
Course Title : Fluid Mechanics (II)

- **Aim:**

Creating necessary background for increasing knowledge and ability of chemical engineering students for the purpose of fluid mechanics industrial equipment design in chemical, petroleum and gas industry

- **Syllabus:**

- ✓ Flow of compressible fluids, definition and equations
- ✓ Design of fluidized beds
- ✓ Gas-Liquid two phase flow in horizontal & vertical tube
- ✓ Flow in porous media
- ✓ Mixing of Newtonian and non-Newtonian fluids
- ✓ Microfluidics

- **Reading Resources**

- ✓ Unit Operations of Chemical Engineering [Warren Lee McCabe, Julian Smith, Peter Harriott], McGraw-Hill
- ✓ Fluid Flow for Chemical Engineers [F. A. Holland, R. Bragg], Edward Arnold