



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



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING
COURSE OUTCOMES (COs)**

Semester: VIII

Course Name: Optical Fiber Communication		Course Code: EC-801
Students will be able to:		
CO1:	Describe the various components of an optical fiber communication system.	
CO2:	Explain the signal degradation in optical fiber, dispersion, attenuation, fabrication of optical fiber & measurement techniques like OTDR.	
CO3:	Analyze the different optical sources and detectors.	
CO4:	Estimate the optical transceivers & optical fiber connectors.	
CO5:	Measure various parameters of optical fiber networks and amplifiers.	

Course Name: Departmental Elective (Wireless Communication)		Course Code: EC-802(B)
Students will be able to:		
CO1:	Discuss the applications & requirements of wireless services, technical challenges & propagation mechanism.	
CO2:	Explain the wireless propagation channels, wideband & directional channel characteristics.	
CO3:	Analyze the different channel models, channel sounding & antennas	
CO4:	Illustrate the structure of a wireless communication link & error probability of different channels.	
CO5:	Compare the various diversity & equalizers in wireless communication system.	



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



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

Course Name: Open Elective (Wireless Network)		-Course Code: EC-803(A)
Students will be able to:		
CO1:	Explain and compare the various cellular system and its components.	
CO2:	Illustrate the LTE systems in the mobile communication.	
CO3:	Analyze the wireless Sensor Networks (WSN) & its architecture.	
CO4:	Analyze the various routing protocols like IPv4 & IPv6.	
CO5:	Measure the various components of Internet of Things (IoT) & GPS systems	

Course Name: Advanced Communication Engineering Lab		Course Code: EC-804
Students will be able to:		
CO1:	Work with equipments and tools of communication systems.	
CO2:	Analyze BPSK, DPSK, QPSK generation and detection.	
CO3:	Evaluate the performance of TDM and FDM.	
CO4:	Measure the gain and directivity of different antennas.	
CO5:	Determine coupling and isolation characteristics of a stripline directional coupler.	



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



**DEPARTMENT OF ELECTRONICS & COMMUNICATION
ENGINEERING**

Course Name: Major Project-II		Course Code: EC-805
Students will be able to:		
CO1:	Exhibit the thorough knowledge for the selected project topic.	
CO2:	Design & implement the project using appropriate hardware & software.	
CO3:	Perform tasks efficiently & committed way in the team.	
CO4:	Communicate proficiently with team members & community at large in written & oral forms.	
CO5:	Manage and complete the project in stipulated time.	

HOD EC