



**UNSW**  
SYDNEY

Australia's  
Global  
University

# Built Environment

ARCH1261  
Construction and Structures 2



Course Outline – Term 2, 2020

## Disclaimer

Information within this document is subject to change. The full and most accurate course outline will be available in Moodle closer to the start of the term in which the course is offered.

## 1. COURSE STAFF

|                       |  |
|-----------------------|--|
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## 2. COURSE DETAILS

|                                    |  |
|------------------------------------|--|
| <b>Credit Points</b>               | 6 units of credit (uoc)  |
| <b>Workload</b>                    | Approx. 150 hours including class contact hours, weekly individual and group online learning activities, readings, class preparation, and assessment activities. |
| <b>Teaching Times and Location</b> | Find details in timetable <a href="http://www.timetable.unsw.edu.au">http://www.timetable.unsw.edu.au</a>  |

## Description

This course builds on the knowledge gained in Construction and Structures 1. It extends the study of architectural materials, construction and structures through in-depth case studies where students investigate and apply knowledge of reinforced concrete and steel construction integrated with architectural design. The course explores the role of the architect and the relevance of building codes, standards and regulations applicable to medium-scale buildings. The integration of materials, structure and construction technologies with architectural design is developed through a focus on detail design and material specification.

## Aims

This course will enable students to advance their comprehension and application of construction principles, technologies and disciplinary knowledge through the exploration of medium-scale buildings using reinforced concrete and steel construction technologies. The course examines the real-world implications of construction in architectural design with an emphasis on architectural decision-making, building regulations and detail design and documentation.

## Course Learning Outcomes (CLOs)

At the successful completion of this course, you will be able to:

1. Appraise concrete and steel construction options informed by disciplinary knowledge and an intermediate-level understanding of their physical characteristics appropriate for the architectural design.
2. Integrate to an intermediate level material, construction and structural implications of concrete and steel, including environmental performance, with the architectural design.
3. Demonstrate intermediate skill in the communication (using drawings, models, specifications and schedules) of material, construction and structural information consistent with the architectural design.
4. Apply intermediate knowledge of the relevant legislation, quality and performance standards and codes applicable to the selected materials (including finishes, fittings and components) and construction systems.
5. Defend and support the selection and use of concrete and steel construction technologies consistent with the architectural design of medium-scale buildings.

### 3. ASSESSMENT

| Assessment task           | Weight | CLOs Assessed |
|---------------------------|--------|---------------|
| 1. Documentation Drawings | 25%    | 1, 2, 4       |
| 2. Model                  | 25%    | 3, 4          |
| 3. Exam                   | 50%    | 1, 2, 4, 5    |

### 4. COURSE IMPROVEMENT AND FEEDBACK

Feedback from students is an integral part of improving courses and teaching approaches. One of the primary mechanisms of feedback is myExperience, which we strongly urge all students to complete at the end of term. Course convenors use the feedback to make ongoing improvements to the course. This is communicated in Moodle in the myFeedback Matters page.