BLDG 0002 BUILDING CALCULATIONS (WSTC PREP)

Credit Points 10

Legacy Code 700318

Coordinator Robert Paluzzano (https://directory.westernsydney.edu.au/search/name/Robert Paluzzano/)

Description This subject is designed to assist students to become competent in the field of introductory senior mathematics. It introduces and reinforces mathematical skills in the areas of scale, application of scale, Pythagoras theory, trigonometry, sine and cosine, application of sine and cosine, building volumes, application of building volumes, gradients, application of gradients and thermal flow. Emphasis is placed on developing key competencies in building calculations.

School Western Sydney The College

Discipline Building Science and Technology

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 0 Preparatory subject

Equivalent Subjects MATH 0027 - Scientific Methods in Construction Management

Restrictions

Students must be enrolled at The College in 6031 - Diploma in Building Design Management / Bachelor of Building Design Management, 7136 - Diploma in Building Design Extended, 6045 - Diploma in Construction Technology/Bachelor of Construction Technology or 7165 - Diploma in Construction Technology Extended.

Learning Outcomes

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

1. Apply Scale and ratios
2. Apply Pythagoras Theory
3. Solve Trigonometric Equations
4. Apply Sine and Cosine to building calculations
5. Apply Building Volumes to building calculations
6. Apply Gradients to building calculations
7. Develop preliminary knowledge of Thermal Flow

Subject Content

Scale and Ratios
Pythagoras theory
Trigonometry
Sine and Cosine
Application of Sine and Cosine
Building volumes
Application of Building Volumes
Gradients
Application of Gradients
Thermal Flow
Scale and Ratios
Pythagoras theory
Trigonometry
Sine and Cosine
Application of Sine and Cosine
Building volumes
Application of Building Volumes
Gradients
Application of Gradients
Thermal Flow

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
Intra-session Exam	1 hour	30	N	Individual	N
Intra-session Exam	1 hour	30	N	Individual	N
Intra-session Exam	90 minutes	30	N	Individual	N
Reflection	5 minutes + 2 minutes question time	10	N	Individual	N

Prescribed Texts

- Breach, M. 2011, Fundamentals Maths for Engineering and Science, Palgrave Macmillan

Teaching Periods

Term 2 (2024)
Penrith (Kingswood)
On-site
Subject Contact Robert Paluzzano (https://directory.westernsydney.edu.au/search/name/Robert Paluzzano/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=BLDG0002_24-T2_KW_1#subjects)

Term 1 (2025)
Penrith (Kingswood)
On-site
Subject Contact Robert Paluzzano (https://directory.westernsydney.edu.au/search/name/Robert Paluzzano/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=BLDG0002_25-T1_KW_1#subjects)