Course Number and Name
BEI601 - CONTROL SYSTEMS

Credits and Contact Hours
4 and 60

Course Coordinator’s Name
Ms B.Kalaiselvi

Text Books and References

TextBook:

References:
5. www.electrical4u.com

Course Description
- To study control problem, control system dynamics and feedback principles.
- To study time response of first and second order systems and basic state variable analysis and to do simple problems.
- To study the concept of stability and criteria for stability and to do simple problems.
- To study the frequency response through polar plots and Bode plots and Nyquist stability criteria and to do simple problems.

Prerequisites
Signals & Systems, Electronics and Instrumentation

Co-requisites
Nil

required, elective, or selected elective (as per Table 5-1)

required

Course Outcomes (COs)

CO1: Outline the development of mathematical models to represent systems and their representation by transfer functions

CO2: Discuss the transient and steady state response of control systems

CO3: Practice frequency domain plots (Bode and Polar)

CO4: Analyze performance of control systems

CO5: Design compensation networks

CO6: Design the different types of compensators

Student Outcomes (SOs) from Criterion 3 covered by this Course

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List of Topics Covered

UNIT I  CONTROL SYSTEM MODELLING


UNIT II  TIME RESPONSE ANALYSIS:


UNIT III  STABILITY IN TIME DOMAIN:


UNIT IV  STABILITY IN FREQUENCY DOMAIN


UNIT V  COMPENSATION TECHNIQUES: