ENERGY PROGRAMS
Energy Finance

Develop an in-depth understanding of energy finance by examining three vital areas: pricing, asset valuation, and risk management. Model and forecast energy and forward/futures prices. Analyze energy-related derivatives and different derivative products and learn how to apply what you have learned. Gain an understanding of energy markets and how to measure and manage the financial risks created by volatile energy prices. This program is extremely valuable for those involved in financial and quantitative analysis, valuation and structuring, and trading positions within major energy companies as well as investment banks, consulting and financial services firms.

**Economics & Technology of the Crude Oil, Natural Gas & LNG Value Chains**

Discover the economics, technology, policy/regulatory issues, business strategies, and trends that affect these three key value chains. Utilize global market conditions, U.S. and international case studies, oil and natural gas market outlooks, and example project investments to acquire valuable insights into these industries. Get hands-on experience while building business acumen and increasing functional area knowledge. Review key value chain economics as well as the business and technology features impacting investment projects. Understand the relationships between global energy balances, prices, and investment cycles, and learn the role that technology and technological innovation play in the value chain.

**Decision and Risk Analysis in Hydrocarbon Exploration and Production**

Analyze approaches for modeling decisions and uncertainties that arise in the context of oil and gas project management. Examine ideas associated with risk analysis as it relates to the production of hydrocarbons over the life of an oil field. Gain hands-on experience in economic modeling, and illustrate how risks such as estimating hydrocarbon reserves and recovery rates as well as investment cost and oil prices should factor into decision making in oil and gas investments. Model complex projects with influence diagrams and construct deterministic sensitivity analyses (Tornado Diagrams). Use decision trees as a means of structuring risky problems.

**Principles of Business Valuation**

Develop the skills needed to understand how projects and companies are valued, beginning with a broad overview and discussion of valuation techniques, including both intrinsic value and market value approaches. Learn the discounted cash flow method (DCF), the most widely used intrinsic valuation method. Discuss methods for estimating a firm’s weighted cost of capital, and the effect of leverage (debt) on the firm’s cost of equity along with the valuation efforts of a firm’s capital structure. Build financial models in excel, and learn through practical application.

**Managing External Stakeholder Relationships**

Examine the management of ethical, legal, political, and cultural risks (and opportunities) associated with developing energy projects in emerging markets including upstream and downstream oil and gas investments. Analyze companies’ social responsibility efforts, management of relationships with external stakeholders, and how politics, culture, and law structure companies’ relationships with governments and other stakeholders in emerging markets.

**Energy, Technology and Policy**

This fast-paced, information-packed class provides an overview of “The Big Picture: Energy & Society.” Examine a range of topics beginning with “Basics and Fundamentals” and study the role that energy plays in our environment, including “Energy and Water” and “Energy and Food.” Explore how energy and energy policy affects culture and humanity and discuss critical technologies of the future. Gain an understanding of other topics such as Fossil Fuels: Conventional and Unconventional, Nuclear and Renewable Power, Electricity, Transportation, Energy Policy Basic, Energy and the Economy, and Energy and Water.

Register at www.mccombs.utexas.edu/execed or call (512) 471-9893
Where knowledge is power.

Open Enrollment classes in the Energy Concentration offer you an opportunity to gain new perspectives and skills related to the energy industry with coursework tailored specifically to the challenges and opportunities of the field. With classes focused on the economics, strategy, business valuation, and finance specific to the trade, this concentration offers you a unique opportunity to improve your business acumen directly related to the complexities of your field.

Energy Classes may be taken separately or as part of our Energy Certificate Program. You may begin at any time of the year and take classes in any order.

OUR PROGRAMS
Get an in-depth look at the economics, strategy, business valuation and finance specific to the energy industry.

LOCATION
Study in an environment focused on the complexities of the energy industry.

FACULTY
Learn from faculty from the McCombs School of Business, the Cockrell School of Engineering, and the Center for Energy Economics.

OUR APPROACH
Our smaller class sizes promote engagement with faculty as well as the formulation of meaningful relationships with other participants.

www.mccombs.utexas.edu/execed
(512) 471-5893