

## Mathematics with Physics

Heriot-Watt University

### Venues

Edinburgh Campus

### Content

Mathematics and physics are inextricably linked. The comprehensive grounding in mathematics offered by this course underpins an exploration of key physics topics, including quantum theory, nuclear physics and solid state physics. While a clear understanding of the subject will be a given, employers will also be looking for the other qualities imparted through this course, in particular numerical, analytical and problem solving skills.

Year 1: Level 1 has been designed to ease the transition from school to university. You will take courses in calculus and algebra which continue the study of these subjects from school, while also taking physics courses on mechanics and waves and fields and forces.

Year 2: Work in mathematics consolidates and extends the first year content, with applied mathematics and numerical analysis being introduced, alongside physics courses in photonics, quantum mechanics and relativity.

Year 3: Mathematics courses in pure and applied topics are offered along with physics courses in advanced quantum theory, electromagnetism and optics.

Year 4: Further exploration and specialisation in advanced mathematics is possible with options related to our research expertise, together with a selection of topics in advanced physics.

### Start Date

September

### Qualification

Degree

### Study Method

Full time

### Award Title

BSc Hons

### UCAS Code

G1F3

## Course Length

3- 4 years

## Faculty

School of Mathematical and Computer Sciences

## Department

Mathematics

## Entry Requirements

2022 entry requirements:

Standard entry: 5 Highers at ABBBB including Maths at A and Physics plus English at National 5.

Widening access entry: 4 Highers at BBBC including Maths and Physics at B plus English at National 5.

For entry to Level 2 you would require 3 Advanced Highers at ABB including Maths at A and Physics plus 5 Highers at ABBBB.

## SCQF Level

10

## Progression Routes

«ProgressionRoutes»

## Combination Courses

«htmlCombinationCourse»

«htmlCombinationUCASCode»

## Address

Edinburgh  
EH14 4AS

## Website

[www.hw.ac.uk](http://www.hw.ac.uk)