Course Number and Name

BEC701 - FIBER OPTIC COMMUNICATION

Course Objectives

- To learn the basic elements of optical fiber transmission link, fiber modes configurations and structures.
- To understand the different kind of losses, signal distortion, SM fibers.
- To learn the various optical sources, materials and fiber splicing
- To learn the fiber optical receivers and noise performance in photo detector.
- To learn link budget, WDM, solitons and SONET/SDH network.

Prerequisites	Co-requisites
Electromagnetic Fields and waves.	Nil

Course Outcomes (COs)

CO1: Demonstrate an understanding of optical fiber communication link, structure, propagation and transmission properties of an optical fiber.

CO2: Estimate the losses and analyze the propagation characteristics of an optical signal in

different types of fibers

CO3: Describe the principles of optical sources and power launching-coupling methods.

CO4: Compare the characteristics of fiber optic receivers

CO5: Design a fiber optic link based on budgets

CO6: To assess the different techniques to improve the capacity of the system.

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	а	b	С	d	е	f	g	h	i	j	k	
CO1	Н		М			М		Н				
CO2	М	L	Н				Н		L	Н		
CO3	М	н		Н		М	L				Н	
CO4	М	Н		Н					Μ		Μ	
CO5		L			Μ	Μ	М		L		Μ	
CO6				М		H	М					