



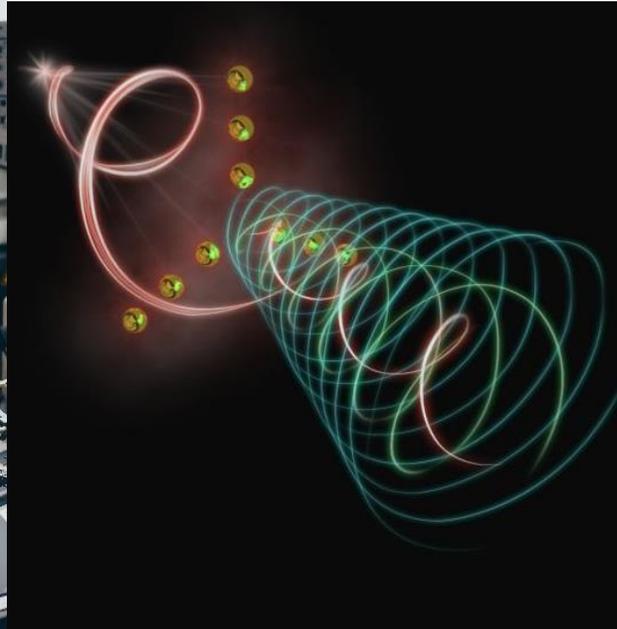
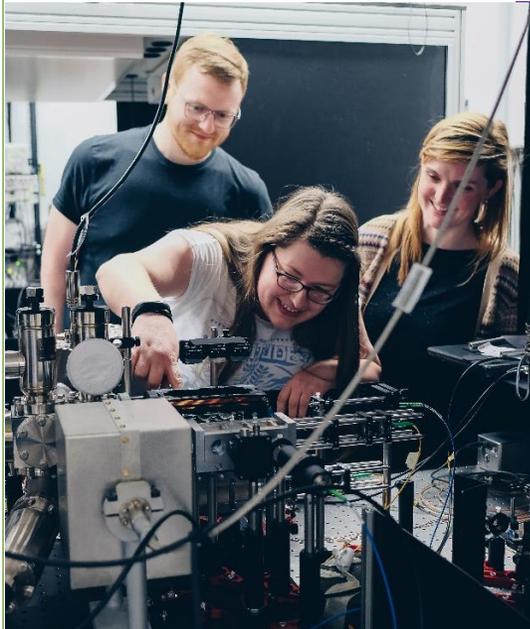
University of
Strathclyde
Science

PHYSICS @ FACULTY OF **SCIENCE**

www.strath.ac.uk/science

DEPARTMENT OF PHYSICS

Prof. Robert Martin (Undergraduate Selector)



OVERVIEW OF PRESENTATION

- The Department
- Teaching through the years
- Placement and overseas study
- Student Support
- Physics Society
- Careers
- Q & A



DEPARTMENT OF PHYSICS WEBSITE

Web: <https://www.strath.ac.uk/science/physics>

Web: <https://www.strath.ac.uk/science/physics/currentstudents/>

Questions about your offer email: physics-study-enquiries@strath.ac.uk

... or ask one of us at the end of this session!

Physics

Our research | **Ways to study** | **Postgraduate study**

Follow us on Twitter
• Tweets by PhysicsStrath

Current Students & Alumni
• Current Students
• Alumni

Study with us
Information for Ukrainian nationals

Contact us
+44 (0) 141 548 3366
physics-study-enquiries@strath.ac.uk
Our location
[Find a member of our staff](#)

Bringing physics to you | **International students** | **Why physics... and why physics at Strathclyde?**

News

- Scotland's last Auschwitz survivor leaves £500,000 gift to fund quantum research**
Judith Rosenberg – who died in January aged 98 and
- Inspiring women celebrated in new Learning & Teaching Building**
The University of Strathclyde will honour three

Current Students

Welcome to the *Current Students* page of the Department of Physics. On this page you will find links to key information for your studies.

Curriculum | **Elective Classes** | **Optional Classes**

Department Student Links

- Student Blog
- Physics Facebook page
- Physics Facebook page for International Students
- SCOPE (Strathclyde Student Chapter for Optics & Photonics Engineering)

Careers Service

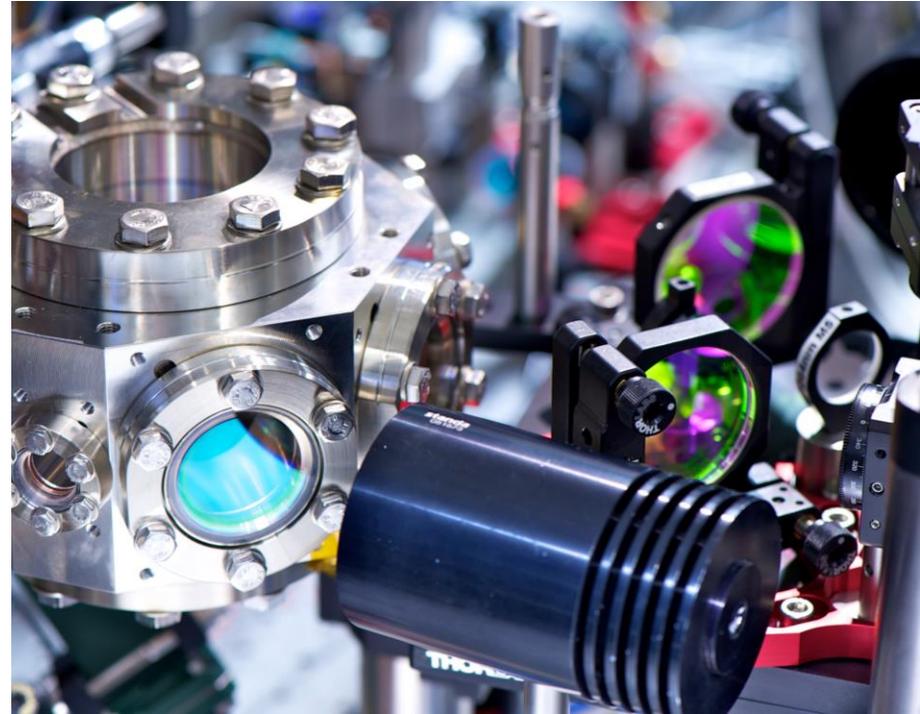
Student Information

- Study with us
- Student Support & Wellbeing
- Student Counselling Service
- Disability Service (Department contacts are Aidan Arnold and Claire McNally)
- Student Finances
- Myplace
- PECASUS

Timetable | **Handbook and Advisers of Studies** | **Physics Society**

WHY PHYSICS AT STRATHCLYDE?

- Develop skills that will enable you to become a successful physicist and maximise your career options
- Learn from academics at the forefront of their research field
- A physics-focussed and fully integrated course structure (e.g. physics focussed maths classes)
- Opportunities for summer projects, placements, international exchanges
- Courses accredited by the Institute of Physics



THE DEPARTMENT

37 Members of Staff

360 Undergraduate students

4 Research divisions

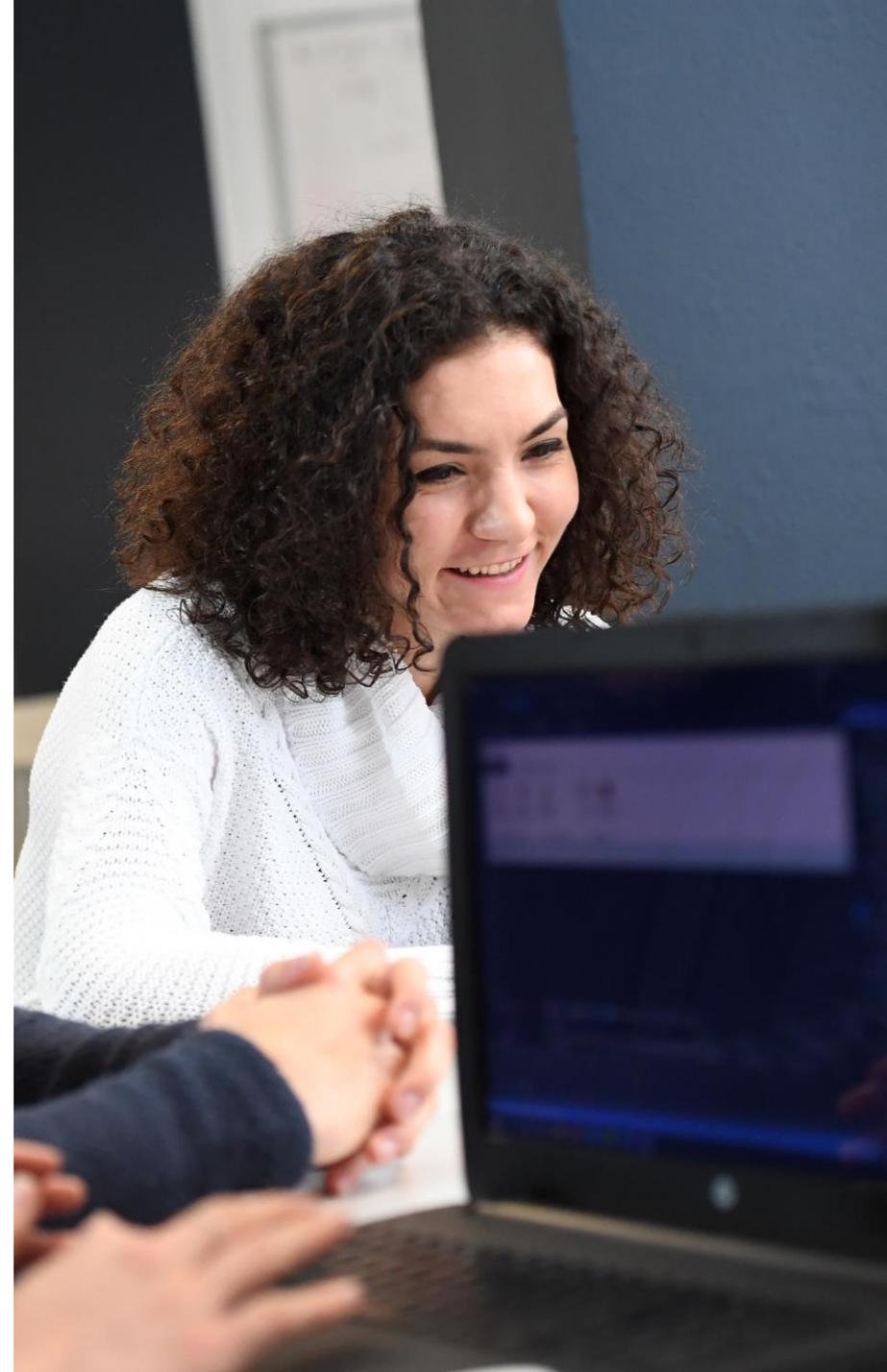
Annual research income \approx £11 million

World leading research informs teaching

All divisions contribute UG projects

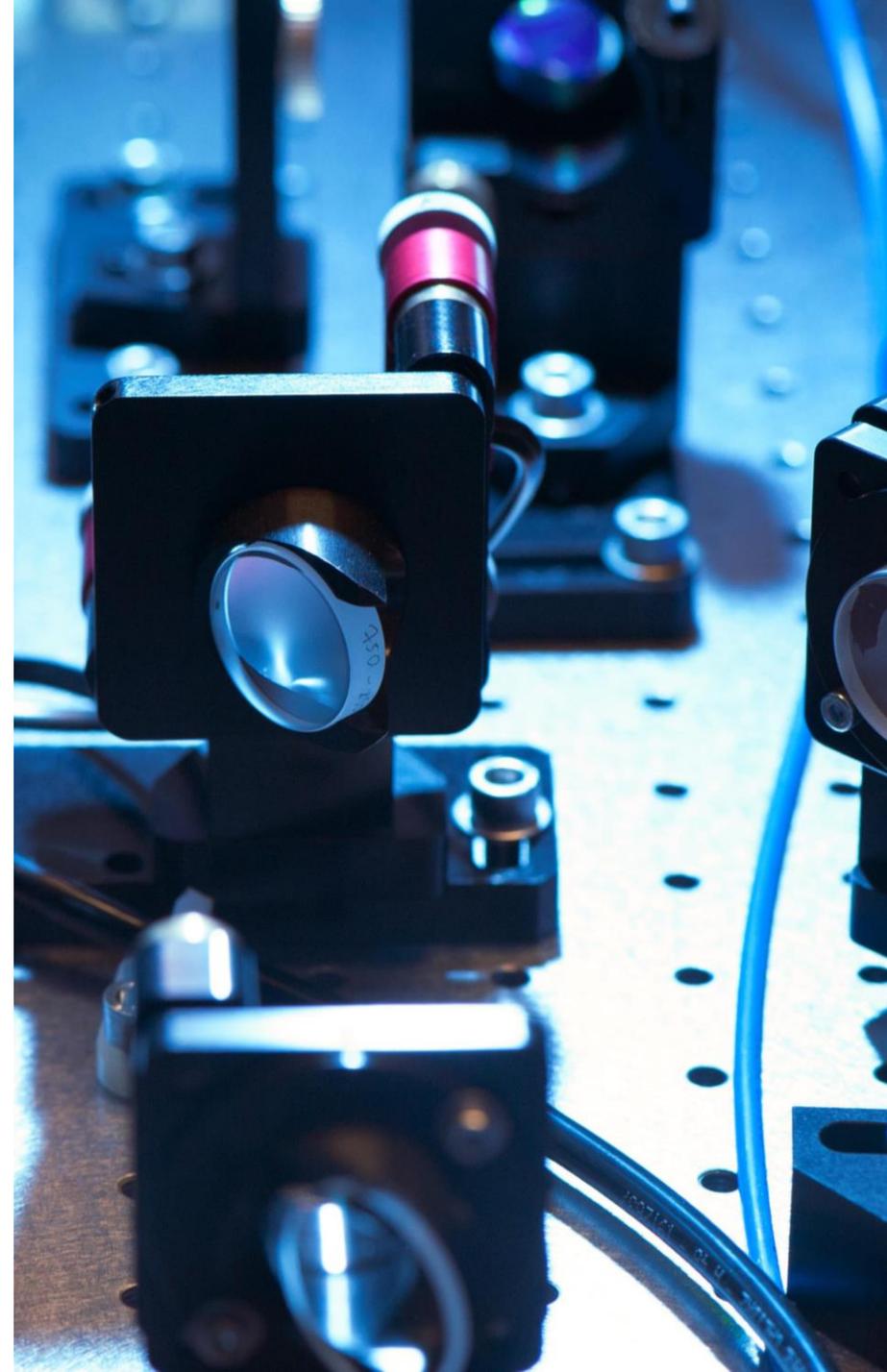
All degrees accredited by Institute of Physics

Physics with Teaching accredited by the General Teaching Council for Scotland (GTC)



TEACHING THROUGH THE YEARS

- Award of degree determined by credits gained over period of study.
- BSc (Hons) 4 years study – 480 credits
- MPhys (Hons) 5 years study – 600 credits
- Minimum of 120 credits per year
- Level of degree determined by Faculty of Science degree algorithm (all students in Faculty are assessed in the same way).



TEACHING YEARS 1 & 2

Year 1 and 2 120 credit compulsory curriculum

Each year has

- 40 credits Mathematics

- 20 credits Mechanics and Waves

- 20 credits Electromagnetism and
Quantum Physics

- 20 credits Experimental Physics

- 20 credits Programming and Skills

 - 1st year introduction to Python

 - 2nd year use Python for physics



TEACHING YEAR 3

60 credits Compulsory

20 credits Electromagnetism and Quantum Physics

20 credits Thermal and Statistical Physics

20 credits Solid state physics

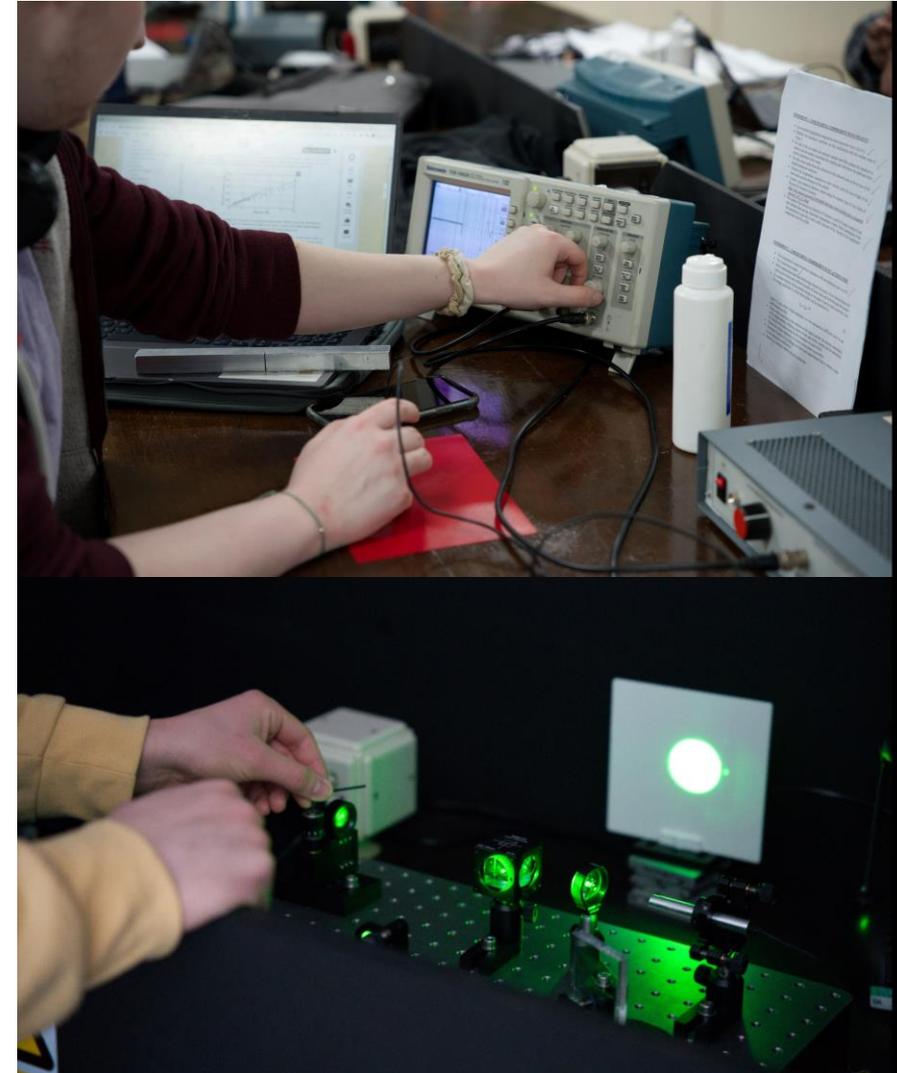
60 Credits optional/elective

20/40 credits Experimental Physics (must do one)

20 credits Mathematics

20 credits Advanced Programming

20 credits Communicating Physics



Photos from our 3rd year Experimental Physics lab (just finishing refurbishment)

TEACHING YEAR 4 & 5 (BSc & MPhys)

Both years have a 40 credit compulsory project, starting in 4th year and continuing in 5th year (MPhys)

Year 4

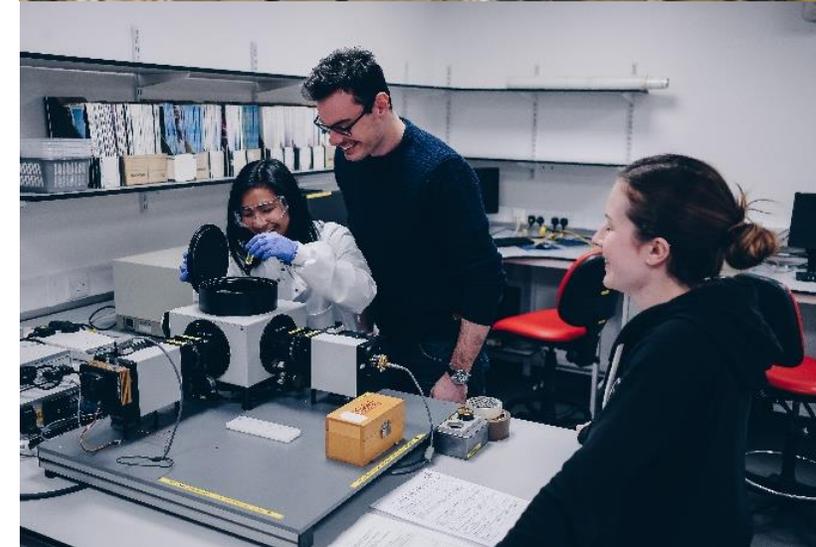
80 credits optional modules which reflect our research interests

Year 5

20 credits compulsory Research Skills

60 credits optional modules which reflect our research interests and extend on Year 4 modules

Modules include – Quantum Optics, Solid State, Nanoscience, Photonics, Plasma Physics, Computational Physics



TEACHING YEAR 4 & 5 (MPhys Advanced Research)

Both years have a compulsory project, starting in 4th year and continuing in 5th year (MPhys)

Year 4

40 credits project

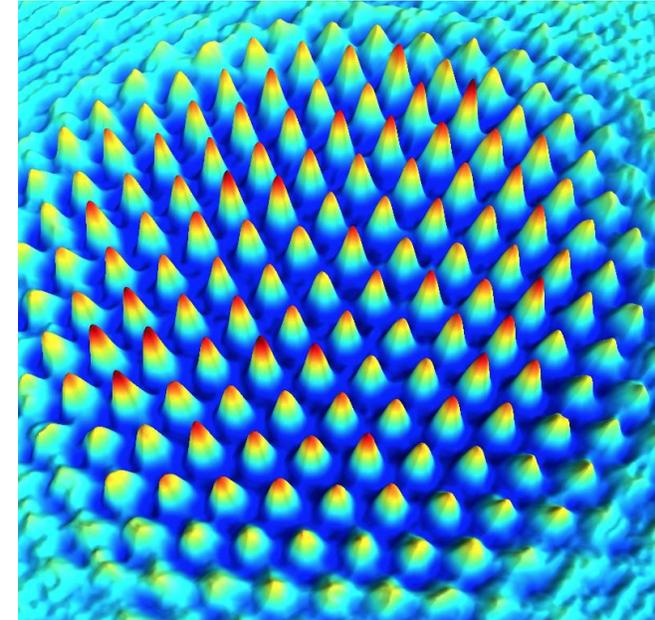
20 credits compulsory Research Skills

60 credits optional modules

Year 5

100 credits project starts in August

60 credits optional modules which reflect our research interests and extend on Year 4 modules



PHYSICS WITH TEACHING

Follows first three years of physics degrees

Year 4

School of Education following the PGDE in Physics.

18 weeks of School placements – both primary and secondary

Pedagogy of Teaching



TEACHING METHODS

Teaching

Core material – Lectures and tutorials

Tutorials contain group work

Labs

Group work supported by demonstrators

Programming

Group work supported by demonstrators

Self mark for feedback

Projects

Individual work supported by academic / researcher



TRANSFER BETWEEN DEGREES

Transfer can be made during each academic year

Transfer is based on you meeting the necessary requirements for each degree

BSc – MPhys Class Weighted Average (CWA) 55 %

BSc/MPhys – MPhys Adv Res CWA 75 %

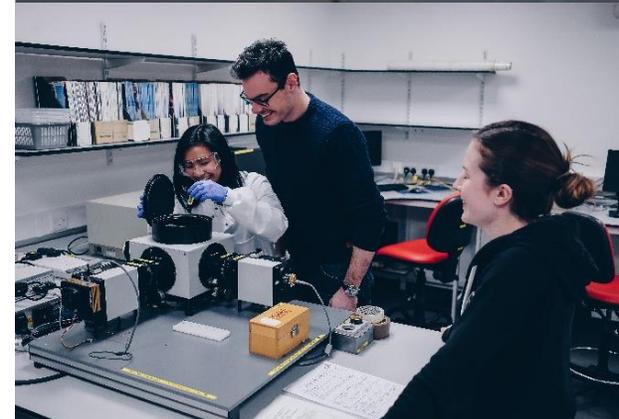
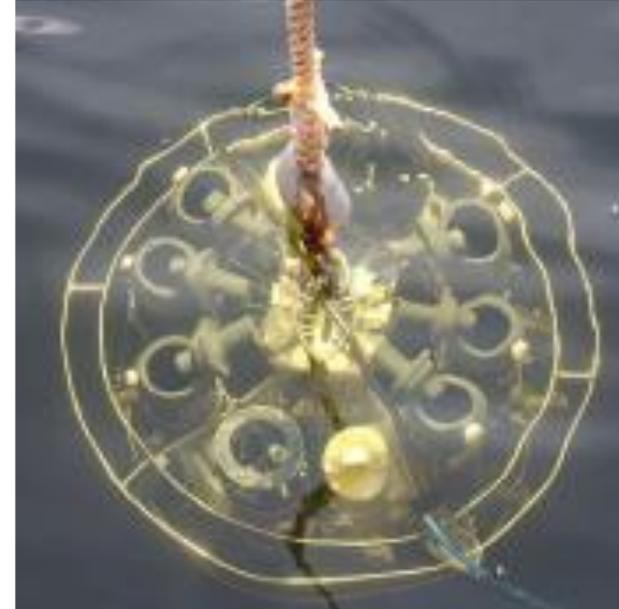
BSc/MPhys – Phys with Teaching CWA 45 % + Higher Eng C

Timing

BSc Physics – MPhys by end of Year 4

BSc/MPhys – Phys with Teaching by end of Year 3

MPhys – MPhys Advanced Research by end of Year 3 with correct modules



INTERNSHIPS

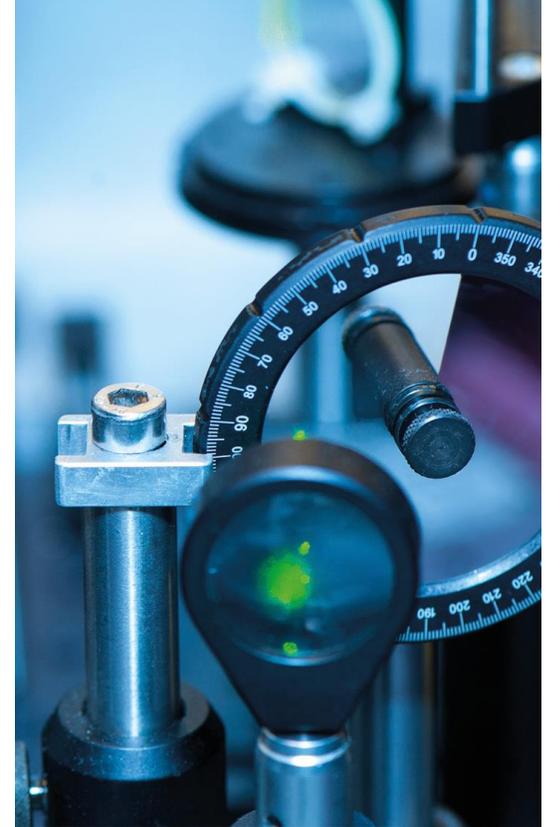
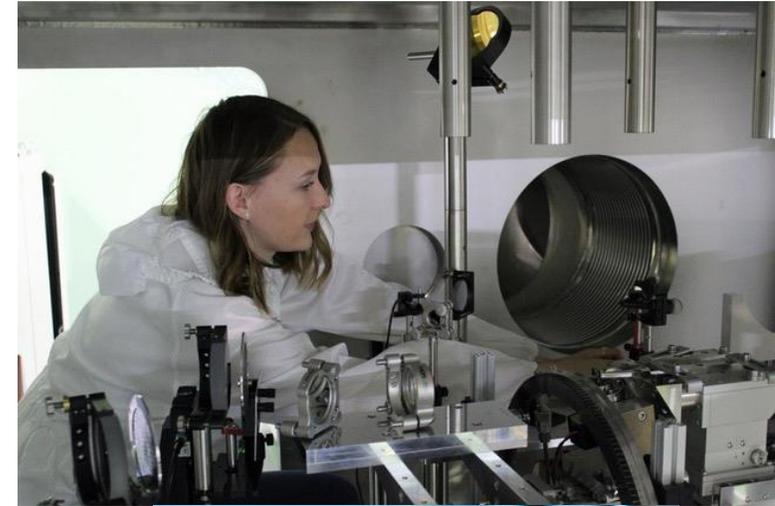
The Department offers opportunity for students to undertake funded internships.

Taken in a research group in the Department and can be funded through bodies such as

Nuffield, Carnegie, EPSRC and University

Normally in the vacation between Y3/4 or Y4/5

Some groups will also offer short term summer placements for students in Y1/2/3



PLACEMENTS

There are opportunities for students to study abroad or in industry. These are found by the student with help and support available from the Department.

Can graduate with degree that reflects this

Normally done in 4th year

Students have studied in, for example:

Germany, France, Hong Kong, USA Canada

Students have worked in industry, for example:

Thales, Coherent, Natural Power, CERN



STUDENT SUPPORT

Each student allocated a Personal Development Adviser -
Meet twice a year, as an “academic family”

Staff run “Open Door” policy

Student Staff Committee

- 2 meetings per semester

- Chaired by student

- Opportunity to raise ideas, concerns

Department has an active women’s group WiSPA



PHYSICS SOCIETY

Run by the students for the students

Offer events

Quiz nights

Christmas Social events

Physics talks

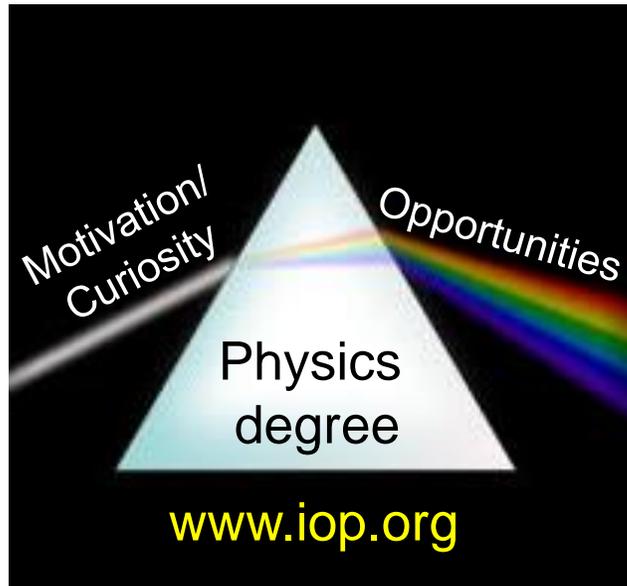
Run drop-in centre which gives help with tutorial problems, explain physics etc

Run trips to visit places such as CERN, ESA and other such places.



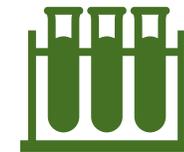
PHYSICS & EMPLOYMENT

- Strathclyde Physics degrees are accredited by **Institute of Physics**
 - * *Chartered Physicist after graduation*
 - * *Allows a fast-track route to Chartered Engineer status*
- Physics opens doors to some of the most exciting, cutting-edge, and rewarding jobs in the world.



Range of career choices:

Research
Teaching
Engineering
I.T.
& others



PHYSICS & EMPLOYMENT

Strathclyde physics graduates are:

					
Chartered Accountant with Ernst & Young	NHS Medical Physics Scientist	Security Analyst for Worldpay Cyber Security	Engineering spin-out at Oxford Uni	Test & Process Engineer at Kaia Corp.	Lens design, Hollywood (holds the 2 nd most Oscars)

- Medical Physicists
- Engineers
- Professors
- Company Directors
- Politicians
- Games Programmers
- Systems Engineers
- Treasury Analysts
- Patent Examiners
- Software Engineers
- Teachers and Education Advisers
- Spacecraft Project Managers
- Defence Scientists
- Oscar winner
- Product Managers
- Senior Risk Managers
- Business Development Managers
- Pop Star
- Bankers
- and more....

<https://www.strath.ac.uk/science/physics/alumni/>

ANY QUESTIONS

We will try to answer now.

After today:

Email: physics-study-enquiries@strath.ac.uk

Web: <https://www.strath.ac.uk/science/physics>



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