Physics with Industrial Placement

Heriot-Watt University

Venues

Edinburgh Campus

Content

The Physics with Industrial Placement MPhys programme will equip you with a broad education in physics, supported by a range of computational and mathematical skills that are highly valued across modern industries. This five-year programme includes an industrial placement in Year 4, giving you the opportunity to apply your knowledge in a real-world setting and gain hands-on experience through Heriot-Watt's established network of industrial partners in the photonics, quantum technology, or engineering sectors.

From revolutionising medical imaging and developing ultra-fast computing to powering green energy solutions and shaping the future of communication, physics is at the core of many of today’s most exciting technological advances. This programme goes beyond the classroom to show how physics drives progress in emerging sectors and transforms society. You’ll learn how to translate theoretical understanding into practical outcomes, gaining insight into how physics operates in research labs, development teams, and high-tech industries.

Your industrial placement is a key part of the programme. It allows you to work alongside professional physicists and engineers on live projects, helping you to explore potential career paths, build professional networks, and develop the kind of workplace experience and problem-solving skills that significantly boost your graduate prospects.

You’ll investigate how the universe works, from the unimaginably small to the unimaginably vast. Along the way, you’ll develop your ability to measure, model, and predict the physical world, gaining the adaptable skillset of a physicist — analytical thinking, data handling, programming, teamwork, and communication.

Topics include fields and forces, photonics and optics, and thermal physics. You’ll explore the quantum world of subatomic particles, the unique properties of laser light, and the challenging ideas of quantum mechanics and cosmology. Later, you’ll build expertise in areas such as electromagnetism, laser physics, solid-state physics, and quantum theory, engaging with current research and frontier technologies.

Start Date

September

Qualification

Degree

Study Method

Full time

Award Title

MPhys

UCAS Code

F31P

Course Length

5 years

Faculty

Science, Technology, Engineering and Mathematics (STEM)

Department

Physics

Entry Requirements

2027 entry requirements

4 Highers at AABB (Standard entry) or BBBC (Widening access entry) including Maths and Physics plus English at National 5.

For entry to year 2 you would require Advanced Higher Maths and Physics at AB or BA plus above.

SCQF Level

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Progression Routes

«ProgressionRoutes»

Combination Courses

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Address

Edinburgh
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Website

www.hw.ac.uk