The first part of the course will deal with artificial lift systems for oil and gas wells. This is critical to the production engineer. Most oil reservoirs will not have sufficient reservoir energy to get the oil, water and gas to the surface for the economic life of the field. Some gas reservoirs and coal bed methane wells will need to be de watered by means of an artificial lift system.

This course will cover 3 major artificial lift systems, the rod pump, electrical submersible pumps and gas lift.

Topics Covered in the first section

- Rod pumps - You will write your own design program
- Electrical submersible pumps
- Gas lift

Tests

- A project designing each of the lift methods

The second part of the course will be well completions and workovers, this includes frac and acid jobs.