# CIVL 3003 CONSTRUCTION PLANNING

**Credit Points** 10

**Legacy Code** 300728

**Coordinator** Yingbin Feng (https://directory.westernsydney.edu.au/search/name/Yingbin Feng/)

**Description** This unit is intended to provide students with the ability to organise the resources required for a major construction project; to plan the sequence and timing of construction operations; and to assess the risk inherent in achieving a construction schedule.

**School** Eng, Design & Built Env

**Discipline** Construction 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 1005 OR
GEOM 2001 OR
BLDG 2002

**Equivalent Subjects** BLDG 3005 - Construction Planning

**Assumed Knowledge**

A basic understanding of the construction process of residential and commercial buildings and estimating principles.

## Learning Outcomes

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

1. Plan a project using basic principles of logic planning
2. Apply the concepts of ecritical path f and efloat f
3. Calculate resources, determine resource constraints on construction operations, and develop solutions that will minimise the impact of these constraints
4. Assess the probability of achieving a project completion date
5. Use a generic computer programme such as MS Project, to develop and graphically represent construction logic

## Subject Content

Bar/Gantt Charts
Critical Path Method - Arrow diagrams
Critical Path Method - Precedence diagrams
Overlapping network models
Resources management - limits, resource aggregation and levelling
Project control
Scheduling using MS Project
Chain scheduling, multiple activity and line of balance
Work study
Risk and scheduling
Program evaluation and review technique (PERT)

## 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 |
|---|---|---|---|---|
| Quiz | 30 minutes | 20 | N | Individual |
| Quiz | 20 minutes | 10 | N | Individual |
| Report | 12 Tutorials | 30 | N | Group |
| Final Exam | 2 hours | 40 | N | Individual |

Prescribed Texts

- Uher, Thomas E., 2011, Programming and Scheduling Techniques,. UNSW Press, Sydney

Teaching Periods

## Summer A

### Parramatta - Victoria Rd

#### Day

**Subject Contact** Yingbin Feng (https://directory.westernsydney.edu.au/search/name/Yingbin Feng/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=CIVL3003_22-SUA_PS_D#subjects)