



**Knowledge Network of
Indian Institute of Technology, Gandhinagar
Under TEQIP-II Initiative**

Summer School on Fluid Mechanics

Fluid mechanics is studied by students from almost all branches of engineering, due to its wide range of applications. Varieties of phenomena (Swing of a cricket ball, flying of an air-plane, cyclones, sediment transport in river etc.) can be explained by principles of Fluid Mechanics. It is important to learn the subject through problems and projects. This summer school provides an opportunity for the faculty members and students to revisit the important fundamental concepts of Fluid Mechanics and to sharpen their teaching skills. Participation in this summer school is invited through registration.

Topics to be covered

Fundamental concepts; Fluid statics; Basic equations in integral form; Basic equations in differential form; Incompressible inviscid flow; Dimensional analysis; Internal incompressible viscous flow; Boundary layer theory.

The following format will be followed in the summer school:

A typical day's activities consist of 2-3 hrs lectures; 2 hrs of problem solving session; 2 hrs of laboratory work. In addition, each candidate has to do a project.

Presenters: Instructors:

1. Prof. Pranab Mohapatra (IIT Gandhinagar)
 2. Prof. Vinod Narayan (IIT Gandhinagar)
 3. Prof. Atul Bhargava (IIT Gandhinagar)
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