

Module code:	AUR347
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Module Title:	Number in the Built Environment
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Level:	3	Credit Value:	20
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Cost Centre(s):	GABE	JACS3 code:	K400
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Faculty:	Faculty of Arts, Science and Technology	Module Leader:	Louise Duff
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Scheduled learning and teaching hours	40 hrs
Guided independent study	160 hrs
Placement	0 hrs
Module duration (total hours)	200 hrs

Programme(s) in which to be offered	Core	Option
BSc (Hons) Architectural Design Technology (with Foundation Year) SUBJECT TO VALIDATION	✓	<input type="checkbox"/>
BSc (Hons) Construction Management (with Foundation Year) SUBJECT TO VALIDATION	✓	<input type="checkbox"/>

Pre-requisites
None

Office use only

Initial approval: 12/12/2018
With effect from: 01/09/2019
Date and details of revision:

Version no:1

Version no:

Module Aims

To enable students to apply numeracy techniques and methods to solve construction related calculations. Students will be able to select and apply a variety of mathematical, graphical and statistical techniques to solve practical construction problems.

Intended Learning Outcomes

Key skills for employability

- KS1 Written, oral and media communication skills
- KS2 Leadership, team working and networking skills
- KS3 Opportunity, creativity and problem solving skills
- KS4 Information technology skills and digital literacy
- KS5 Information management skills
- KS6 Research skills
- KS7 Intercultural and sustainability skills
- KS8 Career management skills
- KS9 Learning to learn (managing personal and professional development, self-management)
- KS10 Numeracy

At the end of this module, students will be able to

Key Skills

At the end of this module, students will be able to		Key Skills	
1	Be able to use basic numerical techniques and methods to solve construction related calculations	KS3	KS10
		KS5	
2	Be able to select and apply mathematical techniques correctly to solve practical construction problems involving perimeters and volumes.	KS3	KS10
		KS5	
3	Be able to select and apply shape and area techniques correctly to solve practical construction problems.	KS3	KS10
		KS5	
4	Be able to select and apply graphical and statistical techniques correctly to solve practical construction problems.	KS3	KS4
		KS5	KS10

Transferable skills and other attributes

- Effective numeric skills
- Ability to analyse statistical data
- Ability to present data coherently and effectively

Derogations

None

Assessment:

A number of worksheets to be undertaken to show problem solving abilities in Built Environment scenarios

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)	Duration (if exam)	Word count (or equivalent if appropriate)
1	1 & 2	Coursework	50	n/a	1,250
2	3 & 4	Coursework	50	n/a	1,250

Learning and Teaching Strategies:

A series of key lectures demonstrating theory, worked examples and practice in the development of skills in maths and statistics.

Syllabus outline:

Calculator functions,
Introduction to techniques and methods to allow solving problems relating to monetary issues and space appraisal.
Simple measurement of areas and volumes
Creating graphs.
Processing data by statistical means

Bibliography:

Essential reading

Bird, May, (1994) Technician Mathematics 2, Pearman
Greer, Taylor, (1994) Mathematics for Technicians, Nelson Thornes
Tourret,A. (1997) Applying Maths in Construction, Architectural Press

Other indicative reading