DEPARTMENT OF AERONAUTICAL ENGINEERING

PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA.

S.No	Name of Laboratory	Name of the Equipment
1	Basic Work Shop	1. Fitting 2. Carpentry 3. House Wiring 4. Tin Smithy 5. Black Smithy
2	Mechanics of Solids lab	1. Universal Testing machine 2. Simply Supported and Cantilever Apparatus 3. Torsion Testing machine 4. Brinell And Rockwell Hardness testing Machine 5. Spring Testing Machine 6. Izod and Charpy Testing Machine 7. Shear Testing Machine
3	Mechanics of Fluids lab	1. Venturimeter Test Rig 2. Test Rig for Flow over Notch 3. Pipe Friction Apparatus 4. Bernoullis Apparatus 5. Test Rig for Orifice Meter 6. Mouth piece apparatus
4	Thermodynamics & Heat Transfer Lab	1. Forced convection apparatus. 2. Natural convection apparatus 3. Parallel and counter flow heat exchanger. 4. Emissivity apparatus. 5. Stefan Boltzman Apparatus. 6. Drop and film wise condensation. 7. Critical Heat flux apparatus. 8. Refrigeration Test Rig 9. Air Conditioning Test Rig 10. Morse test on multi- cylinder piston engine 11. Multi- cylinder piston engine

		12. Diesel engine apparatus
5	Aircraft Materials & Production Lab	1. Lathe Machine 2. Radial Drilling Machine 3. Tapping and Dying equipment 4. Riveting equipment 5. Shaper 6. Planar 7. Milling Machine 8. Grinding Machine 9. Welding, Soldering and Brazing Equipment 10. CNC Machine
6	Aero Modelling & Flight Simulation Lab	1. Radio Controllers 2. Electric Motors 3. Propellers 4. Material for preparing body 5. Servos 6. Batteries 7. Flight Simulator
7	Aerodynamics and Propulsion Lab	1. Low Speed Subsonic Wind Tunnel 2. Symmetric Airfoil Model 3. Cambered Airfoil Model 4. Cylinder With pressure taps 5. Airfoil with pressure taps 6. Semi sphere model 7. Sphere model 8. Disc model 9. Wedge model 10. Automobile model etc. 11. Smoke generator and its models
8	Aircraft Structures lab	1. UTM-20/40 Tonnes with Jigs and Fixture and precision extensometers. 2. Deflection Test Rig 3. NDT Equipment 4. Strain Measuring Equipment
9	Simulation Lab	1. Personal Computers, P-IV with 512 MB RAM, and Parallel processing computational facility for 30 Nos 2. Educational version liscenses for MAT Lab, Auto CAD, ANSYS and Pro-E
10	Computational Aerodynamics & Airframe Design Lab	
11	Flight Vehicle Design lab	

Above list of Laboratories is sharing with Mechanical Engineering.