

DEPARTMENT OF AERONAUTICAL ENGINEERING

INFRASTRUCTURE



MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Sponsored by CMR Educational Society)

(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2008 Certified)

Maisammaguda, Dhulapally (Post Via Hakimpet), Secunderabad – 500100

AIRCRAFT PRODUCTION TECHNOLOGY LAB

(a) Lathe Machine



(b) Radial Drilling Machine



(c) Shaping Machine



(d) Planer Setup



(e) Milling Machine



(f) Soldering Equipment Riveting Gun, Welding Equipment



(g) CNC Machine Lathe/3D printer



(h) Gas Welding Equipment



(i) Arc Welding Equipment



(j) Adhesive Bonds & Wood Gluing Samples



(k) Micro Scope



AIRCRAFT ENGINEERING DRAWING LAB USING CAD



SOLID MECHANICS AND FLUID MECHANICS LAB

(a) Solid Mechanics Lab - Universal Testing Machine



(b) Solid Mechanics Lab - Torsion Test Equipment



(c) Solid Mechanics Lab - Rockwell's Hardness Equipment/ Brinell Hardness Equipment



(d) Solid Mechanics Lab - Spring Test Equipment



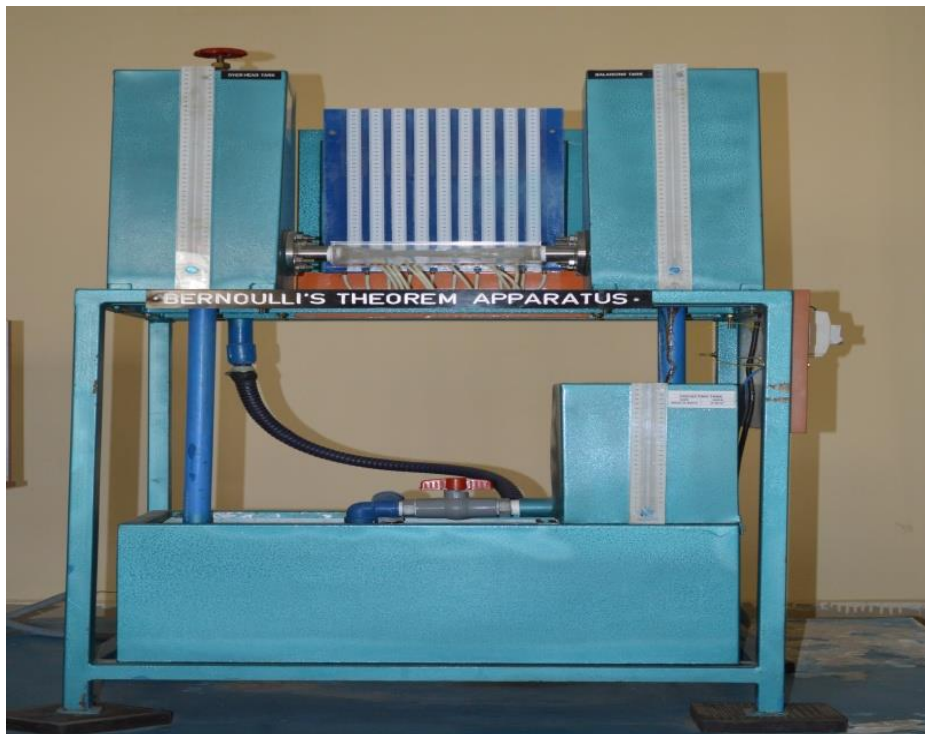
(e) Solid Mechanics Lab - Impact Test Using Izod/ Impact Test using Charpy



(f) Fluid Mechanics Lab - Venturimeter Test Rig/ Orifice Meter Test Rig



(g) Fluid Mechanics Lab - Bernoulli's Apparatus



(h) Fluid Mechanics Lab - Pipe Friction Apparatus



(I) Fluid Mechanics Lab - Mouth Piece Apparatus



AERODYNAMICS & PROPULSION LAB

(a) Wind Tunnel Test Rig



(b) Centrifugal Blower Test Rig



(c) 4 Stroke Petrol Engine



(d) 4stroke Diesel Engine



(e) Port Timing Diagram Test Rig



(f) Valve Timing Diagram Test Rig



(g) Centrifugal Air Compressor Test Rig



(h) Axial Flow Compressor



AIRCRAFT STRUCTURES LAB

(a) Universal Testing Machine



(b) Deflection Test Rig



(C) SS Beam Test Setup



(d) Ultrasonic Apparatus



(e) Dyepenetration Test



(f) Magnetic Particle Test



(g) Riveting Tools



(h) Shear Center Setup



(i) Wagner Beam Setup



Name Of The Laboratory	Major Equipments
Computational Structures Lab	Computer, ANSYS Software
Programming Language for Mathematical Models	Computers, MATLAB /SCILAB
Computational Aerodynamics Lab	Computers, MATLAB/SCILAB/ ANSYS Software
Flight Vehicle Design Lab	Computer, MATLAB/MS EXCEL

