

## 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 Rouths 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.