

# FP039-15 Essential Mathematics

**22/23**

**Department**

Warwick Foundation Studies

**Level**

Foundation

**Module leader**

Joel Milburn

**Credit value**

15

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

FP039-15 Essential Mathematics

[Module web page](#)

### Module aims

To provide students with the mathematical competence necessary for subsequent degree-level study in Management or Business.

To develop students' awareness of mathematical tools for modelling the characteristics of business decisions.

### 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.

1. Number: Rational number equivalences, Ratio and Proportion, Numerical accuracy, Laws of indices, Irrational numbers.
2. Algebra: Fundamentals of Algebra, Algebraic equations, Coordinate geometry, Simultaneous equations, Inequalities.

3. Statistics: Summary statistics; including from grouped data, Data and Data presentation, Bi-variate data, Correlation and Regression including hypothesis testing.
4. Probability: Elementary Probability, Laws of Probability, Bayes' theorem, Probability Distributions.
5. Discrete Maths: Graph theory, Critical path analysis, Gantt charts, Scheduling diagrams.

## Learning outcomes

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

- Use Mathematical skills and techniques to solve problems that arise in a business setting by selecting appropriate solution strategies
- Select and make use of basic statistical techniques and statistical methodologies
- Utilise diagrams, graphs and technology to help explore mathematical situations and interpret these in a business and real-world context
- Apply probability concepts to model uncertain management contexts and understand the outcomes.

## Indicative reading list

Essential Maths for Business and Management (Morris, 2007)

Foundation Maths (Croft and Davison, 2016)

[View reading list on Talis Aspire](#)

## Subject specific skills

No subject specific skills defined for this module.

## Transferable skills

No transferable skills defined for this module.

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## Study

### Study time

Type	Required
Lectures	12 sessions of 1 hour (25%)
Seminars	36 sessions of 1 hour (75%)
Total	48 hours

## Private study description

Independent study

## Costs

No further costs have been identified for this module.

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## Assessment

You do not need to pass all assessment components to pass the module.

### Assessment group A1

	Weighting	Study time	Eligible for self-certification
Assessment component			
Weekly Multi-Choice Quizzes	20%	5 hours	No
6 summative quizzes to be taken as homework on Moodle. The best 5 scores will contribute 4% each to the overall module mark.			

Reassessment component is the same

Assessment component			
Mid-module Test	30%	10 hours	No

Reassessment component is the same

Assessment component			
End of module test	50%	15 hours	No

Reassessment component is the same

## Feedback on assessment

Immediate answers provided to the MC quizzes.  
Students to view marked scripts in class for mid-module test.  
Tabula.

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## **Availability**

## **Courses**

This module is Core for:

- Year 1 of FIOE Warwick International Foundation Programme