



**BANSAL INSTITUTE OF RESEARCH AND TECHNOLOGY,
BHOPAL**
Kokta Anand Nagar, Bhopal



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

COURSE OUTCOMES (COs)

Semester: V

Course Name: Microprocessor & its Application		Course Code: EC-501
Students will be able to:		
CO1:	Describe the fundamentals of a microprocessor based system.	
CO2:	Explain the assembly programming of 8086 microprocessor.	
CO3:	Explain the functionality of various interfacing chips and general purpose devices in microprocessor based system	
CO4:	Explain the functionality of 8051 microcontroller & embedded systems.	
CO5:	Evaluate the implement of microprocessor based system for real world applications.	

Course Name: Digital Communication		Course Code: EC-502
Students will be able to:		
CO1:	Discuss the pulse modulation system and different sampling techniques.	
CO2:	Explain the various analog to digital conversion and line coding methods.	
CO3:	Analyze the various digital modulation techniques.	
CO4:	Explain optimum filter and determine bit error probability of different digital communication systems.	
CO5:	Estimate the error correcting codes and apply knowledge of information theory to solve the related problems.	



**BANSAL INSTITUTE OF RESEARCH AND TECHNOLOGY,
BHOPAL**
Kokta Anand Nagar, Bhopal



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

Course Name: Departmental Elective (CNTL)		-Course Code: EC-503(A)
Students will be able to:		
CO1:	Describe various types of Communication Networks and their parameters.	
CO2:	Explain the various synthesis methods of Impedance /Admittance network.	
CO3:	Illustrate the Transmission line fundamentals and its Lumped parameter.	
CO4:	Explain the transmission Line at radio frequencies Parameters, coaxial cable, voltage and current on dissipation-less line and smith chart.	
CO5:	Measure the transmission line parameters using Smith Chart.	

Course Name: Open Elective (EMT)		Course Code: EC-504(A)
Students will be able to:		
CO1:	Describe the concepts of orthogonal coordinate system & vector calculus to solve problems of electric & magnetic field.	
CO2:	Explain the Maxwell's equation based on gauss law, faraday's law & displacement current .	
CO3:	Analyze the principles of electrostatics & magneto static to the solutions of problems relating to potential, boundary conditions and energy density in electric & magnetic field.	
CO4:	Illustrate the uniform plane wave propagation in different media, solution of wave equation and wave polarization, pointing vector theorem .	
CO5:	Measure the field component of EM wave at normal & oblique incidence of two media.	



**BANSAL INSTITUTE OF RESEARCH AND TECHNOLOGY,
BHOPAL**
Kokta Anand Nagar, Bhopal



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

Course Name: Matlab Programming		Course Code: EC-506
Students will be able to:		
CO1:	Recognize the fundamentals of MATLAB coding	
CO2:	Create and troubleshoot basic m scripts	
CO3:	Plot datasets and analyze the graph in 2-D & 3-D view	
CO4:	Write the program for a given problem in MATLAB coding.	
CO5:	Simulate various electronic & Communication circuits in MATLAB simulation tool	

HOD EC