# Archaeological and Geophysical Survey

This course explores the many non-intrusive techniques and methods of investigation employed by archaeologists. The primary focus is upon the recording of earthworks and on geophysical techniques and the ways in which these spatial datasets can be integrated and interpreted. Consideration is also made of standing building recording and remote sensing. A combination of lectures and fieldwork will be used to develop a balance of practical skills and theoretical knowledge.

# Learning outcomes

* Students should understand and critically evaluate the range of survey techniques and methodologies available and their role in development control and research archaeology.
* They should understand the underlying principles behind measured and geophysical survey techniques.
* Students will develop practical skills in the collection, analysis and interpretation of archaeological and geophysical survey data.

# Content summary

* The survey process
* Application of non-invasive investigation techniques
* The recording process and the use of day books
* Levels of survey
* Understanding maps and plans – projections, distortions and grids
* Principles of scale, accuracy and errors
* Levelling and the use of stadia
* Calculating slope and horizontal distance
* Principles of Global Positioning Systems (GPS)
* Principles and application of Total Stations and plane tables
* Building recording
* Principles of Computer Aided Design (CAD) systems and Geographical Information Systems (GIS)
* Production of reports, archives and illustrations
* The role of geophysics in archaeology
* Principles of magnetometry, magnetic susceptibility, resistivity, metal detectors, GPR, etc. ·
* Interpretation of geophysical data
* Presentation of geophysical data
* Selection of methods and logistics of geophysical prospection
* Operation of typical geophysics equipment

# How to apply

If you wish to apply for this course then please email Dr James Moore – [James.Moore@uhi.ac.uk](mailto:James.Moore@uhi.ac.uk)