

**AIRCRAFT INTERIOR DESIGN LAB**

<b>IV Semester</b>								
<b>Course Code</b>	<b>Category</b>	<b>Hours / Week</b>			<b>Credits</b>	<b>Maximum Marks</b>		
<b>A5AE16</b>	<b>PCC</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>	<b>CIA</b>	<b>SEE</b>	<b>Total</b>
		-	-	3	1.5	30	70	100
<b>COURSE OBJECTIVES:</b>								
<ol style="list-style-type: none"> <li>1. To design various Aircraft interior components in lab.</li> <li>2. To design various individual components, sub-assemblies and main assemblies in lab.</li> <li>3. Discuss the importance of design process and studying the different phases of designing process involved in the design.</li> <li>4. Understand the design of aircraft concepts.</li> <li>5. To design various aircraft components by using Catia software</li> </ol>								
<b>LIST OF EXPERIMENTS</b>								
<ol style="list-style-type: none"> <li>1 Aircraft Seating Design Arrangements (General Class &amp; Business Class) (2D)</li> <li>2 Aircraft Single Aisle Design(3D &amp; 2D)</li> <li>3 Aircraft Twin Aisle Design(3D &amp; 2D)</li> <li>4 Aircraft Seat Design (3D- Business Class)</li> <li>5 Aircraft Seat Design (3D- First Class)</li> <li>6 Design of Laptop Tray Sizing for Seating in Civil Aircrafts.</li> <li>7 Design of Window for Civil Aircraft</li> <li>8 Design of Wind Shield for Fighter Aircraft(Select any one airplane)</li> <li>9 Design of Wind shield for Passenger Aircraft(Select any one Airplane)</li> <li>10 Design of Arm rest cap height from surface in Civil Aircraft</li> <li>11 Design of Joystick(Spacing) in Fighter Aircraft</li> </ol>								
<b>Note:</b> Ten experiments should be performed.								
<b>Reference Books:</b>								
Basics in Catia V5 with Simulation by Ranjan Chikesh								
<b>COURSE OUTCOMES:</b>								
<ol style="list-style-type: none"> <li>1. Understand the importance of drawing and design process and phases involved in the design process</li> <li>2. Design various individual components, sub-assemblies and main assemblies in design lab</li> <li>3. Design various orthographic and isometric projections in drawing sheets</li> <li>4. Develop the basic concepts of aircraft interiors</li> <li>5. Design and develop aircraft interior components</li> </ol>								