

# HAROLD VANCE DEPARTMENT OF PETROLEUM ENGINEERING

Petroleum Engineers provide the world with energy while safeguarding the environment. Petroleum Engineering is concerned primarily with the safe and economic extraction of oil, gas, and other natural resources from the earth. Oil and gas is produced through the design, drilling and operation of wells and well systems, and the integrated management of the underground reservoirs in which the resources are found.

The mission of the Petroleum Engineering Department is to create, preserve, integrate, transfer and apply petroleum engineering knowledge and to enhance the human capability of its practitioners. The Petroleum Engineering Program has two educational objectives:

- graduates will have the technical depth and breadth to be successful professionals early in their careers; and
- graduates will have the broad technical knowledge and soft skills needed to rise to positions of professional leadership.

In essence, the goal of the Petroleum Engineering curriculum is to provide a modern engineering education with proper balance between fundamentals and practice, and to graduate engineers capable of being productive contributors immediately who are also prepared for life-long learning. The curriculum includes study of:

- design and analysis of well systems and procedures for drilling and completing wells;
- characterization and evaluation of subsurface geological formations and their resources;
- design and analysis of systems for producing, injecting and handling fluids;
- application of reservoir engineering principles and practices for optimizing resource development and management; and
- use of project economics and resource valuation methods for design and decision making under conditions of risk and uncertainty.

There is a heavy emphasis on mathematics, computer applications, communication skills and interdisciplinary problem solving. As a result, Aggie petroleum engineers are in high demand in the industry, and their starting salaries are consistently among the top in the University and the nation.

The department is well known for its curriculum, facilities and faculty, and its undergraduate program is recognized as one of the top petroleum engineering programs in the United States. The faculty comprises more than 36 professors and lecturers, many of them widely known and globally involved in the petroleum industry. Three (3) of the faculty are members of the prestigious National Academy of Engineering, and 20 are Distinguished Members of the Society of Petroleum Engineers. The Bachelor of Science program is accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org).

Students must work as interns within the Energy Industry. A minimum of one internship, six weeks of approved experience, is required for graduation. The department also participates in the Cooperative Education Program.

In addition to the Bachelor of Science degree in Petroleum Engineering, the department also offers both masters and doctoral degrees, including

Master of Science, Master of Engineering, and Doctor of Philosophy (see the *Texas A&M University Graduate and Professional Catalog*).

The department offers a combined program designed to help students complete both a Bachelor's degree and a Master's degree within 5 years. For more information, please contact the advising office.

Before commencing course work in the major, students must be admitted to the major or have the approval of the department.

## Faculty

Abedi Mashhadimighani, Sara, Associate Professor  
Petroleum Engineering  
PHD, University of Southern California, 2012

Akkutlu, Ibrahim Y, Professor  
Petroleum Engineering  
PHD, University of Southern California, 2002

Al-Mohannadi, Nasser, Professor of the Practice  
Petroleum Engineering-Qatar Campus  
PHD, Colorado School of Mines, 2004

AlMujalhem, Manayer, Research Assistant Professor  
Petroleum Engineering-Qatar Campus  
PHD, Texas A&M University, 2021

Alexander, Gia, Lecturer  
Petroleum Engineering  
MA, Texas A&M University, 1991

Amani, Mahmood, Professor  
Petroleum Engineering-Qatar Campus  
PHD, Texas A&M University, 1997

Banerjee, Debjyoti, Professor  
Petroleum Engineering  
PHD, University of California at Los Angeles, 1999

Barrufet, Maria A, Professor  
Petroleum Engineering  
PHD, Texas A&M University, 1987

Bastian, Peter A, Professor of the Practice  
Petroleum Engineering  
MS, Texas A&M University, 1983

Blasingame, Thomas A, Professor  
Petroleum Engineering  
PHD, Texas A&M University, 1989

Dattagupta, Akhil, University Distinguished Professor and Regents Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 1992

Diyashev, Iskander, Professor of the Practice  
Petroleum Engineering  
PHD, Texas A&M University, 1998

Fadlemlula, Mohamed, Instructional Associate Professor  
Petroleum Engineering-Qatar Campus  
PHD, Middle East Technical University, 2012

Gildin, Eduardo, Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 2006

Hasan, Abu Rashid, Research Professor  
Petroleum Engineering  
PHD, University of Waterloo, 1979

Hascakir, Berna, Associate Professor  
Petroleum Engineering  
PHD, Middle East Technical University, 2008

Hill, Alfred D, Regents Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 1978

Jochen, Valerie Ann, Professor of the Practice  
Petroleum Engineering  
PHD, Texas A&M University, 1994

Khan, Faisal, Professor  
Petroleum Engineering  
PHD, Pondicherry University, 1998

Kim, Jihoon, Associate Professor  
Petroleum Engineering  
PHD, Stanford University, 2010

Kim, Kiseok, Assistant Professor  
Petroleum Engineering  
PHD, University of Illinois at Urbana Champaign, 2017

King, Michael J, Professor  
Petroleum Engineering  
PHD, Syracuse University, 1980

Laprea Bigott, Marcelo, Professor of the Practice  
Petroleum Engineering  
PHD, Texas A&M University, 1979

Lee, William J, Regents Professor  
Petroleum Engineering  
PHD, Georgia Institute of Technology, 1963

Liang, Jenn T, Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 1988

Maggard, Bryan, Senior Lecturer  
Petroleum Engineering  
PHD, Texas A&M University, 2000

McVay, Duane A, Professor  
Petroleum Engineering  
PHD, Texas A&M University, 1994

Medina Cetina, Zenon, Associate Professor  
Petroleum Engineering  
PHD, John Hopkins University, 2007

Meehan, Donald, Professor  
Petroleum Engineering  
PHD, Stanford University, 1989

Mishra, Srikanta, Research Professor  
Petroleum Engineering  
PHD, Stanford University, 1987

Misra, Siddharth, Associate Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 2015

Moridis, George J, Professor  
Petroleum Engineering  
PHD, Texas A&M University, 1987

Nascentes Alves, Ibere, Professor of the Practice  
Petroleum Engineering  
PHD, University of Tulsa, 1991

Nasrabadi, Hadi, Associate Professor  
Petroleum Engineering  
PHD, Imperial College London, United Kingdom, 2006

Noynaert, Samuel F, Associate Professor of the Practice  
Petroleum Engineering  
PHD, Texas A&M University, 2013

Okoroafor, Esuru, Assistant Professor  
Petroleum Engineering  
PHD, Stanford University, 2021

RABBANI, HARRIS SAJJAD, Engineering Assistant Professor  
Petroleum Engineering-Qatar Campus  
PHD, University of Manchester, 2018

Rahman, Mohammad A, Associate Professor  
Petroleum Engineering-Qatar Campus  
PHD, University of Alberta, 2010

Retnanto, Albertus, Professor of the Practice  
Petroleum Engineering-Qatar Campus  
PHD, Texas A&M University, 1998

Rodrigues De Paula Lima, Heitor, Professor of the Practice  
Petroleum Engineering  
PHD, Texas A&M University, 1998

Samouei, Hamidreza, Research Assistant Professor  
Petroleum Engineering  
PHD, Shiraz University, 2011  
PHD, Shiraz University, 2011

Seers, Thomas D, Engineering Associate Professor  
Petroleum Engineering-Qatar Campus  
PHD, University of Manchester, 2016

Shor, Roman, Associate Professor  
Petroleum Engineering  
PHD, University of Texas, 2016

Sliva, Catherine A, Associate Professor of the Practice  
Petroleum Engineering  
BS, Texas A&M University, 1980

Sliva, Glenn M, Associate Professor of the Practice  
Petroleum Engineering  
BS, Texas A&M University, 1981

Spath, Jeffrey B, Professor  
Petroleum Engineering  
PHD, Mining University of Leoben, Austria, 1996

Suarez-Rivera, Roberto, Adjunct Professor  
Petroleum Engineering  
PHD, University of California - Berkeley, 1992

Sun, Yuefeng, Professor  
Petroleum Engineering  
PHD, Columbia University, 1994

Von Gonten, William, Adjunct Professor  
Petroleum Engineering  
BS, Texas A&M University, 1988

Voneiff, George W, Professor of the Practice  
Petroleum Engineering  
MS, Texas A&M University, 1992

Wu, Kan, Associate Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 2014

Younis, Rami, Associate Professor  
Petroleum Engineering  
PHD, Stanford University, 2011

Zhu, Ding, Professor  
Petroleum Engineering  
PHD, The University of Texas at Austin, 1992

## Majors

- Bachelor of Science in Petroleum Engineering (<http://catalog.tamu.edu/undergraduate/engineering/petroleum/bs/>)

## Minors

- Petroleum Engineering Minor (<http://catalog.tamu.edu/undergraduate/engineering/petroleum/minor/>)

## Certificates

- Data Analytics for Petroleum Industry Certificate (<http://catalog.tamu.edu/undergraduate/engineering/petroleum/data-analytics-petroleum-industry-certificate/>)
- Energy Engineering Certificate (<http://catalog.tamu.edu/undergraduate/engineering/petroleum/energy-engineering-certificate/>)
- Petroleum Ventures Certificate (<http://catalog.tamu.edu/undergraduate/engineering/petroleum/petroleum-ventures-certificate/>)