

Course Number and Name												
BCE301 - APPLIED MECHANICS												
Credits and Contact Hours												
4 & 60												
Course Coordinator's Name												
Ms.R.J.Rinu Isah												
Course Objective												
<ul style="list-style-type: none"> • To learn fundamental concepts of Stress, Strain and deformation of solids with applications to bars, beams and thin cylinders. • To know the mechanism of load transfer in beams, the induced stress resultants and deformations. • To understand the effect of torsion on shafts and springs. • To analyze a complex two dimensional state of stress and plane trusses 												
Prerequisites						Co-requisites						
Engineering Mechanics						NIL						
required, elective, or selected elective (as per Table 5-1)												
Course Outcomes (COs)												
CO1	To apply the fundamental concepts of stress and strain in the design of various structural components and machines											
CO2	To analyze and design shafts to transmit required power											
CO3	To analyze about the force in member Truss with different methods											
CO4	To determine the bending, shear stresses and deflection produced in a beam subjected to system of loads											
CO5	To determine stresses due to impact and suddenly applied loads											
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	
CO1	H		M	M					L			
CO2	H	M	M	M	H				L			
CO3	H	M	M	M					L			
CO4	H		M	M					L			
CO5	H		M	M	H				L			