Examination Feedback for EEE402/6042 – Integrated Circuit Technology
Autumn Semester 2010-11

Feedback for EEE402/6042 Session: 2010-2011

Feedback: Please write simple statements about how well students addressed the exam paper in general and each individual question in particular including common problems/mistakes and areas of concern in the boxes provided below. Increase row height if necessary.

General Comments:

This year the majority of students were 6042 (MSc), rather than 402 (MEng). The course is held at an identical level for students of both courses. The overall pass rate was 53%, if one counts 50% as the basic pass mark and 73% with 40% as the pass mark.

The paper was similar to previous years. Only one Erasmus appeared for 402 and he got 33%. He rarely attended lectures.

Average: Q1:7.7
Q2: 9.9
Q3:8.8
Q4:11.4.
The highest marks were 75 (held jointly by 2).

Question 1:

This year one tough problem (6 marks) was introduced in Question 1 to discern the brightest. Unfortunately no one in the class got it right. This brought down the average for this question.

Most of the students had barely revised their notes, particularly in terms of basics of crystallography/semiconductors. In terms of class lectures, they had been shown “on-line” web-clips to clarify some of the concepts this year.

Question 2:

Standard questions in comparison to last year. Almost all got the problems right.

Few were precise in their knowledge of MOCVD and MBE. Part of the problem is the “memory” element of the questions, a large part of the class did not avail of the practical tour which would have helped them in this regard.

Question 3:

4 attempted this question. Two of them in particular answered brilliantly the question on the CMOS process flow. This was also an additional tough question introduced this year.

No one answered the general question on methods currently used to boost channel mobility.

Question 4:

Problem was easy for most. The question on wet and dry chemical etching was answered by most. The question of the pseudomorphic layer was not answered with as much precision as could have been expected.