

5. Restrictions			
Type	Module Code	Module Name	Condition
Pre-requisites:	None		
Co-requisites:	None		
Exclusions:	None		
Courses to which this module is restricted:			
Module code: MOD008105		Version: 2 Date Amended: 17/Oct/2024	

1. Module Title
Core Maths

2a. Faculty Leader
Chinchu Babu

2b. School
SE: ARU College

2c. Faculty
Faculty of Science and Engineering

3a. Level
3

3b. Module Type
Standard (fine graded)

4a. Credits
15

4b. Study Hours

150

LEARNING, TEACHING AND ASSESSMENT INFORMATION

6c. Key Texts/Literature

The reading list to support this module is available at: <http://readinglists.anglia.ac.uk/modules/mod008105>

6d. Specialist Learning Resources

None

6a. Module Description

Core Maths is a course that ensures you will have the necessary basic mathematical skills required for your level 4 studies. By the end of the course, you will be able to carry out the basic mathematical manipulations and understand the relevant key concepts required in order to progress to your chosen degree course. Each mathematical concept will be introduced to you via a lecture, in which examples of how to use and apply the concept are demonstrated. You will then practise problems in a tutorial for each topic, using worksheets given out in advance of the sessions. The worksheets given to you will include problems applied to the various everyday scenarios to indicate the importance and applicability of mathematics to your future degrees. The subjects covered are a range of arithmetic skills, algebra, solving equations, probability and basic statistics.

6b. Outline Content

- Arithmetic: basic arithmetic and the correct order of mathematical manipulations; negative numbers; fractions; percentages; ratios; decimals; significant figures; scientific notation and indices
- Algebra: using symbols; brackets; solving linear equations; rearranging equations
- Data: graphic presentation; straight line equations
- Statistics: median, mode, mean; mean deviation, standard deviation;
- range Inequalities
- Areas and volumes of simple shapes
- Non-linear equations

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Perform arithmetic calculations, expressing numbers in different formats, manipulate algebraic expressions and apply mathematical formulae to solve equations and find areas and volumes
2	Knowledge and Understanding	Use basic statistics to interpret data
3	Intellectual, practical, affective and transferrable skills	Present data graphically
4	Intellectual, practical, affective and transferrable skills	Apply basic mathematical methods to solve simple scientific and technological problems

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	0	N/A	N/A
Other teacher managed learning	48	1-4	4 hours per week x 12 teaching weeks.
Student managed learning	102	1-4	Pre and post session preparation, reading and research. Other tasks as detailed in Module guide.
TOTAL:	150		

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2022/3	F01CAM	Trimester 1	ARU Cambridge Campus	Face to Face

9. Assessment for the above Module Occurrence					
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Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	1 2 3 4	50 (%)	Fine Grade	30 (%)

In-class test (up to 1.5 hours)					
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011	Coursework	1 2 3 4	50 (%)	Fine Grade	30 (%)

In-class test (up to 1.5 hours)					
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<p>In order to pass this module, students are required to achieve an overall mark of 40%.</p> <p>In addition, students are required to:</p> <p>(a)achieve the qualifying mark for each element of fine graded assessment of as specified above</p> <p>(b) pass any pass/fail elements</p>
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