

# CIVL 4002 COMPOSITE STRUCTURES

**Credit Points** 10

**Legacy Code** 300987

**Coordinator** Fidelis Mashiri ([https://directory.westernsydney.edu.au/search/name/Fidelis Mashiri/](https://directory.westernsydney.edu.au/search/name/Fidelis%20Mashiri/))

**Description** This subject builds on knowledge gained in steel and concrete structures, especially the design of structural members using either steel or concrete. Students will learn the design of composite beams, floors, columns and connections based on Australian and International standards as well as mechanics of materials.

**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/](https://www.westernsydney.edu.au/currentstudents/current_students/fees/)) page.

**Level** Undergraduate Level 4 subject

**Pre-requisite(s)** CIVL 3012 AND CIVL 3002

## Learning Outcomes

On successful completion of this subject, students should be able to:

1. Identify and discuss various structural systems used in composite construction
2. Apply limit state design concepts to composite structural elements and structures
3. Analyse and determine design loads for composite structures
4. Design composite structural elements based on service loads

## Subject Content

1. Composite Beams
2. Composite Floors
3. Composite Columns
4. Composite Connections

## 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
Assignments (Solutions to Exam Type Questions; Total of 4 to cover each content topic; Each worth 5%; Each topic covers ULOs 1-4)	20 Pages (in total)	20	N	Individual
Mid-Semester Exam	2 Hours	20	N	Individual
Final Examination	2 Hours	60	N	Individual

Teaching Periods

### Spring (2023) Penrith (Kingswood)

**On-site**

**Subject Contact** Fidelis Mashiri ([https://directory.westernsydney.edu.au/search/name/Fidelis Mashiri/](https://directory.westernsydney.edu.au/search/name/Fidelis%20Mashiri/))

View timetable ([https://classregistration.westernsydney.edu.au/odd/timetable/?subject\\_code=CIVL4002\\_23-SPR\\_KW\\_1#subjects](https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=CIVL4002_23-SPR_KW_1#subjects))

### Parramatta City - Macquarie St

**On-site**

**Subject Contact** Fidelis Mashiri ([https://directory.westernsydney.edu.au/search/name/Fidelis Mashiri/](https://directory.westernsydney.edu.au/search/name/Fidelis%20Mashiri/))

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