# CIVL 7007 ADVANCED TIMBER STRUCTURES

**Credit Points** 10

Legacy Code 301009

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

**Description** This unit enables students to gain an in-depth knowledge into timber structures based on Australian Standards. Design of timber beams, floors, columns and connections will be introduced with a focus on the use of plywood, round timbers, glue-laminated timber and structural laminated veneer lumber.

School Eng, Design & Built Env

**Discipline** Civil Engineering

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

Restrictions

Students must be enrolled in a postgraduate program

## **Learning Outcomes**

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

- 1. Interpret the properties of sawn timber and manufactured wood products that influence their strength as a construction materials.
- 2. Apply limit state design concepts for timber elements and whole structures
- 3. Determine design loads and analyse timber structures to evaluate internal design action effects
- 4. Design timber elements based on evaluated design action effects

## **Subject Content**

- 1. Characteristics, grading and use of timber for structural design
- 2. Design of tension members
- 3. Design of Compression members
- 4. Design of members in flexure
- 5. Design of members under combined action
- 6. Design of 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.

Item	Length	Percent	Threshold	Individual/ Group Task
Professional Task	10 pages per assignment	20	N	Individual
Intra-session Exam	2 hours	20	N	Individual
Final Exam	2 hours	60	N	Individual

**Teaching Periods** 

#### **Autumn**

### Parramatta City - Macquarie St

Day

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

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=CIVL7007\_22-AUT\_PC\_D#subjects)