

Jagadambha College of Engineering and Technology Yavatmal

Department of Electronics & Telecommunication Engineering(PG-EXTC Engineering)

Year: First Year	Semester:First
Course Name: Advance Optical Communication	Course Code: CO1ENTC1
CO1ENTC1.1	Brief Knowledge about guided optical communication.
CO1ENTC1.2	Different Optical Sources in Advance Optical Communication.
CO1ENTC1.3	Know about Optical amplifiers, EDFA, Soliton Systems & design of system required in networks.
CO1ENTC1.4	Analyse Optical Detectors & study of type of detectors characteristics.
CO1ENTC1.5	Know about Multiplexing Components & Techniques.
CO1ENTC1.6	Know Different Optical fiber measurements.
Course Name: Random Process	Course Code: CO1ENTC2
CO1ENTC2.1	Know about Probability and Random Variables.
CO1ENTC2.2	Know about Standard Distributions of Binomial, Poisson, Geometric, Negative Binomial, Uniform, Exponential, Gamma, Weibull and Normal distributions and their properties.
CO1ENTC2.3	Know details about Multi-dimensional Random Variables.
CO1ENTC2.4	Know about Random Processes and Characterization.
CO1ENTC2.5	Know about Correlation of Random Processes.
CO1ENTC2.6	Know detail about Power Spectral Density (PSD).

Course Name: Digital Communication Technique	Course Code: CO1ENTC3
CO1ENTC3.1	Understand Characterization of Communication Signal and Optimum Receiver for AWGN Channel.
CO1ENTC3.2	Understand different types of Source Coding techniques.
CO1ENTC3.3	Understand different types of Channel Coding techniques.
CO1ENTC3.4	Understand Signal Design for Band Limited Channel Design.
CO1ENTC3.5	Understand Linear Equalization Techniques.
CO1ENTC3.6	Undersatnd Spread Spectrum Techniques.

Course Name: Digital Signal Processing & Applications	Course Code: CO1ENTC4
CO1ENTC4.1	Brief Overview about Digital Filters.
CO1ENTC4.2	Understand Design of Digital FIR filters.
CO1ENTC4.3	Understand Design of Digital IIR filters.
CO1ENTC4.4	Understand Multi-rate Digital Signal Processing.
CO1ENTC4.5	Know about DSP Processors and its Application.
CO1ENTC4.6	Understand Different types of Wavelets in DSP & A.

Course Name: Cryptography & Network Security	Course Code: CO1ENTC5
CO1ENTC5.1	Understand the OSI Security Architecture & Classical Encryption Techniques.
CO1ENTC5.2	Understand the concept of Public Key Cryptography.
CO1ENTC5.3	Know the Authentication and HASH function concept.

CO1ENTC5.4	Understand Authentication Applications in Network Security:
CO1ENTC5.5	Know the System Level Security in the Network.
CO1ENTC5.6	Understand the IP Security in detail.

Year: First Year	Semester:Second
Course Name: Adaptive Signal Processing	Course Code: CO2ENTC1
CO2ENTC1.1	Understand Different Random Signals, properties & parameters.
CO2ENTC1.2	Know detail about Wiener Filters.
CO2ENTC1.3	Understand different Adaptive Filtering Algorithms.
CO2ENTC1.4	know about Kalman Filters and Square Root Adaptive Filters.
CO2ENTC1.5	Understand Recursive Least Square Algorithms.
CO2ENTC1.6	Know the Applications of Adaptive filtering.
Course Name: Wireless Communication	Course Code: CO2ENTC2
CO2ENTC2.1	Understand Basic Fundamentals of Wireless Communication.
CO2ENTC2.2	Know about Analog and Digital Cellular Mobile Systems.
CO2ENTC2.3	Understand the elements and applications of Wireless Sensor Network.
CO2ENTC2.4	Know the Low power wireless communication systems & Data Networks and protocols.
CO2ENTC2.5	Understand Wireless Communication Standards & Bluetooth network.
CO2ENTC2.6	Know about Private Mobile Radio network and Introduction of 3G Systems.

Course Name: Advance Computer Networks & Programming	Course Code: CO2ENTC3
CO2ENTC3.1	Understand Review of computer networking & switching techniques.
CO2ENTC3.2	Understand details about TCP/IP.
CO2ENTC3.3	Understand Network management and congestion control algorithm.
CO2ENTC3.4	Know the ATM Networks.
CO2ENTC3.5	Understand Advance Network Architecture.
CO2ENTC3.6	Understand Network Security Issues.
Course Name: RF & Microwave Circuit Design	Course Code: CO2ENTC4
CO2ENTC4.1	Understand designing of Two Port RF Networks & Signal Flow Graph.
CO2ENTC4.2	Understand Matching and Biasing of Network.
CO2ENTC4.3	Understand Designing of RF Transistor Amplifier.
CO2ENTC4.4	Understand Designing of Ooscilators and Mixers.
CO2ENTC4.5	Know about the Microwave Integrated Circuits.
CO2ENTC4.6	Understand the MMIC Technology.
Course Name: Mobile Computing	Course Code: CO2ENTC5
CO2ENTC5.1	Understand the Wireless network technology & Introduction to 3G and 4G mobile systems.
CO2ENTC5.2	Understand the Channel allocation and interference reduction.

CO2ENTC5.3	Understand the Mobility and Location management.
CO2ENTC5.4	Know the different Mobile Protocols in detail.
CO2ENTC5.5	Know the Services in wireless networks.
CO2ENTC5.6	Understand the Security issues in mobile and wireless.