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Why Join AUC's Petroleum Engineering Program?

- AUC provides quality professional education that advances the ideals of American liberal arts and lifelong learning. As freedom of academic expression is fundamental to this effort, AUC encourages the free exchange of ideas and promotes open and ongoing interaction with scholarly institutions throughout Egypt and other parts of the world.
- The University environment is designed to advance proficient use of the tools of learning as well as students' thinking capabilities, language and personal skills.
- Students are trained by outstanding faculty members with PhDs from leading universities in the United States, Canada, Europe and Egypt. Faculty members have considerable professional experience gained through working for the petroleum industry in different capacities.
- AUC has one of the best English-language libraries in the Middle East, equipped with state-of-the-art information-access technologies.
- The campus includes up-to-date computer facilities and software, as well as well-equipped experimental laboratories in nearly every specialty.
- Students have access to a rich and diverse student life with a broad array of extracurricular activities.
- The New Cairo campus is spacious, technologically advanced and environmentally sensitive, and offers world-class educational resources.
- Students explore the wealth of the earth's crust and engage in the development and production of energy resources.
- Graduates join a pool of qualified professionals that are in high demand in today's job market in one of the highest paying industries.



THE AMERICAN UNIVERSITY IN CAIRO



SCHOOL OF SCIENCES AND ENGINEERING

Department of Petroleum and Energy Engineering

UNDERGRADUATE PETROLEUM ENGINEERING PROGRAM

Bachelor of Science in Petroleum Engineering

DEPARTMENT OF PETROLEUM AND ENERGY ENGINEERING

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The Department of Petroleum and Energy Engineering opens the doors to an extremely challenging and exciting career involving the discovery, exploration and processing of the earth's energy resources through the knowledge of basic sciences, geosciences and petroleum engineering. The program offers a Bachelor of Science in petroleum engineering and adopts an integrated approach, striking a balance between the fundamentals of oil and gas exploration, the production and practical know-how and the application of advanced technology. The program focuses on strengthening ties with the industry, and provides graduates with excellent opportunities in the regional and global job markets.



Mission

The mission of the petroleum engineering (PENG) program is to provide students with a world-class, accredited petroleum engineering education within the context of a liberal arts environment, and prepare them for a successful career in the petroleum industry -- both locally and internationally. The program instills in the students the pursuit of excellence, coupled with social responsibility, ethical conduct and professional behavior.

Academic Offerings

The petroleum engineering program is approved by the Ministry of Higher Education. For details, visit <https://sse.aucegypt.edu/departments/petroleum-engineering>.

Admission Requirements

Students are admitted to the program either upon admission through AUC's system of declaration-at-the-gate or after successful completion of criteria courses. For the required courses, consult the department, admissions office or the academic advisor.

Scholarships

The department works closely with the industry to provide a number of scholarships to outstanding students. Available scholarships are announced by the department. Currently, scholarships are offered by industry leaders Apache Corporation and Shell.

Graduation Requirements

The petroleum engineering major is designed as a five-year program. A total of 162 credits must be successfully completed for the degree of a Bachelor of Science in petroleum engineering.

The program comprises the following:

Core Curriculum Requirements	33 credits
Engineering Core Requirements	52 credits
Petroleum Engineering Requirements	68 credits
Petroleum Engineering Electives	9 credits



Facilities and Specialized Laboratories

The program's curriculum is served by well-equipped laboratories of the science and engineering departments, in addition to the specialized petroleum engineering laboratories. The department developed state-of-the-art laboratories in drilling engineering, oil and gas production, fluid and rock properties, and computer simulation. Hands-on experience is also provided through internships.

Extracurricular Activities

The department encourages students to participate in professional and honor societies in the field. The Society of Petroleum Engineering (SPE) student chapter (www.spe.org) was established to serve students of the department and encourage them to participate in activities that enhance their social and practical skills, and serve their needs in the petroleum and energy engineering discipline. The AUC SPE student chapter has won the prestigious Outstanding Student Chapter Award given by SPE International. The Department of Petroleum and Energy Engineering encourages and often supports travel of outstanding students to compete in SPE student paper contests and technical events.



Career Opportunities

Petroleum engineering graduates have excellent job opportunities in one of the highest paying professions worldwide. Our primary goal is to produce highly qualified engineers with the best possible preparation to compete in local, regional and global energy-related job markets. Graduates also have excellent opportunities to continue their education toward higher degrees. Target employers include, but are not limited to, oil and gas companies, oil field services, and others.

Faculty

The program was initiated in Fall 2007. Currently, there are seven full-time faculty members. Several adjunct faculty members from various reputable universities, as well as from the industry, are also affiliated with the department. Faculty members have considerable industry experience in the oil and gas fields, in addition to their academic experience.

Research

Current research activities include investigation of nano-fluids and other advanced fluids in enhancing oil recovery, stimulation of unconventional reservoirs, and use of artificial neural networks (ANN) and AI techniques in solving practical problems.

Accreditation

- AUC is accredited in the United States by the Commission on Higher Education of the Middle States Association of Colleges and Schools. All programs of the School of Sciences and Engineering are accredited on the national level by the National Authority for Quality Assurance and Accreditation of Education (NAQAEE).

- The program is approved by the Ministry of Higher Education and is accredited by the Supreme Council of Universities in Egypt. The department has recently filed for accreditation by the American Engineering Accreditation Commission of the ABET --formerly known as the Accreditation Board for Engineering and Technology.

