

CIVL 3003 CONSTRUCTION PLANNING

Credit Points 10

Legacy Code 300728

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

Description This subject 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 fees 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 ♦critical path♦ and ♦efloat♦
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.

Type	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