

Feedback for EEE6351 Session: 2010-2011

General Comments:

This course is designed to provide background information to students who have never encountered any avionic or control theory. Students have to answer 3 questions from a total of 4 (2 on avionics and 2 on control theory) and the exam contributes 80% of the module marks with coursework accounting for the remaining 20%

Question 1:

Question 2:

Question 3:

This year several students on the course came from a control background so the 2 questions in the control section were popular. In this question students had to plot the Bode frequency response plot on log-lin graph paper provided. Unfortunately 3 decade paper was provided, rather than the 4 decade provided which meant the resultant curve could only be plotted over a limited range. This did not affect the ability to answer the question, but could have led to inaccuracies. Students were not penalized for this. In part (b)(iii) and (iv) several students simply quoted an answer rather than explaining the method used to position the phase lead compensator; for this reason it was very difficult to award partial marks if the final answer was incorrect. Part (b)(iv) presented the most problems with only 1 student answering it correctly.

Question 4:

The majority of students who attempted this question managed parts (a) and (b) without too much difficulty. In part (c) obtaining the determinant appeared to be the most troublesome part; some students also failed to state whether the system was controllable or not. In part (d) most students knew the correct method but several made mistakes in the matrix algebra. Part (e) was well attempted but some students omitted signs of the summers and or omitted the feedback arrow to show the signal direction.