

Course Number and Name												
BEC612 & Principle Of Communication engineering												
Credits and Contact Hours												
3 & 45												
Course Coordinator's Name												
Mr.Vijayaragavan												
Text Books and References												
Text Books:												
1. 'Kennedy, G , 'Electronic Communication Systems', McGraw Hill, 4 th Edition, 1987												
2. Simon Haykins, 'Communication systems', 3 rd Edition, John Wiley, Inc., 1995.												
References:												
1. Taub and Schilling, 'Principle of Communication system', 2 nd Edition, McGraw Hill, 1987.												
2. Bruce Carlson, A., 'Communication Systems', 3 rd Edition, Tata McGraw Hill, 1986.												
3. Roddy and Coolen , 'Electronic communication', 4 th Edition Prentice Hall of India.1999.												
4. http://www.mathworks.com/access/helpdesk/help/toolbox/signal & systems/												
Course Description												
To create awareness among the students about the different types of non-conventional energy resources and emphasize its importance												
Prerequisites						Co-requisites						
Digital Electronics						Nil						
required, elective, or selected elective (as per Table 5-1)												
Required												
Course Outcomes (COs)												
CO1: To introduce about the radio communication system.												
CO2: To study about the coding used in communication system.												
CO3: To study about the data communication system.												
CO4: To study about the transmission system involved in communication system.												
CO5: To study about the television transmitters and receivers.												
Student Outcomes (SOs) from Criterion 3 covered by this Course												
COs/SOs	a	b	c	d	e	f	g	h	i	j	k	l
CO1		M	M		M		M			M		M
CO2			L		H	M				L	L	
CO3		M			H		M				L	
CO4		M			M	M	M			M	L	M
CO5			M		H					L		M
List of Topics Covered												
UNIT 1 RADIO COMMUNICATION SYSTEM											9	
Frequency spectrum-Principle of AM and FM-AM and transmitters and receivers-Introduction to microwave communication systems-Principle Of satellite communication.												

UNIT II PULSE COMMUNICATION SYSTEM 9
PAM, PPM, PDM, PCM-Delta Modulation-Differential PCM-Merit and demerits-Comparison Of pulse modulation schemes.

UNIT III DATA TRANSMISSION 9
Base band signal receiver-Error probability-Optimum and matched filter techniques coherent reception-Digital modulation system, FS, PSK-Comparison Of data transmission systems.

UNIT IV TRANSMISSION MEDIUM 9
Characteristics Of cables-Optical fibers-Effects Of EM radiation – Bandwidth and noise restrictions-Statistical and measurement of random noise-Concept of multiplexing-FDM and TDM.

UNIT V TELEVISION 9
Scanning methods-B/W and Color Systems-Camera and picture tubes-Synchronization-Transmitters and receivers.