# MATH 0030 INTRODUCTION TO BUILDING CALCULATIONS (WSTC PREP)

**Credit Points 10** 

Legacy Code 700317

**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 basic and introductory senior mathematics. It introduces and reinforces mathematical skills in the areas of basic arithmetic, algebra and geometry. Emphasis is placed on developing key competencies in building calculations.

School Western Sydney The College

**Discipline** Mathematics

Student Contribution Band HECS Band 1 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Undergraduate Level 0 Preparatory subject

#### Restrictions

Students must be enrolled at The College in 7136 - Diploma in Building Design Extended or 7165 - Diploma in Construction Technology Extended

# **Learning Outcomes**

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

- 1. Apply appropriate arithmetic techniques to solving problems
- 2. Apply algebraic techniques to solving problems
- 3. Solve problems involving simple linear equations
- 4. Solve quadratic equations using the formula
- 5. Apply the SI units appropriately
- 6. Solve geometric problems

# Subject Content

- 1. Arithmetic processes
- Working with whole numbers
- Working with fractions, decimals and percentages
- Working with index numbers
- Arithmetic operations and order of operations
- 2. Algebra
- Terminology
- Working with algebraic expressions
- 3. Solving Equations
- SI units and measurements
- Linear equations
- Quadratic equations using the quadratic formula
- 4. Geometry
- Angles
- Area, volume and surface area of common objects
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## **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.

Туре	Length	Percent	Threshold	Individual/ Group Task
Intra-session Exam		30	N	Individual
Numerical Problem Solving		30	N	Individual
Numerical Problem Solving		30	N	Individual
Presentation		10	N	Individual

#### **Prescribed Texts**

 Gaton, B., Delaney, C., Horracks, S., Jelbart, T., O'Connor, M., (2015), Foundation Mathematics 3rd edition, Oxford University Press Australia.

**Teaching Periods** 

# Term 1 (2022)

## Penrith (Kingswood)

#### Day

Subject Contact Robert Paluzzano (https://

directory.westernsydney.edu.au/search/name/Robert Paluzzano/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH0030\_22-T1\_KW\_D#subjects)

# Term 3 (2022)

## Penrith (Kingswood)

#### Day

Subject Contact Robert Paluzzano (https://

directory.westernsydney.edu.au/search/name/Robert Paluzzano/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject\_code=MATH0030\_22-T3\_KW\_D#subjects)

# Term 1 (2023)

### 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=MATH0030\_23-T1\_KW\_1#subjects)

# Term 3 (2023) 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=MATH0030\_23-T3\_KW\_1#subjects)