

Department of Applied Mechanics, IIT Delhi
First Semester, 2024-2025

Fluids & Solids Laboratory (AMP 262) 0-0-4

Course Co-ordinator: Amitabh Bhattacharya (Fluids)

Course Instructor: Gaurav Singh (Solids)

Class Schedule:

Mon/Thu: 3.00-4.50 pm (batches A1 & A2)

Tue/Wed: 3.00-4.50 pm (batches A3 & A4)

Teaching Assistants:

Fluid Mechanics: Niladri Sekhar Panda, Joaquim, Shubham Sharma

Solid Mechanics: Roushan Kumar, Manoj Sikhar, Ranu Raj, Ankit Singh Chandel, Ayan Basu, Naveen Kumar

Experiments:

Fluid Name of Experiment

- F01 Performance characteristics of free jet
- F02 Study of flow measurements devices (Venturimeter)
- F03 Fully developed flow through pipes (Moody chart)
- F04 Performance characteristics of Pelton turbine
- F05 Flow Visualization
- F06 Flow around Circular Cylinder
- F07 Development of Turbulent Pipe Flow
- F08 Performance Characteristics of Centrifugal Pump

Solid Name of Experiment

- S01 Hardness Testing (Brinell & Rockwell)
- S02 Strain Gauge (Tensile & Bending)
- S03 Uniaxial Tension
- S04 Uniaxial Compression
- S05 Torsion
- S06 Impact (Izod)
- S07 Impact (Charpy)
- S08 Buckling

Evaluation Policy: Theory, conduction of experiment, report writing and viva-voce.

Attendance Policy: If a student's attendance is less than 75%, the student will be awarded one grade less than the actual grade that he/she has earned.