

COURSE OUTLINE

EXPERIMENTAL FLUID MECHANICS

(Prof. G.P. Romano)
A.A. 2023-2024

CLASSROOM LESSONS:

Background concepts and practical activities to be performed during laboratory practice. Basics of experimental fluid mechanics, measurement techniques and test facilities. Measurement errors (about 20 hours).

LABORATORY PRACTICE (about 40 hours)

Signal & Data Analysis.

1. Performance of a VAWT in Wind Tunnel.
2. Velocity measurements using Ultrasound Anemometry.
3. Drag of models in wind tunnel.
4. Measurements of the force due to the impact of a jet on surfaces.
5. Flow visualizations in wind tunnel.
6. Particle Image Velocimetry