



Course

# Concrete Structures

CVEN3304

6 Units of Credit

## Overview

A course on concrete materials and the design of reinforced concrete structural elements subject to bending, shear and combined bending and axial compression. These include: concrete materials (cements, aggregates and admixtures and hardened concrete properties) concrete mechanical properties, reinforcement types and properties; durability requirements; behaviour of reinforced concrete cross-sections in bending at both service and ultimate loads; ultimate strength analysis and design of cross-sections in flexure (singly and doubly reinforced, ductility); serviceability analysis and design of beams (cracked section analysis, deflection and crack control); ultimate strength in shear; bond anchorage and curtailment (simple and continuous beams and one-way slabs); short and slender concrete columns (interaction diagrams).

**Faculty**

Faculty of Engineering

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**School**

School of Civil and Environmental Engineering

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**Study Level**

Postgraduate

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**Offering Terms**

Term 2

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**Campus**

Kensington

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**Delivery Mode**

Fully on-site

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**Indicative contact hours**

6

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**Timetable**

[Visit timetable website for details](#)

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## **Equivalent Courses**

CVEN3302 6 UOC

Structural Behaviour and Design

## **Course Outline**

To access course outline, please visit:

[CVEN3304 Course Outline](#)

## Fees

Commonwealth Supported Students \$1170

Domestic Students \$4350

International Students \$5730

### **DISCLAIMER**

Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the [fee website](#).

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.

## **Pre-2019 Handbook Editions**

Access past handbook editions (2018 and prior)

[Pre-2019 Handbook Editions](#)

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Authorised by Deputy Vice-Chancellor (Academic)

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