MATH 0030 INTRODUCTION TO BUILDING CALCULATIONS (WSTC PREP)

Credit Points 10

Legacy Code 700317

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

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 fees 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 in7136 - 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.

Type	Length	Percent	Threshold	Individual/ Group Task	Mandatory
Intra-session Exam	1 hour	20	N	Individual	N
Numerical Problem Solving	1 hour	30	N	Individual	N
Numerical Problem Solving	90 minutes	30	N	Individual	N
Participatio	In Class	10	N	Individual	N
Presentation	5 minutes + 2 minutes question time	10	N	Individual	N

Prescribed Texts

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