

# MA1K2-0 Refresher Mathematics

**23/24**

**Department**

Warwick Mathematics Institute

**Level**

Undergraduate Level 1

**Module leader**

Andrew Brendon-Penn

**Credit value**

0

**Module duration**

4 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

It is a module for new incoming students based on A-level Mathematics but done right.

### Module aims

The next year cohort of students will come to the university without going through A-level exams. The aim of this module is to refresh their existing mathematical knowledge. It will be in a different style from A-levels, in a style of university level Mathematics.

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Functions and polynomials. Summation and the binomial theorem. Linear equations and matrices. Trigonometric functions. Differentiation. Taylor series, the exponential and logarithm. Complex numbers. Integration.

### Learning outcomes

By the end of the module, students should be able to:

- Subject knowledge and understanding: a good working knowledge of A-level mathematics and certain core items from further mathematics
- Cognitive skills: logical understanding of definition/theorem/proof method of doing Mathematics

## International

It will be available to international students who have done other qualifications rather than A-levels

## Subject specific skills

New level of understanding of the A-level mathematics and certain core items from further mathematics. Understanding of connections between different parts of mathematics.  
Understanding of proofs and examples.

## Transferable skills

knowledge of mathematics and mathematical method

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## Study

### Study time

Type	Required	Optional
Online learning (scheduled sessions)		3 sessions of 45 minutes
Online learning (independent)		25 sessions of 30 minutes
Total	0 hours	

### Private study description

No private study requirements defined for this module.

## Costs

No further costs have been identified for this module.

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## Assessment

Students can register for this module without taking any assessment.

### Assessment group A

	<b>Study time</b>
Test	1 hour
Test	1 hour
Test	2 hours

## Feedback on assessment

As the module is weighted 0 CATS, the main method will be self-assessment. The students will mark their own tests and can redo them to their own satisfaction.

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## Availability

## Courses

This module is Core for:

- USTA-G302 Undergraduate Data Science
  - Year 1 of G302 Data Science
  - Year 1 of G302 Data Science
- Year 1 of USTA-G304 Undergraduate Data Science (MSci)
- UCSA-G4G1 Undergraduate Discrete Mathematics
  - Year 1 of G4G1 Discrete Mathematics
  - Year 1 of G4G1 Discrete Mathematics
- Year 1 of UCSA-G4G3 Undergraduate Discrete Mathematics
- Year 1 of UMAA-G105 Undergraduate Master of Mathematics (with Intercalated Year)
- Year 1 of USTA-G300 Undergraduate Master of Mathematics, Operational Research, Statistics and Economics
- UMAA-G100 Undergraduate Mathematics (BSc)
  - Year 1 of G100 Mathematics
  - Year 1 of G100 Mathematics
  - Year 1 of G100 Mathematics
- UMAA-G103 Undergraduate Mathematics (MMath)
  - Year 1 of G100 Mathematics
  - Year 1 of G103 Mathematics (MMath)
  - Year 1 of G103 Mathematics (MMath)
- Year 1 of UMAA-G106 Undergraduate Mathematics (MMath) with Study in Europe
- Year 1 of UMAA-G1NC Undergraduate Mathematics and Business Studies
- Year 1 of UMAA-G1N2 Undergraduate Mathematics and Business Studies (with Intercalated Year)
- Year 1 of UMAA-GL11 Undergraduate Mathematics and Economics
- Year 1 of UECA-GL12 Undergraduate Mathematics and Economics (with Intercalated Year)
- UMAA-GV17 Undergraduate Mathematics and Philosophy
  - Year 1 of GV17 Mathematics and Philosophy
  - Year 1 of GV17 Mathematics and Philosophy

- Year 1 of GV17 Mathematics and Philosophy
- UPXA-GF13 Undergraduate Mathematics and Physics (BSc)
  - Year 1 of GF13 Mathematics and Physics
  - Year 1 of GF13 Mathematics and Physics
- UPXA-FG31 Undergraduate Mathematics and Physics (MMathPhys)
  - Year 1 of FG31 Mathematics and Physics (MMathPhys)
  - Year 1 of FG31 Mathematics and Physics (MMathPhys)
- Year 1 of USTA-G1G3 Undergraduate Mathematics and Statistics (BSc MMathStat)
- USTA-GG14 Undergraduate Mathematics and Statistics (BSc)
  - Year 1 of GG14 Mathematics and Statistics
  - Year 1 of GG14 Mathematics and Statistics
- Year 1 of UMAA-G101 Undergraduate Mathematics with Intercalated Year
- USTA-Y602 Undergraduate Mathematics, Operational Research, Statistics and Economics
  - Year 1 of Y602 Mathematics, Operational Research, Stats, Economics
  - Year 1 of Y602 Mathematics, Operational Research, Stats, Economics