

MPhil IN ARCHAEOLOGICAL SCIENCE

Cutting-edge developments in science are increasingly applied to help answer questions at the heart of archaeology. How can we reconstruct ancient diets and climate using isotopes? What can materials analysis tell us about the ancient production and exchange of metals? How can genetics help us understand ancient and modern societies?

The MPhil in Archaeological Science is exceptional in its breadth and interdisciplinary crossovers. It will allow you to learn theories and methods within the fields of materials analysis, geoarchaeology, zooarchaeology, archaeobotany, proteomics, genomics, computational archaeology, and isotopic and molecular archaeology.

Supported by our world-class expertise and facilities, this programme will train you in the research skills necessary to design and carry out your own independent research projects incorporating the latest scientific methods.

THEMES

This MPhil programme allows you to acquire experience of an unparalleled range of themes and analytical methods. Unusually for programmes of this kind, it promotes connections between environmental archaeology and material culture studies. Some cross-cutting themes that link the different analytical approaches include:

- palaeodiet and palaeoclimate reconstructions
- ancient trade and exchange
- life-histories of landscapes, people and things
- the roles of ancient and modern archaeogenetic studies
- the potential for ancient proteins in archaeology and cultural heritage
- identity, knowledge transfer and mobility in society and material culture
- craft organisation and technological innovations
- food procurement, the origins and spread of agriculture and animal herding
- taphonomy and site formation

These themes can be explored by variously integrating different approaches, including: the isotopic analyses of human and animal tissue; microscopic, chemical and isotopic analyses of artefacts and other material remains; protein and DNA analyses of biogenic samples; zooarchaeological and archaeobotanical investigations; the application of soil micromorphology to palaeosols and archaeological settlements; spatial and temporal analysis of settlement distribution.



STRUCTURE

This eleven-month programme allows you to design a curriculum that is tailored to your own interests. It is possible to combine modules in archaeological science with modules on particular theories, periods or regions.

You take two term-long core modules: Principles of Archaeological Science and Applications of Archaeological Science. These provide you with training in the general foundations, applications and practice of the most established techniques in archaeological science, using examples of a wide range of materials, methods, regions, periods and problems.

You then choose at least two term-long archaeological science modules from a list that includes:

- Biomolecular Archaeology
- Archaeological Materials and Technologies
- Environmental Archaeology
- Geoarchaeology
- Computational Archaeology
- Human Osteology

In addition, you can choose two further modules from the list above or you can choose any other year-long module or two term-long modules from other MPhil programmes. You also take a Research Skills module and write a dissertation. For your dissertation, you will complete intensive, self-driven and original research on an archaeological science project under the supervision of leading specialists.

TEACHING

Lectures and seminars are integrated with extensive laboratory sessions, enabling you to gain hands-on experience of multiple laboratory techniques while developing specific areas of specialisation. Teaching takes place in small groups. Our state-of-the-art laboratory facilities in the Department and multiple collaborations with other Departments can offer you experience in virtually any technique necessary for your training or research.



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AFTER THE MPhil

This MPhil programme provides you with skills in critical thinking, team working, multimedia communication, numerical competence and the use of advanced analytical instruments. This is an excellent foundation for further postgraduate study. You will also be well prepared to work in archaeological science labs or as a specialist in the heritage sector.

WHAT ARE WE LOOKING FOR?

We look for postgraduates in archaeology, science, or any other cognate discipline. We actively encourage diversity and tailor our training to challenge you and build on your own strengths.

CONTACT

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