



Aircraft Maintenance

Aerospace Engineering

Instructor Name: Prof. A.K. Ghosh

Institute: IIT Kanpur

Department: Aerospace Engineering

About Instructor: Prof. A.K. Ghosh is a faculty of Aerospace Engg. Department of IIT Kanpur. He is also the in-charge of the flight laboratory and unmanned aerial vehicle of IIT Kanpur. His research areas include system identification through flight tests using conventional and neural network based methods, design of aircrafts and airborne projectiles, supercavitation, unmanned aerial systems. Before joining IIT Kanpur, he worked as a scientist with Defense Research Development Organization (DRDO). He has published many peer reviewed journal papers and conference papers, guided 13 doctoral students, and 38 masters students. He is also a mentor of multiple aerospace start-up companies, and also been associated with major industry contributions of high speed low drag aircraft bomb, Pinaka Mk-I, 105mm sabot round for tracked vehicles, etc.

Pre Requisites: : Introduction to Airplane Performance

Core/Elective: : Core

UG/PG: : Both

Industry Support : DRDO, HAL, Boeing, Airbus, Bell, McDonnell Douglas, UAV Factory, Lockheed Martin, Cessna.

Course Intro: : This course offers the introduction to the aircraft systems like hydraulics system, landing gear, flue system, electrical systems, 50,100,200,500 hours inspection, etc.

COURSE PLAN

SL.NO	Week	Module Name
1	1	Indian aircraft rules, Civil aviation requirement, CAR 66, Aircraft System
2	2	Hydraulic system, Fuel system, Electrical system, Landing gear
3	3	Aircraft structure, Aircraft Inspection, Special Inspection, Daily Inspection
4	4	50 hours inspection, 100 hours inspection, 200 hours inspection, 500 hours inspection, 5 year inspection