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Department of Mechanical Engineering	
Control Systms II (67574)	
Total Credits	**3**
major elective	
Prerequisites	P1 : Control Systems I (67471) OR Automatic Control (67325)

Course Contents

Frequency response methods. Stability in frequency domain. Design of feedback control systems. Design of state variable feedback systems. Introduction to digital control. Computer exercises using MATLAB software

	Intended Learning Outcomes (ILO's)	Student Outcomes (SO's)	Contribution
1	Ability to analyze feedback control systems using root locus and frequency response methods.	A	40 %
2	Perform stability analysis in the frequency domain and analyses robust control systems.	E	20 %
3	Ability to design feedback and state variable feedback control systems	C K	40 %

Textbook and/ or Refrences

Richard C. Dorf, and Robert H. Bishop (2001). Modern Control Systems, Ninth Edition, Prentice-Hall, InC.

Assessment Criteria	Percent (%)
First Exam	25 %
Second Exam	25 %
Final Exam	50 %

Course Plan

Week	Topic
1 , 3	CH. 7: The Root Locus Method.
4 , 5	CH. 8: Frequency response methods. Midterm Exam I (Thursday 13 / 10 / 2011)
6 ,8	CH.9 : Stability in the Frequency Domain.
9 , 11	CH. 10: The Design of Feedback Control Systems.
12 , 13	CH. 11: The Design of State Variable Feedback Systems. Midterm Exam II (Thursday 24 / 11 / 2011)
14 , 15	CH. 12: Robust Control Systems.
null	Final Exam