

Geology

BSc

College of Science,
Engineering and Food
Science



University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Introduction

Geology is the study of the chemical and physical composition, structure and evolution, over 4,500 million years, of the Earth's history. It allows understanding of the formation of natural resources such as coal, oil, gas, groundwater and mineral deposits; of climate change, and of natural geohazards like earthquakes and tsunamis.

Why Study

Year 1 comprises modules in geology, geography, earth science, biological sciences, environmental science, mathematics, chemistry and physics. In Years 2 and 3 there are a series of courses designed to cover all the main branches of geology. Fieldwork, for which there are additional fees, forms an integral aspect of all geology courses at UCC. In the summer of Year 3, and before the start of Year 4, a major field-based research project is undertaken in an area of choice, in Ireland or abroad. Several aspects of geology are treated up to specialised levels, in Year 4.

Study Abroad

Students have the option of organising for themselves a 6-week work placement during the summer between Years 3 and 4. This placement can be in any industry associated with Geology, for example, an oil company.

Careers

In recent years, graduates have gained employment in the area of environmental geology and exploration and have worked at home or abroad in diverse fields such as infrastructure and engineering projects, geotechnical site investigations, hydrogeology, landfill management and environmental impact and protection. Currently our graduates are in high demand and are being actively recruited by hydrocarbon and mineral exploration companies, guaranteeing unrivalled opportunities to work overseas.

Further Study

UCC Geology graduates can pursue geological research at MSc and PhD level in a range of focused topics in geology, such as:

- environmental geology
- palaeontology
- volcanic studies
- crustal geology and geochemistry
- structural geology
- marine geology
- sea bed mapping.

CK404

DEGREE OUTLET

COURSE PAGE ONLINE

www.ucc.ie/en/ck404/geology

CONTACT INFORMATION

Professor Andrew Wheeler

T: +353 (0)21 490 4650

E: bees@ucc.ie

www.ucc.ie/en/bees



HANNAH MCGILLYCUDDY

GRADUATE 2013

“Studying Geology at UCC was one of the best things I’ve ever done. The work is hard but well worth the effort, the friends you make become family (hard not to when you go on so many field trips with them). The Geology staff are friendly and helpful, going above and beyond to help you. Geology is one of those rare courses where your future will be unlikely to include a 9-5 office job and opportunities are endless to see the world.”

#uccmakeyourmark



KEY FACTS

- The course has a strong focus on field skills, which makes graduates highly employable. A combination of instruction and assessment methods are used to bring out the best in students

Year 1 Modules

BL1002 Cells, Biomolecules, Genetics & Evolution (5 credits); **BL1004** Physiology and Structure of Plants and Animals (5 credits); **BL1005** Habitats and Ecosystems (5 credits); **CM1003** Introductory Chemistry for Environmental Scientists (10 credits); **ER1006** Applied Earth Systems (5 credits); **EV1002** The Environment (5 credits); **GL1001** Introduction to Geology (5 credits); **GL1004** Geological Evolution of Ireland (5 credits); **GG1010** Introduction to Physical Geography (5 credits); **MA1001** Calculus for Science Part 1 (5 credits); **PY1009** Physics for the Environmental Sciences I (5 credits)

Year 2 Modules

CORE: Quaternary Environments and Geomorphology; The Atmospheric Environment; Biogeography; Coastal and Marine Geomorphology; Crystallography, Optics and Mineralogy; Sedimentological Processes and Sedimentary Petrology; Igneous and Metamorphic Petrology; Easter Field Course; Structural Geology; Geohazards and Research Skills; Fossils as Living Organisms

ELECTIVES: The Environment and Human Health; Environmental Archaeology; Fluids; Calculus for Science; Physics for the Environmental Sciences

Year 3 Modules

CORE: Evolution for Geologists; Advanced Structural Geology; Geohazards and Research Skills; Sedimentary Environments; Stratigraphy; Geological Map Interpretation; Crustal Evolution of NW Britain; Igneous and Metamorphic Petrology; Micropalaeontology and Palynology

ELECTIVES: Archaeo-palynology; Conservation Biology; Geoinformatics; Coastal and Marine Geomorphology

Year 4 Modules

CORE: Advanced Field Geoscience Techniques; Research Project or Geology Mapping Project

ELECTIVES: Practical Offshore Marine Science; Petroleum Geology and Basin Analysis; Applied Geophysics; Advanced Igneous Processes; Economic Geology; Geological Work Placement; Exceptional Glimpses of Ancient Life; Geochemistry

