

Course code	Course Name	L-T-P-Credits	Year of Introduction
AO333	AIRCRAFT STRUCTURAL ANALYSIS LAB	0-0-3-1	2016
Prerequisite:			
Course Objectives <ul style="list-style-type: none">To impart practical experience on static and dynamic analysis of aircraft structural components			
List of Experiments			
<ol style="list-style-type: none">1. Constant strength Beams2. Buckling of columns3. Unsymmetrical Bending of Beams4. Shear Center Location for Open Section5. Shear Center Location for Closed Section6. Flexibility Matrix for Cantilever Beam7. Combined Loading8. Wagner beam9. Stress / Strain Measurement on pressurized thin walled tubes of various materials using strain gauges.10. Stress / Strain Measurement on flat plate and cylindrical rod with axial loads using strain gauges.11. Stress / Strain Measurement on hollow cylindrical rod with torsional load using strain gauges.12. Vibration damping test – Longitudinal13. Vibration damping test – Torsional14. Stress / Strain Measurement using strain rosette – Star and Delta Connected15. Verification of stress optic law using photo elasticity.			
Expected Outcome <ul style="list-style-type: none">The students will be able to do experiments to analyse static and dynamic behaviour of aircraft structural components			
END SEMESTER EXAM			