

“The thing that attracted me to geoaerchaeology was the opportunity to link culture and nature, to gain a detailed understanding of how people have interacted with the earth over time.”



Dr Helen Lewis
UCD School of Archaeology



Training excavations at Templeteenaun medieval church site, Co. Wicklow (RIA funded). Credit: UCD School of Archaeology

Studying geoaerchaeology is like studying the geography of the past. It combines attempts to understand ancient cultures and societies through their material remains, with interpretation of archaeological contexts and artefacts made of soils, sediments, metals, clay and stone. We also study landscape history and change, and how the environment was influenced by, and influenced, people in the past; this history has a major impact on and lessons for our world today. Much of my own work has focused on how ancient people used space, on sites and in landscapes, through the study of buried soils, but geoaerchaeologists study all aspects of ancient culture, from all periods when there were people on the earth, even up to how we understand the past in the present.

The thing that attracted me to geoaerchaeology was the opportunity to link culture and nature, to gain a detailed understanding of how people have interacted with the earth over time. It also satisfied my interest in arts, humanities and science subjects, as it combines everything from social theory to soil micromorphology, chemistry and physics. Students who are interested in the application of geological and other scientific approaches to solving archaeological problems will find this an exciting and challenging joint degree option, unique in Ireland.

BSc in Archaeology and Geology

How will I find out more about this degree programme?

You can get information about this degree programme by calling, emailing or writing to:

Dr Helen Lewis,
UCD School of Archaeology,
University College Dublin, Belfield, Dublin 4
Tel: +353 1 716 8169
Email: helen.lewis@ucd.ie
Web: www.ucd.ie/archaeology

Dr Julian Menuge,
UCD School of Geological Sciences,
University College Dublin, Belfield, Dublin 4
Tel: +353 1 716 2141
Email: j.f.menuge@ucd.ie
Web: www.ucd.ie/geology



Undergraduate students drawing a medieval church wall.
Credit: UCD School of Archaeology

What is Archaeology and Geology?

Archaeology and Geology have in common the aims of understanding past life, dating and interpreting past events, investigating natural materials of interest to people, and exploring the relationships between culture and the natural world.

Archaeology is the study of the extraordinary diversity of human experience and long-term human culture, through the material remains left by ancient societies and individuals, and evidence of their past environments. Archaeology is also about the present: ancient places and objects form symbols for modern cultural and political identities. Models of ancient human adaptation to changing conditions inform modern understanding of the impact of environmental change on societies.

Geology is the study of the Earth: its composition and the processes that shape its surface and interior, for example global warming, earthquakes, volcanoes and landslides. It impacts profoundly on many aspects of life and society. Geology also seeks to answer fundamental questions regarding the structure, age and evolution of Earth, including the history of life.



A soil block sample (c. 5cm high) from an archaeological site.
Credit: Conor McDermott



Students augering at Belderrig, Co. Mayo. Credit: Conor McDermott

What will I study as part of my degree?

The Joint Major BSc Honours Degree in Archaeology and Geology is taught over three years (Stages). Modules are taught through various mixtures of lectures, laboratory practical classes, tutorials and fieldwork. Stage 1 includes a core introducing Archaeology and Geology. Students also take Chemistry and a selection of Biology, Geography and Mathematics modules. An optional Geology module introduces students to rocks in the field.

Stage 2 delivers a broad spectrum of Geology and Archaeology at intermediate level. Students take three core Archaeology modules (Environmental Archaeology; Interpreting Archaeology; Archaeology in Practice) and five core Geology modules (Sedimentology and Palaeobiology; Tectonics and Structure; Mineralogy and Petrology; Field Studies and Applied Geology; Applied Geophysics), plus two further Archaeology modules on specialised topics.

Stage 3 consists of advanced courses in related areas of Archaeology and Geology, including Geoarchaeology, with a strong emphasis on field investigation. Geoarchaeology Fieldwork is a 10-credit research module integrating geological and archaeological field skills, undertaken during the summer vacation between Years 2 and 3. Students also select from a range of optional modules in specialised aspects of Archaeology and Geology.



Stage 2 and 3 students examining peats containing evidence of the past environment at Belderrig, Co. Mayo. Credit: Graeme Warren

What are the opportunities for graduates in Archaeology and Geology?

In the past twenty years, archaeology has become an increasingly commercial field in Europe, and particularly in Ireland in the past decade, with many archaeological companies being formed. There is potential for careers in all aspects of the archaeological contract industry. The heritage sector is also growing, as is cultural tourism; all of these industries require cross-over knowledge between natural and cultural conservation and interpretation.

Science-based archaeology skills are particularly in demand in Ireland and abroad, in both contract and research archaeology professions, and careers for specialists are found both within larger organisations and for self-employed individuals or small business. It is anticipated that the unique mixture of transferable academic and practical, humanities and science skills will also be extremely beneficial for a wide range of other future corporate, research, education and administrative careers.

This degree also leads on to several postgraduate degree options, including a planned UCD master's degree in Geoarchaeology, and the Archaeology Higher Diploma, MA, MLitt and PhD programmes, leading in turn to academic research and education careers.