ABPL30040 Measurement of Building Works

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 1 x 2 hour lecture per week; 1 x 2 hour tutorial per week Total Time Commitment: 170 hours
Prerequisites:	<table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>ABPL20042 Residential Construction and Structures</td><td>Semester 1</td><td>12.50</td></tr><tr><td>ABPL20041 The Construction Context</td><td>Semester 1</td><td>12.50</td></tr></table> Note: ABPL20041 The Construction Context may be taken concurrently with this subject. If you have not completed The Construction Context and wish to take it and Measurement of Building Works concurrently, you will need to contact your course adviser in the Environments and Design Student Centre.
Corequisites:	None
Recommended Background Knowledge:	Basic computer skills.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Dr Ajibade Aibinu
Contact:	Email: **aaibinu@unimelb.edu.au (mailto:aaibinu@unimelb.edu.au)**
Subject Overview:	This subject introduces the quantification of building works. It covers the principles and practice of measurement in simple residential construction including the application and use of the Australian Standard Method of Measurement (ASMM) of Building works in practice. It covers the following aspects: writing description/specifications for measured building items; purpose and preparation of Bill of Quantities (BoQ); Processes of preparing BoQ including: taking-off, working-up, abstracting and billing; types of bill formats and their uses; basic principles of measurement and description of the following: groundworks (ordinary strip foundation on flat sites – linear) and superstructure (walls – masonry, and partitions including cladding; floors in concrete, reinforcement and formwork, simple timber pitched roof, Roofing, and finishes); Concept of BoQ estimating, pricing of items and introduction to building-up of rates for work items; Introduction to computerised measurement; Tender process.
Learning Outcomes:	Upon completion of this subject students should be able to: 1 Apply the Standard Method of Measurement (SMM) to quantification of the works for simple buildings.

	2 Measure quantities for groundworks; masonry (Brickwork); concrete/reinforcement and formwork; simple timber pitched timber roof; roofing, and finishes. 3 Describe a bill of quantities 4 Produce a bill of quantities for groundworks; masonry (Brickwork); concrete/reinforcement and formwork; simple timber pitched timber roof; roofing, and finishes. 5 Investigate and price measured building work items in a Bill of Quantities (BoQ). 6 Explain the application of computer software to measurement of building works. 7 Demonstrate understanding of the theory and practice of competitive tendering. 8 Explain the role of cost management of building works.
Assessment:	Four practical exercises and assignments (40%) due in week 5 (10% group work), week 7 (10% individual work), week 9 (10% individual work) and week 11 (10% group work) respectivelyThree-hour end of semester exam (60%) Students are required to achieve a mark of at least 40% in the exam in order to pass the subject.Attendance and participation in 80% of the tutorials is a mandatory requirement for passing the continuous assessment component of this subject.
Prescribed Texts:	Marsden, P. (1998) Basic Building Measurement, University of NSW Press. AIQS et al (1990) Australian Standard Method of Measurement, AIQS & MB-CHAA. Picken, D. (1999) Building Measurement: Worked Examples, Deakin University Press. Sierra, J.J.E. (1991) Building Measurement: A Guide to the Australian Standard Method of Measurement of Building Works, OTEN.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2015/B-ARTS)** # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2015/B-BMED)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2015/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2015/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2015/B-MUS)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2015/B-SCI)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2015/B-ENG)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	At the completion of the subject students should have developed the following skills and capabilities: # Effective participation as a team member. # Written, verbal and visual presentation of ideas # Correct use of technical terminology relating to quantification of building works and cost estimating. # Information gathering and critical synthesis skills # Identification and familiarity with building components # Understanding of construction documentation used in residential construction.
Notes:	Students undertaking this subject will be expected to regularly access an internet-enabled computer (in particular the University's Learning Management System - LMS) for access to information and for online discussion and communication with their tutors and their peers.
Related Majors/Minors/ Specialisations:	Civil (Engineering) Systems major Construction major Engineering Systems Environments Discipline subjects Property major Restrictions for Breadth Options within the Bachelor of Environments - relating to specific majors

Related Breadth Track(s):	Construction