

Course Number and Name													
BEE022 & Fiber Optics and Laser Instrumentation													
Credits and Contact Hours													
3 & 45													
Course Coordinator's Name													
Mr.Uma Mageshwaran													
Text Books and References													
1. J.M. Senior, "Optical Fiber Communication – Principles and Practice", Prentice Hall of India, 1st edition, 1985.													
2. J. Wilson and J.F.B. Hawkes, 'Introduction to Opto Electronics', Prentice Hall of India, 2 nd Edition, 2001.													
Course Description													
To contribute to the knowledge of Fiber optics and Laser Instrumentation and its Industrial and Medical Application.													
Prerequisites						Co-requisites							
Control System						Nil							
required, elective, or selected elective (as per Table 5-1)													
Required													
Course Outcomes (COs)													
CO1: To expose the students to the basic concepts of optical fibers and their properties													
CO2: To provide adequate knowledge about the Industrial applications of optical fibers													
CO3: To expose the students to the Laser fundamentals													
CO4: To provide adequate knowledge about Industrial application of lasers.													
CO5: To provide adequate knowledge about holography and Medical applications of Lasers.													
Student Outcomes (SOs) from Criterion 3 covered by this Course													
COs/ POs	a	b	c	d	e	f	g	h	i	j	k	l	
CO1	H	M	M	H	M		M		H	L	L	M	
CO2	H	M	M	H	H		M		H	L	L	M	
CO3	H	M		H	H		M		H	L	L	M	
CO4	H	M		H	H		M		H	L	L	M	
CO5	H	M	M	H	H		M		H	L	L	M	
List of Topics Covered													
UNIT I											OPTICAL FIBRES AND THEIR PROPERTIES		9

