Industrial Placement Year.

If you do an Industrial Placement Year course, you spend a year between level two and level three on a work placement. You can apply your physics knowledge in a scientific organisation, or apply the transferable skills from your degree to a role outside science.

You'll pay reduced fees for the year you're on placement, and earn a salary throughout.

Organisations where physics students have done their placements include:

- CERN, Switzerland
- Daresbury Laboratory, Science and Technology Facilities Council
- IBM
- Sellafield Ltd

Study abroad.

If you want to study abroad, you can apply to spend time in destinations including Australia, Canada, Europe, New Zealand and the USA after you've joined the University.

Universities our students have gone to include:

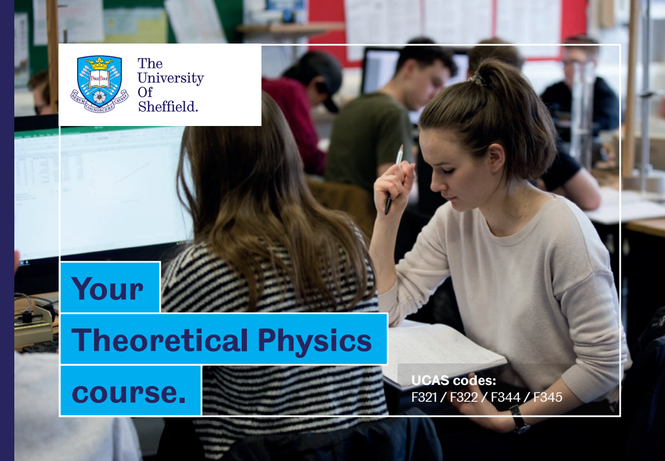
- Australian National University, Canberra
- McMaster University, Ontario, Canada
- Monash University, Melbourne, Australia
- University of Auckland, New Zealand
- University of Illinois at Urbana-Champaign, USA
- University of Texas at Austin, USA

Be Sheffield Made.

IOP Institute of Physics

The information given here is based on the current academic year. There may be some changes before you start your course. For the latest information, visit our website.

www.sheffield.ac.uk/physics
www.youtube.com/sciencesheffield



The University Of Sheffield.

Your Theoretical Physics course.

UCAS codes:
F321 / F322 / F344 / F345

You'll study the essential physics that all physics students cover. Plus, you can take advanced maths modules, to give you a much more detailed understanding of the tools and ideas that underpin all of physics.

There are optional modules from the start of your degree and the choice only expands from there. We offer a range of project modules in level three, and MPhys students spend half of their final year working in one of our leading research groups.

Level one.

Core modules:

- Fields and Quanta
- Motion and Heat
- Further Mathematics for Physicists and Astronomers
- Mathematics Core or Introductory Mathematics for Physicists and Astronomers

Optional modules:

- Frontiers in Physics
- Introduction to Astrophysics
- Introduction to Electric and Electronic Circuits
- Introduction to Optics
- Our Evolving Universe
- Physics of Living Systems 2
- The Solar System
- The Physics of Sustainable Energy

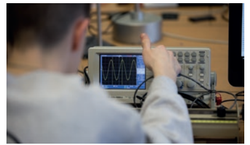
Level two.

Core modules:

- Classical and Quantum Physics for Theoretical Physics
- Programming in Python
- Special Relativity and Subatomic Physics

Optional modules:

- Aspects of Medical Imaging and Technology
- Astronomical Spectroscopy
- Detection of Fundamental Particles
- Differential Equations
- Galaxies
- Mathematics Core II
- Physics of Materials
- Physics with Labview (Industrial Placement Year BSc only)
- Stellar Structure and Evolution
- The Physics of Music
- Vector Calculus and Dynamics



Level three.

Core modules:

- Advanced Programming in Python
- Atomic and Laser Physics
- Mathematical Physics
- Particle Physics
- Problem Solving in Physics
- Solid State Physics
- Statistical Physics

Optional modules:

- Astrobiology
- Dark Matter and the Universe
- Differential Geometry
- History of Astronomy (BSc only)
- Industrial Group Project in Physics
- Introduction to Cosmology
- Introduction to Soft Matter and Biological Physics
- Mathematical Modelling of Natural Systems
- Microscopy and Spectroscopy Laboratory
- Nuclear Physics
- Origin of the Chemical Elements
- Physical Computing
- Physics Education and Outreach
- Physics in an Enterprise Culture (MPhys only)
- Research Project in Physics
- Quantum Information Laboratory
- Semiconductor Physics and Technology
- Topics in Mathematical Biology

Level four (MPhys only).

Core modules:

- Advanced Quantum Mechanics
- Research Project

Optional modules:

- Advanced Topics in Waves and Fluid Dynamics
- Advanced Particle Physics
- Advanced Soft Matter and Biological Physics
- Analytical Dynamics and Classical Field Theory
- An Introduction to General Relativity
- Directed Reading in Physics and Astrophysics
- History of Astronomy
- Introduction to Cosmology
- Optical Properties of Solids
- Physics in an Enterprise Culture
- Quantum Optics and Quantum Computing
- Semiconductor Physics and Technology
- The Development of Particle Physics
- Topics in Mathematical Physics