The energy industry, which includes the oil and gas sector, is made up of companies who find fuel resources, remove them from the earth, and process and distribute them for use. It is one of the largest and often most controversial industries in the world.

The oil and gas industry includes oil companies, petroleum refiners, fuel transport, end-user sales at gas stations, natural gas extraction, and more. The oil and gas industry can be broken into Upstream, Midstream, and Downstream. Upstream, also called exploration and production, is the most scientific and technical part of the oil and gas industry. The midstream sector is all about transportation of oil and gas. The midstream sector includes pipeline transport companies, barge companies, trucking and hauling companies, and more. The downstream sector markets and distributes oil and gas to consumers. There is the greatest diversity of opportunities at this level, which makes this level highly attractive and competitive.

Depending on the role, the work environment could be an office setting, in the field, such as an offshore oil/gas production facility, a drilling rig, or maintaining gas service stations, or on the road while transporting the product.

Campus Resources
Any coursework that provides context about the field.

Other Resources
Professional Associations
• Independent Petroleum
• Association of America (IPAA)
• The Natural Gas Solution
• American Petroleum Institute (API)

FACTS & STATS
U.S. Energy Consumption

<table>
<thead>
<tr>
<th>Energy Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum</td>
<td>36%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>29%</td>
</tr>
<tr>
<td>Coal</td>
<td>16%</td>
</tr>
<tr>
<td>Nuclear Electric Power</td>
<td>9%</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>10%</td>
</tr>
</tbody>
</table>

What can you do in ENERGY - OIL & GAS?

SKILLS & EXPERIENCE NEEDED

Skills Required
• Interpersonal skills
• Teamwork
• Data Analytics
• Innovation
• Communication
• Ability to Change
• Technical Skills
• Creativity

Experience
Breaking into the oil and gas field can be difficult because the job market is competitive. Many companies that hire for entry-level talent out of undergrad are looking for students with a technical degree.

For non-technical students, internships and specialization are key to gain experience in often niche fields. Search company websites for available opportunities.

Networking and a willingness to relocate are also important in the industry. Many large oil and gas companies are located closer to where oil can be found, such as Texas, so a willingness to move is critical.

Sample Job Titles
• Geologist
• Petroleum Engineer
• Platform Installer
• Driller
• Engine Operators
• Maintenance Workers
• PAC Manager
• Community Outreach Specialist
• Process Improvement Specialist
• Business Analyst Manager
• Operations Specialist
• Health & Safety Specialist
• Marketing Assistant
• Maintenance Analyst
• Gas Scheduler
• Petroleum Equipment Sales
• Commercial Portfolio Manager
• Territory Manager
• Geophysicist
• Pipeline Engineer
• Rig Builder
• Rig-builder Supervisor
• Diver
• Transportation Analyst
• Corrosion Technician
• Process Improvement Specialist
• In-Line Inspection Coordinator
• Measurement and Regulation Mechanic
• Environmental Analyst
• Environmental Compliance Specialist
• Sales Consultant
• Natural Gas Trader
• Project Manager
• Business Development Manager
• Business Analyst
• Pipeliner

WHERE ARE ALUMS?

ExxonMobil
Schlumberger
API
Chevron
bp
GE Oil & Gas
Shell
Marathon
Baker Hughes
BGE
The Petroleum Institute