MVSR Engineering College, Nadergul.

Department of Mechanical Engineering

COURSE OUTCOMES

Class: B.E.III Year II Sem (Mech. Engg.)

Name of the Course: **Control System Theory**

Course Code: ME 355

At the end of the course student is able to

1. Develop mathematical models and transfer functions for mechanical, electromechanical and hydraulic systems
2. Predict time response of dynamic systems, evaluate stability and determine steady state errors.
3. Design control systems using Root locus method to obtain required time domain specifications
4. Sketch Bode plots and polar plots to analyse the frequency response of control systems
5. Determine gain and phase margins of a control system using Nyquist criteria for stability.
6. Design lead or lag compensators in time-domain or frequency domain approach to obtain required response and stability margins
7. Determine time response of chosen system output variables by state-space approach and ascertain Controllability & Observability