School of Civil and Environmental Engineering

Term 3, 2020

# CVEN4103 ENGINEERING CONTRACTS

## Outline

The majority of engineering work is procured through contracts, within an array of delivery methods. The course examines the relationship between tenders and contracts and the various popular forms of delivery methods. The course covers the formation and documentation involved in contracts, the commercial aspects of contractual agreements including payment types and conditions of contract, the contractual and administrative connections of project delivery, and dispute avoidance and resolution.

## Overview

The course is designed to expand your knowledge of one part of the life, of project personnel, that is becoming increasingly important. Many project personnel say that a large amount of their time is spent on contractual matters. Contracts are fundamental to the way project personnel perform their work whether they be project managers, engineers, designers, fabricators, constructors or any of the numerous project team member and third party roles. Accordingly, an understanding of the elements of contracts and the components of contracts is essential for project personnel.

Much project work in the past was (and some of the present is) done on the basis of a handshake. Both parties knew what was expected of them and both performed their obligations. It is hoped that such friendly arrangements do not disappear entirely. Unfortunately largely gone are the handshake days, and society appears to be becoming more litigious. To protect themselves it has become necessary for project personnel to have an understanding of contracts.

The course applies to owner-contractor relationships, contractor-subcontractor relationships, and dealings with consultants and suppliers.

When an owner wishes to undertake a project, there is the possibility of doing the work in-house or by engaging others to do the work. The work may involve consultants and/or contractors.

Assuming the work is to be done by others, the conventional practice is for the owner to call for submissions or proposals or (more usually) tenders from interested parties. The call for submissions may be as simple as an advertisement in a newspaper. Any interested party obtains copies of the tender documents from the owner, the tender documents being descriptions of the work to be undertaken and any conditions surrounding this work. This party (now called a tenderer) then usually submits a price to do the work as do other tenderers. The owner then selects the most suitable tender. The acceptance of the tender usually means that a contract exists between the owner and the tenderer (who might now be called a contractor).

This is the simplest scenario and many alternatives on this theme are possible. For example, tenderers may be preselected or prequalified by the owner. Tenders and contracts are closely linked, with the tender documents forming part of the eventual contract.

The course explores some of the common alternatives. Emphasis is on the commercial side of contracts and tenders rather than the legal side, which is another course in itself. The course takes

you through standard practices in contracts and also highlight where individual approaches are possible. The course is offered as reasonably common practice, but different practices can be found.

**Aims**

When you have completed this course, you should have a better understanding of:

- Procurement.
- Elements of a contract.
- Contract documents.
- Tendering
- Types of contracts.
- Alternative delivery methods.
- Contract administration.

The intent is not to make lawyers out of you but rather to make you aware of what you do know and do not know, where to turn for advice and what are the correct questions to ask.

Do not be apologetic that you do not know everything about contracts. Lawyers, for example, do not know everything about engineering. By studying courses such as this you should be able to converse and interact with lawyers in a more meaningful and efficient way.

The course is structured through face-to-face contact and individual assessment to achieve these aims.

**Handbook details:**
https://www.handbook.unsw.edu.au/undergraduate/courses/2020/CVEN4103/

**Course Information:**
This is a final year 6 UOC course in Civil and Environmental Engineering

**Class details:**
http://timetable.unsw.edu.au/2020/CVEN4103.html

See Moodle for the breakdown of lecture times and times when you are able to ask questions and gain feedback.

**Course Coordinator:**
Professor D. G. Carmichael
https://www.engineering.unsw.edu.au/civil-engineering/staff/david-carmichael

**Relevant Resources:**
Posted on Moodle.

**Course Program:**
The course will cover the following content:

| **I. Understanding Contracts and Tenders** |
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| Elements of a Contract; Discharge of a Contract |
| Tendering and Contract Documents |
| Tendering |
| **II. Procurement** |
| In-House versus Outsourcing |
| Contract (Payment) Types |
| Delivery Methods |
| **III. Administration** |
| Contract Administration |
| Disputes |

**Teaching Mediums**
The course has been designed to include the following:

- Lectures – for conveying nuances in the subject material
- Question/feedback periods – to clarify subject information
- Assignments – for students to relate the subject to industry practice
- Private enquiry – to reinforce the weekly subject material

All components are aimed at developing student understanding in the subject content.

**Learning Outcomes and EA Competencies**
Deep familiarity with engineering procurement terminology and scope (PE1.1; PE1.3; PE1.5; PE2.2; PE2.4; PE3.1; PE3.2; PE3.4; PE3.5)
Deep familiarity with engineering practice (PE1.1; PE1.3; PE1.5; PE2.2; PE2.4; PE3.1; PE3.2; PE3.4; PE3.5)

**Academic Advice**
https://www.engineering.unsw.edu.au/civil-engineering/student-resources/policies-procedures-and-forms/academic-advice

**Dates to Note**
https://student.unsw.edu.au/dates

**Special Considerations**
https://student.unsw.edu.au/special-consideration

**Course Communications**
All communications on the course are to be through the Moodle discussion tool, or during the nominated lecture/workshop time slots. Using the Moodle discussion tool allows all students to see replies to any questions asked, and allows all students to join the discussions. Also use the Moodle discussion tool to create discussion topics with others in the class.

**Assessment – General**

Your final grade in the course will be the sum of your assignment submissions.

**Individual Work**

All assessment work is to be done individually. There is no group work.

**Plagiarism**

The course has a zero tolerance policy on plagiarism. For all assessment, you must use your own words. Do not copy or cut and paste anybody else's words, diagrams, photographs or tables, including any lecture material. Any form of plagiarism, no matter how small, in any submission will score a maximum half marks for the submission. Sharing your submission with another, or using the same words (no matter how minor) as another, will lead to both of you scoring maximum half marks.

https://student.unsw.edu.au/plagiarism

https://www.engineering.unsw.edu.au/study-with-us/current-students/student-responsibilities-and-conduct

**Assessment Details**

See Moodle for particulars of the subject matter of each assessment component, formatting, assessment criteria, and particular requirements.

**Final Examination**

There is no final examination.

**Supplementary Assessment**

If needed, supplementary assessment will comprise an oral presentation and examination via video.