

FP0A4-0 Bridging Mathematics

26/27

Department

Warwick Global Academy

Level

Foundation

Module leader

Harnak Rayat

Credit value

0

Module duration

25 weeks

Assessment

100% coursework

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module develops essential mathematical and statistical skills for analysing and solving a variety of problems. Students will learn how to apply core mathematical processes and statistical methods to practical and theoretical questions, building confidence in quantitative reasoning. The focus is on real-world applications, with problems drawn from a variety of contexts. By the end of the module, students will be able to apply a range of mathematical and statistical techniques, interpret data critically, and communicate solutions clearly and accurately.

[Module web page](#)

Module aims

This module focuses on developing your mathematical and statistical skills to analyse and solve mathematical problems, some of which may be taken from real-world contexts. You will develop your understanding of mathematical processes so that you become confident in their use and application. By the end of the module, you will be confident in and able to use mathematical and statistical techniques in the analysis and solution of a variety of problems and communicate your findings clearly and accurately.

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.

Mathematics: Numbers and Units, percentages and ratios, basic algebraic techniques, graphs, coordinate geometry

Probability and Statistics: Data presentation, Measures of central tendency, Measures of dispersion. Basic probability including Venn diagrams and Tree diagrams.

Learning outcomes

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

- Apply mathematical and statistical knowledge to solve a variety of mathematical and real-world problems, selecting appropriate algebraic tools and statistical models where necessary, implementing them precisely and rigorously to arrive at correct numerical or algebraic results and utilising technology effectively to simplify calculations.
- Undertake basic analysis of data by calculating summary statistics and representing data graphically, understanding the suitability and limitations of different statistical measures and graph types, interpreting the meaning of calculated results within a given context and using them to inform decision-making
- Use fundamental principles of probability to quantify uncertainty and solve problems involving probability distributions.
- Present written mathematical and statistical work clearly and logically.

Indicative reading list

[Reading lists can be found in Talis](#)

Interdisciplinary

Students will have opportunities to draw on knowledge and skills acquired within the different modules on their pathway.

International

All students are international, representing a wide range of cultural, linguistic, and educational backgrounds. They bring diverse experiences and perspectives, enriching discussion and supporting the development of intercultural awareness. Examples for analysis and evaluation are drawn from a variety of countries, ensuring that teaching and learning are embedded in an international context.

Subject specific skills

construct and present mathematical and logical arguments;
develop numeracy skills;
understand, interpret and extract information from data presented in various forms;
solve mathematical and statistical problems using appropriate techniques including using suitable technology when appropriate;
clearly present solutions to mathematical and statistical problems using appropriate symbols and terms.

Transferable skills

problem solving skills;
analytical and logical thought processes;
appropriate use of suitable technology.

Study

Study time

Type	Required
Seminars	25 sessions of 1 hour (17%)
Online learning (independent)	25 sessions of 1 hour (17%)
Private study	70 hours (47%)
Assessment	30 hours (20%)
Total	150 hours

Private study description

Preparation for seminars, practice of techniques and concepts

Costs

No further costs have been identified for this module.

Assessment

Students can register for this module without taking any assessment.

Assessment group A

Study time

Eligible for self-certification

Assessment component

Class Test 1

15 hours

No

Closed book class test with questions testing the Mathematics content studied.

Reassessment component is the same

Assessment component

Class Test 2

15 hours

No

Closed book class test with questions testing the Mathematics content studied since class test 1

Reassessment component is the same

Feedback on assessment

Written feedback via tabula

Availability

There is currently no information about the courses for which this module is core or optional.