**RADAR SIGNAL PROCESSING**

**Course Code:** 13EC2105  
**L P C**  
4 0 3

**Pre requisites:** Analog and digital communication systems, DSP, Basic Radar engineering.

**Course Educational Objectives:**
1. To understand matched filter.
2. Detection of Radar signals in noise.
3. Radar waveforms.

**Course Outcomes:**
1. Design Radar systems in different noise environment.
2. Detection of targets in noise environment.
3. This course provides foundation for more advanced work in detection theory adaptive signal processing.

**UNIT-I**

**RANGE EQUATION & MATCHED FILTER:**

**UNIT-II**

**SIGNAL MODELS:**

**UNIT-III**

**SAMPLING AND QUANTIZATION OF PULSED RADAR SIGNALS:**
Domain criteria for sampling radar signals, sampling in the fast time dimension, Sampling in slow time, Sampling the Doppler spectrum, spatial and angle dimension, Quantization.

UNIT-IV

DOPPLER PROCESSING:

UNIT-V

PHASE CODING TECHNIQUES:

TEXT BOOKS:

REFERENCES: