# Southampton

# Careers and Employability Service What can I do with my degree? Physics and Astronomy

## **Welcome:**

We have developed this recourse pack to help you research specific job sectors which may be of particular interest to Physics and Astronomy students.

- <u>Prospects.ac.uk</u> Options with Physics, as well as pages on: Your skills, job options, career areas, further study, what next, case studies, contacts and job search sites.
- Allaboutcareers What can I do with a Physics Degree?
- <u>Targetjobs</u> What can I do with a Physics Degree?
- **Physics.org** Find out where Physics can take you
- <u>Careers and your Future</u> on the School of Physics and Astronomy website

#### **SKILLS:**

Employers see a physics qualification as an indication of someone who will immediately be an asset to the organisation. This is because physics requires the following attributes:

- A logical and numerate mind
- The ability to solve problems
- Communication skills, developed through report-writing and presentations
- Computing and practical skills
- Teamwork and flexibility (essential for lab work and projects)

#### From www.physics.org

Other key skills include the ability to:

- Analyse and assess information and data
- Apply numeracy, communication and information technology skills efficiently
- Use effective interpersonal and team working skills including demonstrating an appreciation of different points of view
- Self-manage, think independently, set tasks and solve problems.

# **Employment Activities within your degree:**

The Physics and Astronomy department are members of the **South East Physics Network,** which are focussed on providing you industry led presentations, seminars and discussion forums on job searching techniques and CV advice.

Your degree programme will provide you links to industry to find out about the latest placement and graduate vacancies in the sector, as well as providing you access to arranged-visits to local employers. Employers also sponsor final year projects and research collaborations within the department. In previous years students have received bursaries for summer placements and hosts have included NPL, QinetiQ and Symetrica.

Tutors and lecturers also ensure they are up to date with employment within the sector and receive training on activities such as writing you a reference for a future employer.

A number of <u>work experience</u> opportunities are also offered by Career Destinations in addition to a variety of <u>events</u>, <u>tailored workshops and presentations</u> to provide advice and support on how to succeed within the sector. For more information and guidance please go to the <u>Career Destinations</u> website.

# **Employment:**

Physics and Astronomy graduates enter a very wide range of careers - both scientific and non-scientific. The following examples give a sense of the range of jobs Southampton graduates have gone into over recent years. Data has been collected from graduates completing the **DLHE Survey** six months after graduation and from alumni information.

- Engineering services engineer
- Accountant
- Business support officer
- Clinical scientist
- ICT technician
- Offshore geophysical engineer

- Project physicist
- Radiation detection specialist
- Research associate
- Research scientist
- Residual radiation analyst
- Systems engineer
- Trainee accounts assistant
- Trainee medical physicist

# **Finding Job Vacancies:**

As a graduate from Physics and Astronomy you can go into a wide range of occupations, some open to all graduates, and some particularly relevant to your degree. Information and advice about how to find out about employment opportunities can be found on our **Job Hunt webpages** and on the **Prospects** website.

When applying for vacancies you may need support in constructing a CV, filling out an Application Form, drafting a Cover Letter or preparing for Interview. We offer support on all of these areas via our **Job Application Resources webpages** 

### **Physics- related Jobs and Internships:**

The information below can be used to find job vacancies or industrial connections related to your programme, and/or to build understanding of relevant roles. Consider exploring job opportunities, career advice sites and associations/societies related to your degree programme or interests. Alongside this list make the most of the opportunities provided by the University to meet and network with employers and alumni from Physics and Astronomy and learn from their experiences.

#### • Institute of Physics

The IOP is committed to providing members with accurate, up-to-date, careers information and resources. The resources offered are tailored to help you make the most of your potential as a physicist. **Careers information and resources** 

• New Scientist – Each year a <u>Graduate Careers Special</u> is produced providing advice, information and opportunities.

#### Science- related vacancies:

#### **Physics.org**

Includes a careers section listing many of the areas that physics graduates can get into

#### Institution of Engineering and Technology

Search job vacancies

#### Cern Courir

Search job postings for academic and industrial positions worldwide

#### **New Scientist**

Search for jobs linked with your subject of study

#### **Earthworks**

Opportunities in oil, energy, mining, environmental science, meteorology, hydrology, renewable energy and related subjects

#### **Naturejobs**

Science jobs recruitment website

#### **NHS Careers**

#### **Space Careers**

Career opportunities in the space industry

#### **Science Careers**

#### **Academic Posts:**

**Times Higher Education Supplement** Mainly university posts

#### Jobs in the Academic Community

Mainly academic posts for postgraduates

#### Recruitment agencies focussing on the Science sector:

#### Matchtech

A large recruitment agency specialising in science and engineering

#### **ECM**

High-tech recruitment specialists

#### SRG

Specialist scientific recruitment

#### Carbon60

Recruitment agency for avionics, telecoms, air traffic and defence

#### Other vacancies:

#### **Prospects**

Search job vacancies by job category

#### **TARGETjobs**

Graduate jobs, schemes and internships

#### Guardian

# Postgraduate Study and Research:

Approximately half of graduates from Physics and Astronomy pursue <u>further</u> <u>study</u> opportunities following completion of an undergraduate programme.

For many people a PhD provides an important part of developing a career in science. You will generally require a good 2:1 in your first degree and will need to demonstrate the ability to sustain interest in your research topic for 3 to 4 years. Further information is available from the **Physics and Astronomy website**.

#### PhD:

University of Southampton

University of Cambridge

**University College London** 

University of Oxford

University of Liverpool

University of Bristol

#### MSc:

Aeronautical Engineering - Cranfield University

Mechanical Engineering - City University

Physics - Imperial College

Hospital and Health Service Management - University of Birmingham

**PGCE - Secondary** University of Exeter, University of Southampton

Aircraft Pilot training UK Private Institution

#### Find a postgraduate course:

#### **Prospects**

General information and database of postgraduate programmes

#### TARGET courses

Compare postgraduate courses, advice, and reviews

#### Postgrad

General information and database of postgraduate programmes.

#### **Bright Recruits**

Lists PhD/MSc studentships for physicists and post doc opportunities worldwide

#### Findaphd.com

Postgraduate research degrees PhD studentships & scholarships

#### Findamasters.com

A database of taught and research Masters courses

#### Research councils:

#### **Medical Research Council**

**Engineering and Physical Sciences Research Council** 

#### **International opportunities:**

#### **Fulbright Commission**

Their Educational Advisory Service - based in London - provides information and advice on undergraduate and postgraduate study in the USA

#### **IDP Education**

Find a course in the USA, UK, Australia, Canada and New Zealand

#### **World study**

Information and advice on study around the world.