

CIVL 3016 BUILDING SUPERSTRUCTURE

Credit Points 10

Legacy Code 301221

Coordinator Brendan Kirkland ([https://directory.westernsydney.edu.au/search/name/Brendan Kirkland/](https://directory.westernsydney.edu.au/search/name/Brendan%20Kirkland/))

Description The aim of this subject is to provide students with an understanding of the factors that contribute to the design and construction of a building superstructure. Students will be introduced to relevant Australian Standards for common construction materials and practices. The subject also aims to develop the ability of construction students to communicate professionally with other building professionals including structural engineers. Emphasis will be given to the strength, behaviour and failure of structural members, connections and frames.

School Eng, Design & Built Env

Discipline Structural Engineering

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Pre-requisite(s) BLDG 1017 or BLDG 1014

Co-requisite(s) CIVL2016

Equivalent Subjects CIVL3004 CIVL3005

Assumed Knowledge

Basic knowledge of building construction both residential and non-residential.

Learning Outcomes

1. Identify common structural members, components and systems
2. Analyse the different effects and actions caused by various loads on structures
3. Discuss the factors which contribute to the structural design of a large building
4. Assess the strength, behaviour and failure modes of common structural members, components and systems
5. Apply Australian Standards related to the construction of large buildings and ensure National Construction Code compliance
6. Work independently and collaboratively to meet project milestones in an ethical and responsible manner

Subject Content

1. Common structural members, components and systems
2. Loads on structures and their evaluation
3. Structural member actions
4. Behaviour, strength and failure of members, connections and frames

Special Requirements

Legislative pre-requisites

This subject involves extensive practical exercises. In order to undertake the practicals, each student must have the appropriate PPE (Personal Protection Equipment):

Laboratory coat
Safety glasses
Safety shoes (steel capped)

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/Group Task
Quiz	3 x Quizzes (30 minutes each)	30	N	Individual
Report	2000 words (per student)	40	N	Individual
Final Exam	2 hours	30	Y	Individual

Teaching Periods

Autumn (2022)

Penrith (Kingswood)

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL3016_22-AUT_KW_D#subjects)

Parramatta - Victoria Rd

Day

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Autumn (2023)

Penrith (Kingswood)

On-site

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Parramatta - Victoria Rd

On-site

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