- 3.30pm at the A+B Workshop, building F.
2. The **COMPULSORY** Worksafe Construction Industry training day to obtain an accredited White Card – cost \$150
3. **Purchase** PPE (personal protective equipment) - white safety helmet, a yellow vest and leather closed-toe shoes. Please purchase this from a hardware store before week 4.

## Transfer to Deakin University

The following transfer criteria apply:

- You must complete and pass all ten (10) Deakin College Diploma of Construction Management units.
- You must achieve the required Weighted Average Mark (WAM) for your Deakin College Diploma.
- The average includes ALL units attempted at Deakin College.

**The Diploma of Construction Management WAM required for transfer to the Deakin University Bachelor of Construction Management (Honours) CRICOS code 080117B is:**

- 50% for international and domestic students

## Diploma of Construction Management trimester structure:

| <b>2 Trimester program<br/>(Completing the course in 8 months)</b> |  |   |  |  |   |   |
|--|--|---|--|--|---|---|
| 1st Trimester  | <b>SRE170</b><br>Construction Finance<br>(must be passed prior to attempting SRE270) | <b>SRT141</b><br>Building Safety                                | <b>SRT153</b><br>Building Material Science     | <b>SRT159</b><br>Construction Projects 1 | <b>SRA010</b><br>Safety Induction Program<br>(0 credit point) | <b>STP050</b><br>Academic Integrity<br>(0 credit point) |
| 2nd Trimester  | <b>SRE270</b><br>Building Economics<br>(SRE170 must be completed first)              | <b>SRM165</b><br>Introduction to Building Information Modelling | <b>SRT151</b><br>Construction and Structures 1 | <b>SRT259</b><br>Construction Projects 2 |   |   |

| <b>3 Trimester program<br/>(Completing the course in 12 months)</b> |  |  |  |   |   |
|---|--|--|--|---|---|
| 1st Trimester   | <b>SRE170</b><br>Construction Finance<br>(must be passed prior to attempting SRE270) | <b>SRT141</b><br>Building Safety               | <b>SRT159</b><br>Construction Projects 1 | <b>SRA010</b><br>Safety Induction Program<br>(0 credit point) | <b>STP050</b><br>Academic Integrity<br>(0 credit point) |
| 2nd Trimester   | <b>SRE270</b><br>Building Economics<br>(SRE170 must be completed first)              | <b>SRT153</b><br>Building Materials Science    | <b>SRT259</b><br>Construction Projects 2 |   |   |
| 3rd Trimester   | <b>SRM165</b><br>Introduction to Building Information Modelling                      | <b>SRT151</b><br>Construction and Structures 1 |  |   |   |

## Unit Outlines: PLEASE ENSURE YOU CHECK THE UNIT OUTLINE FOR ANY CONTENT AND ASSESSMENT UPDATES.

### **SRE170 Construction Finance**

In SRE170, students will learn fundamental accounting principles and practices to financial transactions on building works and in construction companies. Students will identify how accounting is one of a number of systems which provide information to managers in the construction industry. Learning and assessment activities will focus on understanding financial statements, elementary financial analysis and cash management, taxation considerations including capital allowances, capital budgeting techniques and the obligations and cost of employing staff.

**Assessment: 10% Multiple Choice test, Group research report 25%, Accounting report 25%, examination 40%. To be eligible to obtain a pass in this unit students must achieve at least 40% in the examination.**

### **SRT141 Building Safety**

SRT141 provides the foundations for developing and maintaining a safety culture on building sites and other workplaces, and examines WorkCover requirements in accordance with the OH&S regulations and compliance codes following the Act of 2004, and occupational health and safety procedures and controls. Students will learn about fire safety and life safety principles, including basic first aid. Students will also learn about site safety and supervision of onsite operatives specifically with respect to site induction requirements and compliance requirements.

**Assessment: Individual Hard report 10%, Individual report on construction safety 25%, individual online quiz 25% and individual report on hazard analysis 40%. To be eligible to obtain a pass in this unit, students must attain the OH&S Construction Induction card (White Card) in this unit.**

### **SRT153 Building for Materials Science**

SRT153 introduces students to the properties of materials used in a wide range of building applications. In this unit, students will learn about the chemical and physical properties and the procedures for selection of appropriate materials and their uses in buildings. Learning and assessment activities include the study of materials such as timber, concrete, metals, stone and ceramics, plastics and glass and the environmental significance of materials. Students will examine these material within the framework of sustainability and embodied energy.

**Assessment: online quiz 5%, building material report 15%, material comparison report 25%, Innovative Building Poster 15%, examination 40%. To be eligible to obtain a pass in this unit students must achieve at least 40% in the examination.**

### **SRT159 Construction Projects 1**

SRT159 focuses on residential construction in terms of technical and regulatory requirements for design and construction. In this unit, students will gain an understanding of how Australian standards, National Construction Code (NCC) and other regulatory requirements are used in analysing construction drawings. They will gain practice in preparing and using construction drawings and documentation.

**Assessment: in class activity 5%, Group report on analysis of regulatory requirements 15%, report on analysis of construction plans and process 50%, group construction of a model with report and presentation 30%.**

### **SRA010 Safety Induction Program**

SRA010 is designed for students to learn how to develop and maintain a safety culture within the University, including within the A+B workshop. In this unit, students will examine occupational health and safety procedures, controls and requirements for visits to building sites and other workplaces during their course of study at Deakin. Students will learn about fire safety and life safety principles and operatives, including site safety procedures in built environment. Students will also develop an awareness of building evacuation procedures, laboratory accident management and first aid procedures and safety work procedures particular to the a+b studio.

**Assessment: Multiple choice test 100%. To be eligible to obtain a pass in this unit students must achieve a minimum mark of 70% in the test and complete the seminar practical session.**

### **STP050 Academic Integrity**

STP050 is a compulsory zero credit point unit in all courses in the Faculty of Science, Engineering and Built Environment. The unit learning and assessment activities provides students with guidance on what constitutes academic integrity. It will allow students to develop knowledge, skills and good practice principles to avoid plagiarism and collusion and thereby maintain academic integrity.

**Assessment: Multiple-choice test 100%. To be eligible to obtain a pass in this unit, students must achieve a minimum mark of 70%. Three attempts of the online assessment are permitted.**

### **SRE270 Building Economics**

This unit explores macro and micro economic concepts as they apply to the construction and property industries. Topics include the behaviour of the Australian economy, macro economic theories, tools and policies available to influence the performance of the economy, supply prices and output decision-making and structure, market fluctuations, price mechanisms, concept of cost, profit maximising, market structures, government intervention and regulation, consumer behaviour and labour markets. Urban economics, including land as a factor of production, land rent, land use problems, location decisions, urban growth, transportation and public intervention are also discussed. An introduction to business planning is undertaken.

**Assessment: Essay 25%, group research report 25%, examination 50%. To be eligible to obtain a pass in this unit students must achieve at least 40% in the examination.**

### **SRM165 introduction to Building Information Modelling**

Effective management of information is central to the success of construction projects. In SRM165, students will have the opportunity to gain knowledge of the concepts as well as hands-on experience with related information management systems and methodologies. The unit focuses on major aspects associated with adoption and implementation of information management systems for data creation, visualisation, usage and sharing on construction projects. Students will also be introduced to leading Building Information Modelling (BIM) packages.

**Assessment: Report (including application of software tools) 20%, Building Information Modelling (BIM) model development 30%, group BIM report (including presentation) 50%.**

### **SRT151 Construction and Structures 1**

SRT151 introduces students to construction processes and structural systems. Students will learn about the building elements that comprise a simple residential building, such as footings, flooring, walls, roofs, and internal fit-out. Students will also learn about different structural systems in use, such as brick veneer, trusses and waffle slabs. Students will consider the engineering requirements that bear on house construction, such as loads, forces, fixing techniques, and material properties. Finally, students will be introduced to domestic building processes, such as site preparation, temporary structures, scheduling, safety, management, fabrication, equipment, permits and codes.

***Assessment: 4 x online quizzes 10%, technology portfolio 10%, group case study analysis report and presentation 40%, examination 40%. To be eligible to obtain a pass in this unit students must achieve at least 40% in the examination.***

### **SRT259 Construction Projects 2**

In SRT259 students will gain a detailed understanding of the regulatory environment of the Australian construction industry, National Construction Code (NCC) and associated standards for the construction of a range of low-rise buildings. Students will develop knowledge and skills in identifying, analysing and applying technical codes and materials standards in construction of low-rise residential and commercial buildings.

***Assessment: Individual report on regulatory compliance 20%, individual report on project control 30%, Group regulatory report and presentation 50%.***