
The Building Stones of Cambridge

Date	3 July 2016	Time	10.00 – 16.45
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Venue	Madingley Hall Madingley Cambridge
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Academic	Dr. Mike Tuke	Course code	1516NDX044
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Director

Director of Programmes Emma Jennings

For further information on this course, please contact Clare Kerr, Public Programmes Coordinator
01223 746237 clare.kerr@ice.cam.ac.uk

To book See: www.ice.cam.ac.uk or telephone 01223 746262

Tutor biographies

Mike obtained a degree in Geology at the University of Oxford and then went to Canada to Make a geological map of the northern tip of Newfoundland for his Ph.D. While in Canada he also spent a season mapping in the Canadian Arctic. He has since worked as an exploration Geologist in Malaysia and Zambia. Recently he has taught A level and degree courses and other geology courses specifically for adults. His main interest is in teaching Geology and developing experiments, demonstrations and visual aids for teaching Geology. He has written both a book and a CD of Geological experiments and has a website of geological activities and demonstrations.

Day school content:

In the morning we will be in the lecture room learning how rocks are formed and used whereas in the afternoon we shall walk around the city centre looking at the use of building stones.

This course covers the different ways rocks have been used in the building of Cambridge and how those rocks were formed and how they can be recognised.

Rocks are used in many aspects of urban construction: roofing, masonry, cladding, road stone, paving and kerbstones etc. We need rocks with different properties, sizes and shapes for these different uses. We shall look at the many different ways rocks can be formed and how their mode of formation imparts to rocks their varying properties.

Rocks can be subdivided into three major groups: sedimentary, metamorphic and igneous. We shall look in detail at the processes by which these three groups of rocks are formed and given their properties. The course covers the rock cycle which explains how the erosion and weathering of older rocks produces sediment and solutions which are eventually buried and turned into sedimentary rocks. Deeper burial during mountain building heats and compresses these sedimentary rocks and turns them into metamorphic rocks. Deeper burial heats the rocks still further and begins to melt them. This molten rock, called magma, is able to rise towards the surface where it cools and crystallises to form igneous rocks.

You will have the chance to examine and handle a variety of rocks and sediments in the morning.

In the afternoon we shall walk around the Cambridge City centre and observe the various uses of rocks.

Programme:

09:30	Terrace bar open for pre-course tea/ coffee
10:00 – 11:15	The uses of stone in building. Introduction to the formation of rocks and minerals.
11:15	Coffee
11:45 – 13:00	The formation of the different types of rock.
13:00	Lunch
14:00 – 16.45	Visit to Cambridge city centre to look at building stones - Please ensure you bring sensible clothing and footwear
16:45	Day school ends

Reading and resources list

Listed below are a number of texts that might be of interest for future reference, but do not need to be bought (or consulted) for the course.

Author	Title	Publisher and date
Park, Graham	Introducing Geology	Dunedin 2010
Armstrong, Debbie	Geology	Heinemann 2008
Webster, David	Understanding Geology	Oliver and Boyd 1997

Website: The rock cycle www.geolsoc.org.uk/rockcycle

Additional information

Venue

Details of how to find Madingley Hall can be found on our website:
<http://www.ice.cam.ac.uk/who-we-are/how-to-find-the-institute>

Refreshments

Tea and coffee and a light sandwich lunch will be provided. If you have any specific dietary requirements or allergies and have not already advised us, please inform our Admissions Team on ice.admissions@ice.cam.ac.uk or +44 (0)1223 746262.

Note Students of the Institute of Continuing Education are entitled to 20% discount on books published by Cambridge University Press (CUP) which are purchased at the Press bookshop, 1 Trinity Street, Cambridge (Mon-Sat 9am – 5:30pm, Sun 11am – 5pm). A letter or email confirming acceptance on to a current Institute course should be taken as evidence of enrolment.

Information correct as of: 08 July 2015