

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

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.

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.

Assessment

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

Assessment group A1

	Weighting	Study time
Weekly Multi-Choice Quizzes	20%	5 hours
6 summative quizzes to be taken as homework on Moodle. The best 5 scores will contribute 4% each to the overall module mark.		
Mid-module Test	30%	10 hours
End of module test	50%	15 hours

Feedback on assessment

Immediate answers provided to the MC quizzes.

Students to view marked scripts in class for mid-module test.

Tabula.

Availability

Courses

This module is Core for:

- Year 1 of FIOE Warwick International Foundation Programme