

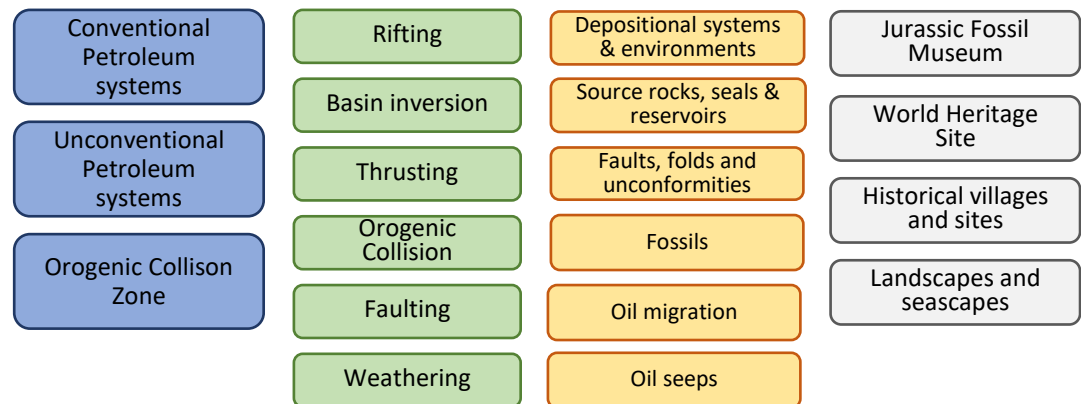
United Kingdom FIELDTRIPS



- ❑ The Southwestern corner of England and Southern Wales has great potential for geological tours of scientific and technical interest
 - ❑ Petroleum systems (Source, Reservoir, Seal, Seep)
 - ❑ Tectonics (from rifting to compression & inversion)
 - ❑ Fossils
- ❑ The region is easily accessible, of spectacular nature, and has numerous sites of geological and touristic interest
 - ❑ Smooth professional coach travel with London airport pick-ups
 - ❑ Numerous points of geological interest and good quality outcrops, including beaches, coastal sections, and woodland reserves
 - ❑ World-renowned Late Jurassic Etches fossil collection museum
 - ❑ Plenty of options for excellent quality food and accommodation
- ❑ IGI offers flexibility on trip structure with options for hybrid classroom/field learning

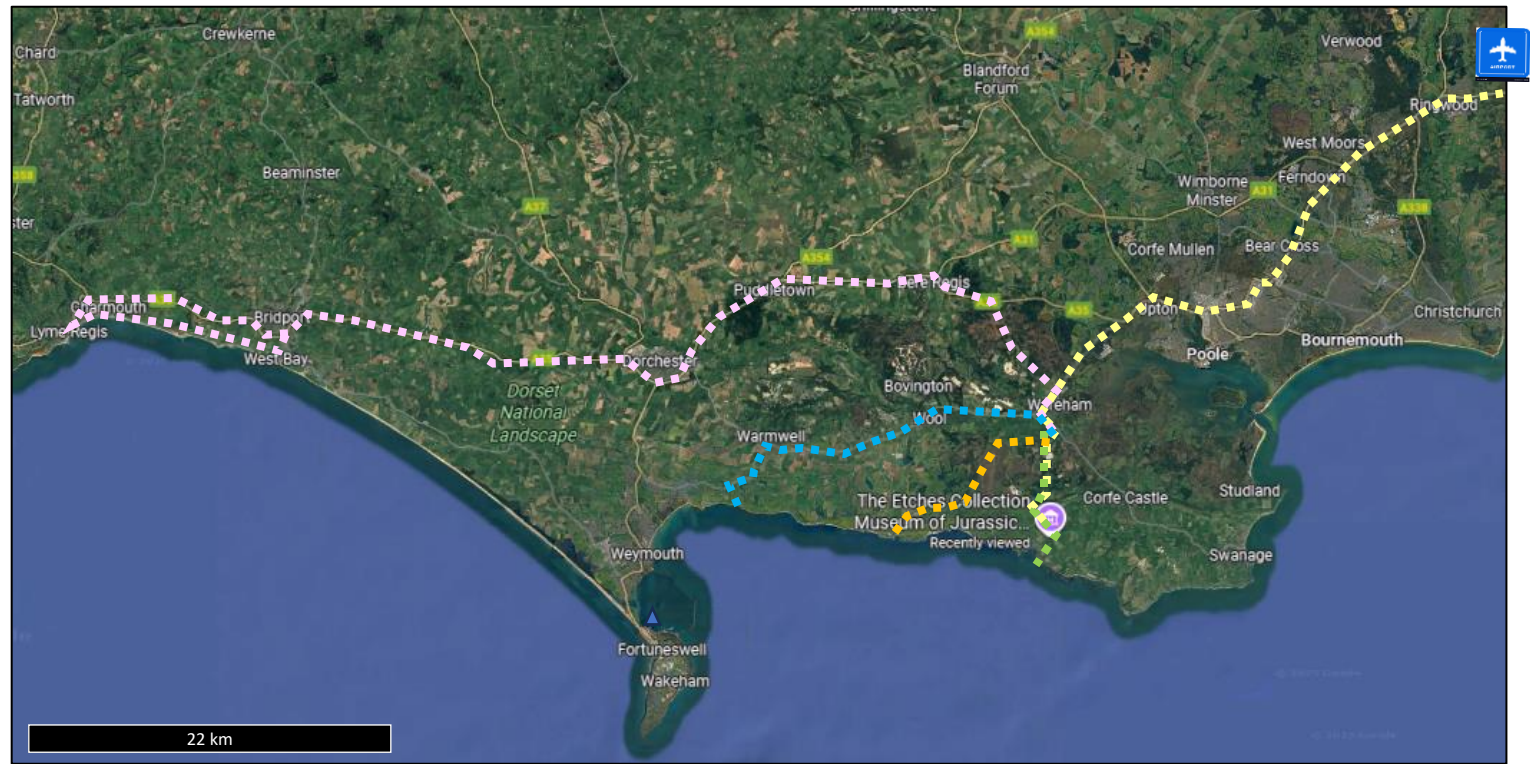


50 km



Example of a week programme

The tour offers a hybrid of classroom teaching, while also visiting field sites of geological and/or touristic interest. Full travel and accommodation are included along with high-quality local food. In this example, the day's teaching starts at 09.00. All site field visits are accompanied by a description of the site, full geological context and full colour handouts.



Tuesday (starting at 10:00)
Heathrow Airport-Etches Museum (3h)

- Packed lunches provided.
- Kimmeridge-age marine fossils 152-157 million years ago
- Regional and Petroleum Exploration History Introduction

Springfield Country Spa Hotel (15m)

Wednesday (starting at 09:00)
Classroom – Petroleum System Intro

- Packed Lunch

Field – Lyme Regis & West Bay (1.5h)

- Lower Jurassic source rock and bitumen
- Controls on organic deposition and diagenesis
- Source rock geochemistry
- Oil reservoir character and production
- Dinner at a local restaurant

Thursday (starting at 09:00)
Classroom – Source Rock Geochemistry

- Lunch at the hotel

Field – Kimmeridge Bay (20m)

- Upper Jurassic source rock and bitumen
- Controls on organic deposition and diagenesis – anoxia / euxinic
- Source rock geochemistry
- Active oil exploration

Dinner at hotel

Friday (starting at 09:00)
Classroom – Molecular Fluid Geochemistry

- Lunch at the hotel

Field – Osmington Mills (30mins)

- Sedimentary transition from Clastic – carbonate - clastic
- Exhumed oil reservoir
- Geology, landscape and wines/beer

- Dinner at a local restaurant in Historic Town – Corfe

Saturday (starting at 09:00)
Lulworth Cove (20m)

- Walk over time (Jurassic-Cretaceous)
- Inversion tectonics (mountain building, faults, folding and salt tectonics)
- Oil Migration
- Packed lunch

Drive to the airport

Example of a 1-Day trip (Bideford – Millook Haven)

The day starts with a 15 min by bus trip between Bideford (Hotel) and Westward Ho! Here, down on the shoreline, a range of ripple styles can be observed in the Crackington Formation, which collectively indicate distal turbidite deposition.

Also present at this location is a raised beach dating from 125k when the sea level fell, leaving behind an isolated elevated fossil cliff-line.

20 min by bus to Peppercombe Cliffs, where a sharp colour contrast in the cliffs is seen. Compared to the sombre grey of the Carboniferous, locally, downthrown Permo-Triassic bright red terrestrial oxidised muds, sands and conglomerates are preserved.

Also seen is a striking Variscan unconformity, juxtaposing folded Carboniferous beds next to parallel bedded Permian sediments.

30 min by bus to Hartland Quay. Following a scenic lunch stop, Warren Beach invites visitors to once again explore features of the turbidite Crackington Fm. sequence. However, here, clearly seen are the visual effects of continental collision, with the sandstones and shales folding into tight chevrons. Also seen are a range of other fold types which can be investigated.

At Hartland Quay, there is an impressive wave-cut platform which allows the viewer to experience the folded landscape in plan view as opposed to the usual sectional view.

50 min by bus to Millook Haven. Although not the easiest site to access, it is worth the visit. In 2004, the cliffs of Penhalt Cliff were voted by the Geological Society as the top ‘folding and faulting’ sites in the UK, and one of the top 10 geological sites in the UK. The spectacularly folded series of inter-bedded sandstones and shales was originally deposited in deep water. Here, the chevron folds have experienced higher degrees of compressional stress and are now recumbent in orientation.

After returning from the beach, a short drive (10 min by bus) will provide an opportunity for a refreshment stop with sea views, before returning to Bideford (1 hr bus) for dinner

