Physical Sciences entry route leading to BSc (Hons) (4 year route including a Foundation Year at Carmel College)

Course overview
Studying this programme provides a route into any of the BSc (Hons) degree programmes offered by the Department of Physics.

INTRODUCTION
This programme provides a route into any of the BSc (Hons) degree programmes offered by the Department of Physics. You will undertake a foundation year at Carmel College, St Helens, where the class sizes are small and the standards of academic achievement high.

At Carmel College, you will take three foundation modules chosen from Physics, Mathematics, Chemistry, Biology or Geography, depending on which degree route you want to follow. In your second year, you will attend the University of Liverpool and take the same modules as other students on your chosen programme from the following:
- Geophysics (Geology) BSc (Hons) (F640)
- Geophysics (Physics) BSc (Hons) (F656)
- Ocean Sciences (Physics Pathway) BSc (Hons) (F700)
- Physics BSc (Hons) (F300)
- Physics and Mathematics BSc (Joint Honours) (FG31)
- Physics with Astronomy BSc (Hons) (F3F5)
- Physics with Medical Applications BSc (Hons) (F350)
- Physics with Nuclear Science BSc (Hons) (F390)

WHAT YOU’LL LEARN
- Skills needed for independent study at undergraduate degree level
• Undertaking a variety of learning methods and assessment tasks
• Fundamental principles that underpin modern physics

• Latest advances in cutting-edge physics research

**ROUTES**

- **Geophysics (Geology) BSc (Hons)**
- **Geophysics (Physics) BSc (Hons)**
- **Physics BSc (Hons)**
- **Physics and Mathematics BSc (Hons)**
- **Physics with Astronomy BSc (Hons)**
- **Physics with Medical Applications BSc (Hons)**
- **Physics with Nuclear Science BSc (Hons)**
Course content
Discover what you'll learn, what you'll study, and how you'll be taught and assessed.

YEAR ZERO
Students follow three foundation modules chosen from Physics, Mathematics, Chemistry, Biology or Geography. Module choice depends on the programme.

Programme details and modules listed are illustrative only and subject to change.

HOW YOU’LL LEARN
Our research-led teaching ensures you are taught the latest advances in cutting-edge physics research. Lectures introduce and provide the details of the various areas of physics and related subjects. You will be working in tutorials and problem-solving workshops, which are another crucial element in the learning process, where you put your knowledge into practice. They help you to develop a working knowledge and understanding of physics. All of the lecturers also perform world class research and use this to enhance their teaching.

Most work takes place in small groups with a tutor or in a larger class where staff provide help as needed. Practical work is an integral part of the programmes, and ranges from training in basic laboratory skills in the first two years to a research project in the third or fourth year. You will undertake an extended project on a research topic with a member of staff who will mentor you. By the end of the degree you will be well prepared to tackle problems in any area and present yourself and your work both in writing and in person. In the first two years students take maths modules which provide the support all students need to understand the physics topics.

LIVERPOOL HALLMARKS
We have a distinctive approach to education, the Liverpool Curriculum Framework, which focuses on research-connected teaching, active learning, and authentic assessment to ensure our students graduate as digitally fluent and confident global citizens.
Careers and employability

The skills you will develop are highly valued by employers, such as a practical approach to problem solving, strong powers of analysis, numeracy, good IT skills and the ability to communicate well. At the University of Liverpool, we ensure our students graduate with the skills employers need. Our stakeholders group, formed of strong industry leaders, advises on all relevant aspects and entrepreneurship is introduced as a key skill through project work.

88% OF PHYSICS STUDENTS AT THE UNIVERSITY OF LIVERPOOL FIND THEIR MAIN ACTIVITY AFTER GRADUATION MEANINGFUL.

Graduate Outcomes, 2018-19.

Physicists are trained to solve a wide range of problems. That’s why graduates have gone on to explore careers in such diverse areas such as telecommunications; microelectronics; nuclear power and instrumentation; cryogenics; astronomy; geophysics; medical physics; materials science; computing; teaching; business; finance and management. Physics graduates are currently among those earning the highest starting salaries in the UK, according to latest figures, and our graduates enjoy excellent opportunities for careers in research, industry, computing, teaching, business and finance.

PREPARING YOU FOR FUTURE SUCCESS

At Liverpool, our goal is to support you to build your intellectual, social, and cultural capital so that you graduate as a socially-conscious global citizen who is prepared for future success. We achieve this by:

- Embedding employability within your curriculum, through the modules you take and the opportunities to gain real-world experience offered by many of our courses.
- Providing you with opportunities to gain experience and develop connections with people and organisations, including student and graduate employers as well as our global alumni.
- Providing you with the latest tools and skills to thrive in a competitive world, including access to Handshake, a platform which allows you to create your personalised job shortlist and apply with ease.
- Supporting you through our peer-to-peer led Careers Studio, where our career coaches provide you with tailored advice and support.
Fees and funding
Your tuition fees, how to pay, and other costs to consider.

TUITION FEES
Tuition fees cover the cost of your teaching, assessment, operating University facilities such as libraries, IT equipment, and access to academic and personal support.

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<th>UK fees</th>
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<td>Foundation year fee</td>
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<th>International fees</th>
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<td>This course is not available to international students.</td>
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Following the foundation years, standard course fees apply.

Fees stated are for the 2022-23 academic year and may rise for 2023-24.

ADDITIONAL COSTS
We understand that budgeting for your time at university is important, and we want to make sure you understand any course-related costs that are not covered by your tuition fee. This could include buying a laptop, books, or stationery.

Find out more about the additional study costs that may apply to this course.

SCHOLARSHIPS AND BURSARIES
We offer a range of scholarships and bursaries to help cover tuition fees and help with living expenses while at university.

Scholarships and bursaries you can apply for from the United Kingdom

Select your country or region for more scholarships and bursaries.
## Entry requirements
The qualifications and exam results you’ll need to apply for this course.

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<th>Your qualification</th>
<th>Requirements</th>
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<td>A levels</td>
<td>A typical offer is likely to be CDD at A level, in related subjects. Students with alternative A level combinations are welcome to apply but should expect to be made higher offers. For further information, visit <a href="http://www.carmel.ac.uk">www.carmel.ac.uk</a>, email <a href="mailto:degree@carmel.ac.uk">degree@carmel.ac.uk</a> or telephone +44 (0)1744 452 213. Applicants over 21 can be considered on GCSEs alone.</td>
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<td>GCSE</td>
<td>All applicants must have a minimum of five GCSEs at grade C/4 or above, including English Language, Mathematics and two Sciences. Core and Additional Science/Dual Science acceptable as the two Sciences. Alternatively, if separate sciences are being studied then one of these must be GCSE Physics. Applicants over 21 can be considered on GCSEs alone.</td>
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<tr>
<td>International qualifications</td>
<td>Select your country or region to view specific entry requirements. Many countries have a different education system to that of the UK, meaning your qualifications may not meet our entry requirements. Completing your Foundation Certificate, such as that offered by the University of Liverpool International College, means you’re guaranteed a place on your chosen course.</td>
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ALTERNATIVE ENTRY REQUIREMENTS

- If your qualification isn't listed here, or you're taking a combination of qualifications, contact us for advice

- Applications from mature students are welcome.