

Physical Sciences (with a Foundation Year)

A four-year route to a range of BSc (Hons) degree programmes within the Department on Physics.



UCAS Code F308 | 4 Years (1+3) | Full-time

This course provides students with the opportunity to enter a range of degree programmes offered within the Department of Physics.

Entry Requirements

A typical offer is likely to be CDD or 80 points in three subjects at A Level, preferably in related subjects. Students with alternative A Level combinations are welcome to apply but should expect to be made higher offers. All students must meet the baseline GCSE requirements of 5 GCSEs at grade C or above including Mathematics (grade 5 if numerical), English Language (grade 4 if numerical) and Sciences (either core and additional science or two separate sciences). Adult learners will be considered without Level 3 qualifications but must meet the GCSE requirements and may be invited for interview. Students with overseas qualifications should contact the college to enquire about whether their qualification are accepted for entry.

Students holding offers at the University of Liverpool may be made a change of course offer to F308, after the examination results, if they fail to gain the required number of points for their first choice course.

Applicants will be expected to fall into one of the following categories:

Adult learners returning to education with A Level passes

.....
Adult learners returning to education with 5 GCSE / O Level passes or more inc. Maths, Sciences and English Language

.....
Sixth Form school leavers currently studying A Levels or BTEC L3 Extended Diploma (Applied Science)

.....
Students from within the European Union

CONTACT

T: 01744 452213
E: degree@carmel.ac.uk
www.carmel.ac.uk

QAA Reviewed
Quality Assurance Agency
for Higher Education



UNIVERSITY OF
LIVERPOOL

carmel
college

Course Modules

All students will study three subjects over two semesters, with a choice of modules to make up their own programme.

However, certain subjects are compulsory for entry onto specific degree courses.

Degree titles and modules are marked on the course selection chart; [E] essential, [P] preferred modules and [O] optional.

Physics (2 semesters compulsory)

This module explores in-depth the topics of measurement, mechanics, electricity thermodynamics, atomic physics, forces, magnetism, materials, waves and oscillations. Assignments are set on a regular basis, aimed to extend the ideas studied as part of the lecture course. Practical work is used to reinforce theory.

Mathematics (2 semesters compulsory)

This module introduces students to graph work, differentiation and integration, vectors, statistics, trigonometry, logarithms, iteration and partial fractions. Students can expect to develop problem solving and analytical skills.

Additional Mathematics

(2 semesters preferred)

This module covers sequencing and series, binomials, complex numbers, polynomials, differentiation, mechanics, momentum, vectors and differential equations. Students can expect to further develop their problem solving and analytical skills.

Chemistry (2 semesters optional)

This module covers atomic structure, atoms and moles, the periodic table, chemical bonding, chemical energy, kinetics and an introduction to Organic Chemistry, alkanes and alkenes. In the second semester the key areas of Organic Chemistry, the Chemistry of the main group elements and Equilibria are studied in further depth. During the two semesters problem solving and practical work are integrated into the lecture programme.

Geography (2 semesters optional)

The module takes an enquiry approach into the investigation of the way people interact with their varied environments. Topics include urbanisation, landform systems, hazard management & pollution. Students will develop a range of case studies concerning the question, issues & problems that these geographical areas present.

Biology (2 semesters optional)

This module looks at cell structure and function, biological molecules, cell division, genetics and metabolism in the first semester. During the second semester students will study hormonal control, transport systems in mammals and multicellular animals, the action of drugs, pharmacology and immunity.

Progression

Assessment is by examination and coursework and students are expected to score an overall mark of 50% to progress to the second year of the course. In the second year students will start on the first year of:

F300 Physics

F350 Physics with Medical Applications

F390 Physics with Nuclear Science

F3F5 Physics with Astronomy

F640 Geophysics (Geology)

F656 Geophysics (Physics)

FG31 Physics and Mathematics

CONTACT

T: 01744 452213

E: degree@carmel.ac.uk

www.carmel.ac.uk

QAA Reviewed
Quality Assurance Agency
for Higher Education



UNIVERSITY OF
LIVERPOOL

carmel
college