



School of Civil and Environmental Engineering

Term 2, 2020

CVEN9744 CIVIL ENGINEERING PRACTICES

COURSE DETAILS

Units of Credit	6	
Contact hours	4 hours per week	
Class	Thursday, 17:00 ±19:00	online
Workshop	Thursday, 19:00 ±20:00	online
	TBA, 1 hour total online	online
Course Coordinator and Lecturer	Robert Holdom	
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INFORMATION ABOUT THE COURSE

This course focus is upon the management of Civil Engineering projects in terms of contract selection, equipment and labour productivity issues. The course is managed over the wide range of sessions.

The course has been designed upon several broad themes:

Firstly, the contract types used in civil engineering and factors influencing their selection.

Secondly, methods of determining construction productivity and how this factor is a significant driver causing change to civil engineering construction practices.

	<p>Do the set class problems</p> <p>Join Moodle discussions of problems</p> <p>Reflect on class problems and assignments</p> <p>Keep up with notices and find out marks via Moodle</p>
Lectures	<p>Find out what you must learn</p> <p>Summarise essential course material from lectures and associated reading</p> <p>Follow worked examples</p> <p>Hear announcements on course changes</p>
Workshops	<p>Be guided by Demonstrators</p> <p>Practice solving set problems</p> <p>Ask questions</p>
Assessments	<p>Enhance your knowledge by undertaking necessary research to complete given tasks</p> <p>Demonstrate your knowledge and skills</p> <p>Demonstrate higher understanding and problem solving</p> <p>Do not copy sections from textbooks or websites, always use appropriate references for sourced material</p> <p>In preparing an assessment element pay particular attention to the instructional advice provided by the lecturer to maximise your mark</p>

COURSE PROGRAM

Term 2, 2020

Date	Topic and Lecture Content	Demonstration Content
04/06/2020 (Week 1)	Introduction to civil engineering practices	Weekly Workshop on topic
11/06/2020 (Week 2)	Equipment purchasing & construction economics Part 1	Weekly Workshop on topic
18/06/2020 (Week 3)	Contracts used in civil engineering practices Factors that impact on contract selection	Weekly Workshop on topic
25/06/2020 (Week 4)	Equipment purchasing & construction economics Part 2	Weekly Workshop on topic Class Test 1 on Saturday
02/07/2020 (Week 5)	Factors that impact on capital spending	Weekly Workshop on topic
09/07/2020 (Week 6)	<i>Flexibility week for all courses (non-teaching)</i> <i>No class.</i>	<i>No class.</i>
16/07/2020 (Week 7)	Construction safety and risk management Part 1	Weekly Workshop on topic
23/07/2020		

construction solutions were taken and the impacts that those decisions have had in the construction delivery of these pieces of significant infrastructure and its impact on community at large. The basis of this work is to provide each learner the opportunity to work with others, to offer an exchange of ideas among the group and contribute in preparing a group report.

3. Class Tests

The course has been structured along particular topic structures:

- a. Construction Economics and Contracts
- b. Equipment Purchasing, Capital Spending and Construction Safety
- c. Internal Rate of Return Analysis, Construction Safety and Risk Management

The grouping of these topics will be taught and examined in a three week period. Each three week period will have a separate Class Test which are:

Class Test 1 will examine the content of lecture and workshop material covered in weeks 1, 2 & 3.

Class Test 2 will examine the content of lecture and workshop material covered in weeks 4, 5, & 7.

Class Test 3 will examine the content of lecture and workshop material covered in weeks 8, 9 & 10.

Class Test 1 will be held on Saturday 27th June, 2020

Class Test 2 will be held on Saturday 25th July, 2020

Class Test 3 will be held on Thursday 6th August, 2020.

Each class test will be held individually from a separate class room and will be of 75 minutes nominal duration.

Learning and assessing in this manner will require students to summarise their work on a weekly basis, complete the workshop material and tasks and seek out the assistance they need by way of discussing it with other peers, and asking questions on the Moodle Discussion Forum.

3. Group Submission

a.

RELEVANT RESOURCES

Appendix A: Engineers Australia (EA) Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions