

**Faculty of Engineering & Technology**

**Control Systems**

**Information :**

**Course Code :** EED302

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Biomedical Engineering

**Description :**

Introduction to feedback control systems. Block diagram reduction. Steady-state error. Transient response analysis: maximum overshoot, settling time, rise time and peak time. System stability and Routh's criterion. Root-Locus analysis: asymptotes, breakaway points, angles of departure. Design of PID controller using root-locus. Frequency response analysis techniques and Bode diagrams. Design of series compensators using Bode Diagrams. Applications using Matlab.