
Course Title : Principles of Petroleum Engineering

- **Aim:**

The purpose of this course is to familiarize students of chemical engineering with the essentials of petroleum engineering, especially reservoir engineering (oil and gas). The main emphasis will be on the Enhance Oil Recovery (EOR) and reservoir modeling and simulation.

- **Syllabus:**

- ✓ introduction to petroleum engineering (oil and gas)
- ✓ sedimentary rock properties
- ✓ reservoir fluid thermodynamics, PVT
- ✓ oil and gas in-place
- ✓ primary recovery
- ✓ enhanced oil recovery
- ✓ miscible / immiscible gas injection
- ✓ reservoir simulation and base reservoir management
- ✓ special topics

- **Reading Resources:**

- ✓ Introduction to Petroleum Engineering. Author(s): John R. Fanchi Richard L. Christiansen 2017 John Wiley & Sons, Inc.
- ✓ Petroleum Engineering Principles and Practice. Authors J. S. Archer C. G. Wall