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)

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