

Sample Curriculum*:

Student A (has engineering bachelor's degree):

FALL SEMESTER

Core On-Campus Classes

Oil & Gas Development
Energy in the 21st Century
Special Projects: Artificial Lift Applications/Impacts on Hydrocarbon Production
Energy & Global Geostrategy
Ethics and Energy

Professional Development

Off-Campus Seminar: Basic Petroleum Engineering Practices
Contemporary Environmental Issues
Field Trip: Drill Site of Barnett Shale Horizontal Natural Gas Well
Field Trip: Nuclear Energy Plant
Field Trip: Hydraulic Stimulation of Barnett Shale Horizontal Natural Gas Well
Mentor Program
Internship
Leadership Project: Portfolio Management of Energy Company Stocks

SPRING SEMESTER

Core On-Campus Classes

Overview of Petroleum Engineering
Environmental Issues in Energy
Special Problems: Analysis of Current Events in Energy
Energy Accounting: Financial Reporting
Energy Accounting: Oil and Gas

Professional Development

Off-Campus Seminar: Reservoir Management for Unconventional Resources
Field Trip: Wind Generation Facility
Field Trip: NAPE Expo & Summit
Field Trip: Natural Gas Combined Cycle Electric Generation Plant
Field Trip: Cheniere Energy's Sabine Pass LNG Terminal
Mentor Program
Internship
Leadership Project: TEP Barnett / Total Energy (Solar project estimates, feasibility study, project management, international corporate team meetings)

Capstone Team Project:

"Comparison of Resources, Economic Cycles, and Impacts of a Horizontal Well versus a Wind Turbine and Solar Installation"
(Evaluation of discounted and undiscounted revenue stream net of operating costs, taxes and royalties over life of the project)

TCU
ENERGY
INSTITUTE

Ralph Lowe
Energy Management
Program

* Sample is a combination of recommended / required coursework, customizable content, and may change from year to year. Actual student's curriculum.