



UNIVERSITY OF LONDON
External System

ACADEMIC EXCELLENCE SINCE 1858



Department of Earth Sciences

MSc Petroleum Geoscience by Distance Learning

Postgraduate Diploma Petroleum Geoscience by Distance Learning

Duration: up to 5 years

Programme Outline

- An on-line version of a well established programme with an international reputation for excellence in the petroleum industry.
- Primarily suited to hydrocarbon industry professionals who wish to further develop knowledge and skills whilst continuing full-time work.
- Comprehensive learning materials delivered via a dedicated web portal: video clips, animations, audio-visual presentations, fully-illustrated manuals, self-assessment quizzes, exercises and computer-based practicals.
- Field trips and intensive study seminars held at various locations worldwide.
- An option to be awarded a Postgraduate Diploma (PGDip) in Petroleum Geoscience is available if a project is not undertaken.

*Hydrocarbons are a precious resource. Finding new reserves is becoming ever more challenging and the enhanced recovery of reserves from existing fields is becoming increasingly important. Well trained Petroleum Geoscientists with the ability to integrate geological and geophysical data, and to apply it on a variety of scales, have a vital role to play. The **MSc in Petroleum Geoscience** provides graduates with training in the practical and technical skills required to address a range of questions, from understanding the distribution of hydrocarbons in sedimentary basins to quantifying the complex structural, stratigraphic and sedimentological architecture of individual reservoirs.*

Studying Petroleum Geoscience at Royal Holloway

- The programme has the same curriculum as the MSc Petroleum Geoscience offered in London at the Royal Holloway campus and at Tyumen Oil and Gas State University in Russia.
- The department is ranked highly in national research assessment exercises as having a research output of international excellence.
- The programme has been developed by and is supported by a team of 13 academic staff, all active researchers and tutors in the field of Petroleum Geoscience.
- Tutorial support provided for each module by Royal Holloway staff
- With experience of supervising hundreds of independent projects for masters students, Royal Holloway staff can provide expert advice for the planning of projects to be carried out using industry data.

Course Content

The programme comprises six taught modules (MSc and PGDip) and an Independent Research Project (MSc only).

Geodynamics of Sedimentary Basins

Tectonics and geodynamic evolution of sedimentary basins, subsidence analysis, thermal histories.

Geophysical Analysis

Seismic acquisition and processing, interpretation techniques, seismic mapping, attribute analysis and reservoir characterisation.

Structural Analysis

Structural interpretation of seismic data, fault and fracture analysis.

Sedimentology and Stratigraphy

Siliciclastic and carbonate depositional systems, facies analysis, seismic and sequence stratigraphy, and palaeogeographic analysis and mapping.

Reservoir Geoscience

Well log analysis, rock mechanics, reservoir geology and geophysics, reservoir modelling.

Petroleum Systems

Petroleum systems, basin modelling, play analysis, petroleum economics.

Independent Project (MSc only)

An independent research project focussed on some aspect of Petroleum Geoscience, designed to meet individual training needs & carried out in association with industry.

Tuition and Assessment

Fully illustrated course materials provided through a web portal, with interactive coursework exercises and on-line tutorials. A two-week residential study period with team projects and incorporating a field course forms part of the programme. On-line quizzes and tutor-supported coursework provide feedback on learning; assessment is by coursework exercises submitted on-line and written examinations for each module.

Programme fees

MSc: Total £10,370 divided into initial registration fee, module fees and project fee.

PGDip: Total £8,520 divided into initial registration fee and module fees

Applications www.londonexternal.ac.uk/geoscience

Further details

For further information contact the Postgraduate Coordinator, Johanna Lindholm (j.lindholm@es.rhul.ac.uk)

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