# **FP039-15 Essential Mathematics**

# 21/22

Department Warwick Foundation Studies Level Foundation Module leader Chris Jones 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 (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**

Туре	Required
Lectures	10 sessions of 1 hour (25%)
Seminars	30 sessions of 1 hour (75%)
Total	40 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	Eligible for self-certification
Assessment component			
Regular Multi-Choice Quizzes The best 5 scores will contribute 4		8 hours e overall modu	No le mark
Reassessment component is the same			
Assessment component Mid-module Test Reassessment component is the same	30%	5 hours	No
Assessment component			
End of module test	50%	10 hours	No
Reassessment component is the same			

#### Feedback on assessment

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

# Availability

# Courses

This module is Core for:

Year 1 of FIOE Warwick International Foundation Programme