1

# CIVL 4002 COMPOSITE STRUCTURES

#### Credit Points 10

Legacy Code 300987

Coordinator Fidelis Mashiri (https://directory.westernsydney.edu.au/ search/name/Fidelis Mashiri/)

**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 fees via the 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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Professional Task	20 Pages (in total)	20	Ν	Individual
Intra-session Exam	2 Hours	20	Ν	Individual
Final Exam	2 Hours	60	Ν	Individual

**Teaching Periods** 

# Spring (2023)

### Penrith (Kingswood)

On-site

Subject Contact Fidelis Mashiri (https:// directory.westernsydney.edu.au/search/name/Fidelis Mashiri/)

View timetable (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/)

View timetable (https://classregistration.westernsydney.edu.au/odd/ timetable/?subject\_code=CIVL4002\_23-SPR\_PC\_1#subjects)

### Spring (2024) Penrith (Kingswood)

### On-site

Subject Contact Fidelis Mashiri (https:// directory.westernsydney.edu.au/search/name/Fidelis Mashiri/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=CIVL4002\_24-SPR\_KW\_1#subjects)

#### Parramatta City - Macquarie St

#### On-site

Subject Contact Fidelis Mashiri (https:// directory.westernsydney.edu.au/search/name/Fidelis Mashiri/)

View timetable (https://classregistration.westernsydney.edu.au/even/ timetable/?subject\_code=CIVL4002\_24-SPR\_PC\_1#subjects)