Sanjay Ghodawat University, Kolhapur

Established as a State Private University under Govt. of Maharashtra Act no. XL dated 3rd May 2017

Empowering Lives Globally !

DEPARTMENT OF AEROSPACE ENGINEERING

AIRCRAFT SYSTEMS LABORATORY

S.No	Equipment Name	Description	Equipment Photo
1	**Aircraft Electrical System**	• A test bench for aircraft electrical systems consists of Battery, Generator, Starter with control and monitoring systems. • The test bench is also equipped with lighting system, electrical bus bars. • This allows the students to learn about aircraft electrical systems through hands-on experience.	
2	**Aircraft Cockpit Instrumentation System**	• This setup provides critical flight data, navigation information and system statuses through the analog gauges. • This helps the students to get real time experience by simulating the analog cockpit environment	
3	**Aircraft Hydraulic system**	• This system is responsible for powering essential components such as flight controls, landing gear, brakes and other heavy duty operations. • The system is equipped with hydraulic pumps, hydraulic fluid, reservoir, actuators, control valves. • This system provides students the actual experience in operating the hydraulics of an aircraft.	

4	**Aircraft Lighting System**	• Navigation Lights (Position Lights)
		  • Red light
		  • Green light
		  • White light
		• Anti-Collision Lights (Strobe Lights)
		  • Flashing white or blue lights.
		• Landing Lights Taxi Lights
		• Logo Lights
			

5	**Aircraft Engine Data Control**	• Data Collection: The ECM collects data from sensors and uses it to analyze engine performance in real-time. • Control: It controls actuators (like fuel injectors and ignition coils) to regulate the engine's operation.	
6	**Zen Air Aircraft**	• Two Seater Piston Engine high wing aircraft • Rotax 4 cylinder engine • 3 Propellors	
7	**Alarus Aircraft**	• Two Seater Piston Engine Low wing • Rotax 4 cylinder engine • Rectangular planform wing • Twin Propellors	