Engineering Professionals

Engineering professionals are involved in the design, construction, operation, maintenance and quality control of systems essential to the exploration, production, processing and transportation of oil and natural gas. Entry into engineering professional occupations typically begins at the junior or associate level. Upward mobility is available through intermediate, advanced, team lead, supervisory and management levels. Career paths typically offer people management or technical specialization.

Typical Educational Requirements: Minimum Undergraduate Degree; Professional Designation required for many occupations.

Occupations

Business Unit Vice President: Has overall responsibility for financial and operational performance of a defined segment of the company. Responsible for profit/loss, budget, short and long term strategic planning, drilling programs, production, EHS performance, etc. Master's degree required.

Completions Engineer: Determines the optimal method for completing a well and supervises actual well completions by third-party companies. Minimum Bachelor's degree in engineering required.

Completions Superintendent: Ensures that well completions are done according to plan and notifies engineers or other field leaders of problems, recommended changes, etc. Manages contract crews engaged in well completions. Bachelor's degree required.

Drilling Engineer: Determines the optimal method for drilling a well and supervises actual drilling of wells by third-party companies. Bachelor's degree in engineering required.

Facilities Engineer: Designs pipelines, compression and/or gas processing facilities, and supervises contractors engaged in same. Bachelor's degree in engineering required.

Mud Engineer: Supply oil companies and their drillers with carefully calibrated drilling fluid (mud) to lubricate the drill bit and minimize damage to the reservoir and other stratigraphic layers below the surface as they drill to the target depth. Bachelor's degree required.

Plant Coordinator: First-line supervisor of a natural gas plant. Bachelor's degree required.

Reservoir Engineer: Analyzes characteristics of reservoirs to identify and optimize exploration techniques. Develops reservoir estimates and future production schedules. Bachelor's degree required.

Water Systems Engineer: Determines optimal strategies and designs facilities for management of wastewater associated with drilling and E&P operations. Bachelor's degree required.