Earth Sciences (with a Foundation Year)
A four-year route to a range of BSc (Hons) degree programmes in Earth or Ocean Sciences.

UCAS Code: F608 | 4 Years (1+3) | Full-time

This course provides students with the opportunity to enter a range of degree programmes in Earth or Ocean Sciences.

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 F608, after the examination results, if they fail to gain the required number of points for their first choice course.

CONTACT
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www.carmel.ac.uk

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
Course Modules

All students will study three subjects over the two semesters. Students can choose modules to make up their own programme, however certain subjects are compulsory for entry onto specific degree courses. Degree titles and optional/compulsory modules are marked on the course selection chart; [E] essential, [P] preferred and [O] optional.

**Biology (2 semesters)**
This course 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. Biology is a practical subject and students will have many opportunities to take part in laboratory investigations and practical sessions.

**Chemistry (2 semesters)**
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 ideas are extended and the key areas of organic chemistry, the chemistry of the main group elements and equilibria are studied in further depth.

**Geography (2 semesters)**
The module takes an enquiry approach into the investigation of the way people interact with their varied environments. Topics include ecosystems, atmospheric processes, river systems, natural hazards, environmental pollution and coastal systems. Students will develop a range of case studies concerning the questions, issues and problems that these geographical areas present.

**Mathematics (2 semesters)**
This module aims to introduce students to graph work, differentiation, trigonometry, logarithms and statistics. Emphasis will be placed on applying material to other areas of the programme studied.

**Physics (2 semesters)**
The module explores in some 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.

**Progression**
Assessment is by examination and coursework. 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:

<table>
<thead>
<tr>
<th>Mathematics</th>
<th>Physics</th>
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<tbody>
<tr>
<td>F600 Geology</td>
<td>F700 Ocean Sciences (Physics Pathway)</td>
</tr>
<tr>
<td>F640 Geophysics (Geology)</td>
<td>F700 Ocean Sciences (Chemistry Pathway)</td>
</tr>
<tr>
<td>F656 Geophysics (Physics)</td>
<td>FF78 Oceans, Climate and Physical Geography</td>
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<tr>
<td>F6F8 Geology and Physical Geography</td>
<td>G1F7 Maths with Ocean and Climate Sciences</td>
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