

BLDG 1021 COMMERCIAL CONSTRUCTION (WSTC)

Credit Points 10

Coordinator Ramin Ebadi (<https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/>)

Description This subject provides students with an introduction to the design, classification, applicable Australian Standards, structural systems, construction techniques, materials handling systems, building services, fit-out and finishes for larger scale buildings. The subject focusses on commercial construction projects such as shopping centres, factories, warehouses, office buildings and associated facilities.

School Eng, Design & Built Env

Discipline Building Construction Management

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 1 subject

Restrictions

Students must be enrolled in an existing Destination College Diploma program listed below:

- 7188 Diploma in Culture, Society and Justice
- 7189 Diploma in Health Science
- 7190 Diploma in Business
- 7191 Diploma in Information and Communication Technologies
- 7192 Diploma in Building Design and Construction
- 7193 Diploma in Engineering Studies
- 7194 Diploma in Creative Industries and Communications
- 7195 Diploma in Arts
- 7196 Diploma in Science
- 7197 Diploma in Education Studies

Learning Outcomes

After successful completion of this subject, students will be able to:

1. Understand and interpret pertinent Australian Standards and building regulations applicable to commercial construction.
2. Evaluate construction methods and techniques for larger scale buildings.
3. Examine materials handling systems and their requirements in commercial construction projects.
4. Evaluate preliminary cost estimates and project scheduling requirements for a project.
5. Apply scale modelling techniques to communicate and solve design challenges in commercial construction projects.

Subject Content

- Introduction to 'Non-Residential Building' and overview of the assessments and Building Regulations; Site Investigations; Preliminaries; Demolition.
- Civil works and Substructure, Industrial: Portal Frames and Flooring Systems, and Industrial: Tilt-up Slab; Wall and Roof Claddings

- High rise: Reinforces Concrete Construction, Structural Steel Construction, Materials handling Systems, and cladding systems.
- General: Fit out and Finishes used, High rise Services 1: Energy, Communication, Hydraulics and High rise Services 2: Mechanical, Fire Protection, Vertical Transportation

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	Mandatory
Quiz	30 minutes	15	N	Individual	N
Quiz	30 minutes	15	N	Individual	N
Report	2000 words including tables and diagrams	30	N	Individual	N
Viva Voce	10 minutes	40	N	Individual	N

Teaching Periods

Spring Block 1 (2025)

Penrith (Kingswood)

On-site

Subject Contact Ramin Ebadi (<https://directory.westernsydney.edu.au/search/name/Ramin Ebadi/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=BLDG1021_25-SB1_KW_1#subjects)