

Course Number and Name												
<b>BCE7L1 - COMPUTER AIDED DESIGN OF STRUCTURES LAB</b>												
Credits and Contact Hours												
<b>2 &amp; 45</b>												
Course Coordinator's Name												
Mr.K.Sathishkumar												
Text Books and References												
Course Description												
<ul style="list-style-type: none"> <li>To introduce the students to analyze and design different structures like trusses, beams, frames etc.</li> </ul>												
Prerequisites						Co-requisites						
Computer Aided Building Drawing						NIL						
required, elective, or selected elective (as per Table 5-1)												
Course Outcomes (COs)												
CO1	To Study about Microsoft office											
CO2	To Study about drawing of buildings using Autocad in 2D											
CO3	To Study about drawing of buildings using Autocad in 3D											
CO4	To Study about Modeling											
CO5	To Study about 3D objects											
CO6	To Study about Solid Editing											
CO7	To Study about drawings of plans and layouts											
CO8	To Study about various mode of drawing in Autocad											
CO9	To Study about file management											
CO10	To Study about analysis of trusses and frame											
CO11	To Study about analysis of different component in staad pro											
CO12	To Study about analysis and design of different component in staad pro											
Student Outcomes (SOs) from Criterion 3 covered by this Course												
	COs/SOs	a	b	c	d	e	f	g	h	i	j	k
	CO1					M						
	CO2					M						
	CO3					M						
	CO4					M						
	CO5					M						

CO6					M							
CO7					M							
CO8					M							
CO9					M							
CO10					M							
CO11					M							
CO12					M							

List of Topics Covered

**LIST OF EXPERIMENTS**

1. Preparation of Script and Slide presentation
2. Creating 2D drawings plan, elevation, section of residential buildings
3. Creating 3D drawings, preparation of elevation for multi storeyed buildings.
4. Surface modeling and solid modeling
5. 3D objects – construction and enhanced viewing
6. Solid Editing and real time 3D rotations
7. Working with layouts.
8. Modifying AUTOCAD environment and plotting
9. File management
10. Analysis of Plane truss space truss – plane frame – space frame and other elements such as plate elements and shell elements.
11. Analysis of different structural components by using STAAD.PRO – STRAP.
12. Analysis and design of different structural components by using STRAP – STAAD.PRO – STAAD etc.