

## Faculty of Engineering & Technology

## **Control Systems**

Information :

Course Code :	EED302	Level	:	Undergraduate	Course Hours :	3.00- Hours
Department :	Electrical Power Engineering					

Instructor Information :

Title	Name	Office hours				
Professor	Said Fouad Mohamed Mekhemar					
Assistant Lecturer	Ahmed Moreab Hussien Mohamed					
Assistant Lecturer	Mohamed Essam Abd El Aziz Abd El Aal					
Assistant Lecturer	Mohamed Abdallah Mahmoud Shaheen					
Assistant Lecturer	Mohamed Abdallah Mahmoud Shaheen					
Assistant Lecturer	Ahmed Moreab Hussien Mohamed					

## **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¢ 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.