

DEPARTMENT OF CHEMICAL ENGINEERING BSC PETROLEUM GEOSCIENCE

The Bachelor of Science (BSc) Petroleum Geoscience produces competent young professionals with a comprehensive knowledge and understanding of Petroleum Geology, Petroleum Geophysics and a good basic knowledge of Petroleum Engineering. It is one of the few university geoscience programmes worldwide that was created through a partnership of academia, government and industry.

This programme is professionally accredited by the Geologic Society of London (GSL) and the Energy Institute (EI). Students who complete this degree are trained to the highest international standards and are therefore fully equipped to smoothly transition into working professionals in industry.



Overview

Petroleum Geoscience is the study of the earth's structure to find and responsibly produce commercial hydrocarbon deposits. Petroleum Geoscientists identify exploration prospects by assessing acreage to suggest possible drilling sites for hydrocarbon exploration. They work alongside Reservoir Engineers, Petroleum Engineers, Production Engineers, Petrophysicists, Drillers and commercial units from the initial appraisal stage of new discoveries to the production of hydrocarbons.



Why Study Petroleum Geoscience at The UWI?

Trinidad and Tobago has a well-developed and mature petroleum industry with about one hundred years of experience in exploration and production.

Industry links

The Petroleum Geoscience Unit has support from most of the major upstream hydrocarbon companies and the Government of Trinidad and Tobago. You will benefit from excellent links with relevant stakeholders such as bpTT, EOG Resources, Shell, BHP Billiton, Petrotrin and NGC. Lectures and field work are also conducted by leading industry experts from a variety of petroleum companies as well as academic researchers with more than a decade of experience in the field.

Professional Organisations

We also encourage you to become involved with the Geological Society of Trinidad & Tobago (GSTT) and internationally recognized organizations such as the American Society of Petroleum Geoscientists (AAPG), Society of Petroleum Engineers (SPE) and Society of Exploration Geophysicists (SEG). Through guest lectures, filed trips and other events, these organisations provide excellent learning and networking opportunities for young professionals

Balance between Theory & Practice

You will gain experience of the practical application of geoscience in the real world through field work and also be exposed to current industry thinking, practices and challenges through an internship

programme developed in collaboration with industry.

Programme Structure

This **full time, 3 year** degree leads to a BSc Honours level qualification and is professionally accredited by the Geologic Society of London (GSL) and the Energy Institute (EI).

The first two years of the Petroleum Geoscience course progressively build a broad, sound knowledge in relevant courses in Geology, Geophysics, Mathematics, Communication Studies and IT, while covering the fundamentals of Petroleum Geoscience and Petrophysics.

The courses are integrated with a comprehensive and carefully designed fieldwork programme and laboratory work. In the final year, in addition to advanced Petroleum Geology and Geophysics courses, you will be exposed to Petroleum Engineering and Formation Evaluation as well as Petroleum Economics. The final year BSc Project Dissertation is an individual project that integrates all the aspects of the Petroleum Geoscience discipline and can be undertaken through The UWI or at an oil and gas company

For a detailed programme outline and course descriptions, download the Faculty of Engineering's Undergraduate Faculty Booklet at www.sta.uwi.edu/faculty-booklet-archive

What made the programme unique and such a success was the involvement of the industry and industry professionals in the course curriculum. They ensured that we were not just deepening our understanding of the technical work but also applying what we have learnt to real life oil and gas problems.

- Tracy Gunness Geologist, bpTT (Inside bpTT Vol 3 Issue 2



Entry Requirements:

This programme attracts the very top science students who are fascinated with the Earth and wish to have a productive industrial career in the energy sector. Applicants should be inquisitive and enthusiastic about scientific study; be innovative and willing to embrace new ideas and challenge existing views; and be motivated to pursue a challenging degree course.

- Grade A or B in CAPE Mathematics
- CAPE Physics or Chemistry
- Geography or one other science subject

OR

 minimum GPA of 3.5 obtained in Pre-ENG

Regional & International Applicants

We welcome applications from all over the world, especially the Caribbean region and Latin America. If the requirements for your qualifications are not listed here, please email us at

geosciences@sta.uwi.edu for guidance on which qualifications we accept.



Where will your degree take you?

Over the last decade, more than 80% of our graduates have been employed in the oil and gas industry or have gone into further research at the MPhil and PhD levels. Companies and organisations that have employed our graduates include bpTT, Petrotrin, Chevron, Shell, EOG Resources, Schlumberger, Baker Hughes and various government agencies.

Possible Career Paths:

- Geoscientist
- Geologist
- Geophysicist
- Petroleum Engineer
- Reservoir Engineer
- Petrophysicist
- Sedimentologist
- Geochemist
- Palaeontologist
- Petrologist
- Academia

For further information:

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