

THIRD YEAR

Communication Electronics -II	COE315
Prerequisite: COE209, COE202 and COE306	(3-2-0-2)

Introduction to electronic communication: Communication Systems, Types of Electronic Communication, modulation and multiplexing, the electromagnetic spectrum, Bandwidth. Concept of gain and attenuation, Reactive components, Tuned circuits and Resonance, filters circuits, Fourier theory. Amplitude Modulator and Demodulator Circuits: Basic principles of amplitude modulation, Amplitude Modulators, Amplitude Demodulators, Balanced Modulators, SSB Circuits. Angle modulation Circuits: Frequency Modulators, Phase Modulators, Frequency Demodulators. Digital Modulation Circuits: BPSK Modulator, Coherent Detector for BPSK, QPSK Transmitter and Coherent Receiver, Non coherent BASK Receiver, DPSK Transmitter and Receiver. **Practical part:** *Gain analysis, linear and angle modulations' different types of modulation and demodulation circuits. Digital modulation and demodulation circuits.*