

FP039-15 Essential Mathematics

20/21

Department

Warwick Foundation Studies

Level

Foundation

Module leader

Chris Jones

Credit value

15

Module duration

10 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

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 (order of operations; fractions, decimals and percentages; ratios; powers and surds; using prime factorisations to find HCF and LCM; rounding, bounds and estimating).
2. Statistics (calculating/estimating averages from simple data lists and frequency tables; range

and standard deviation; quartiles and IQR; box plots and comparing data; histograms; representing data appropriately).

3. Probability (trials, outcomes and sample spaces; Venn Diagrams and mutually exclusive/independent events; tree diagrams).
4. Algebra (solving quadratic equations; sketching quadratics and solving quadratic inequalities; straight line graphs and parallel/perpendicular lines; solving simultaneous equations; solving linear and simultaneous inequalities; composite and inverse functions).

Learning outcomes

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

- By the end of the module the student should be able to:1. Choose and apply fundamental mathematics tools to a variety of business situations.
- Fluently use a calculator to perform mathematical calculations to an appropriate level of accuracy.
- Use a variety of mathematical tools to summarise data.
- Apply probability concepts to uncertain management contexts.

Indicative reading list

Essential Maths for Business and Management (Morris, 2007)
Foundation Maths (Croft and Davison, 2016)

Subject specific skills

No subject specific skills defined for this module.

Transferable skills

No transferable skills defined for this module.

Study

Study time

Type	Required
Lectures	10 sessions of 1 hour (7%)
Seminars	30 sessions of 1 hour (20%)
Private study	87 hours (58%)
Assessment	23 hours (15%)
Total	150 hours

Private study description

No private study requirements defined for this module.

Costs

No further costs have been identified for this module.

Assessment

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

Assessment group A

	Weighting	Study time
Regular Multi-Choice Quizzes	20%	8 hours
The best 5 scores will contribute 4% each to the overall module mark		
Mid-module Test	30%	5 hours
End of module test	50%	10 hours

Feedback on assessment

Immediate answers provided to the MCQ's, students to view marked scripts in class for mid-module test

Availability

Courses

This module is Core for:

- Year 1 of FIOE Warwick International Foundation Programme