

3E module supervision 2015-16

There is a long-standing and continuing problem with finding appropriate supervisors for 3E3 (Modelling risk) and 3E10 (Operations management). Special arrangements have been put in place following extensive discussion between the Teaching Office, the module leaders and the Subject Group. These arrangements were agreed by Directors of Studies at their meeting on 29 June 2015.

The primary consideration is that there should be an equal level of support available to all students. So rather than appoint supervisors of questionable standard, it has seemed best to use a different model to achieve the highest quality of support that we can. The arrangements described below are for quantitative papers, and there is no intention to extend the scheme to essay-based papers where individual feedback is still regarded as essential.

Arrangements for 3E3 and 3E10: Examples classes on examples papers.

The lecturer, or a very experienced supervisor, goes through the essential learning points from each examples paper, giving additional explanations for tricky parts and picking up common errors.

Following the class, a full crib should be made available on Moodle.

The class is offered to the whole student group, scheduled in advance as part of the lecture timetable. Third-year modules have 16 lectures, and there will in addition be 2 or 3 of these examples classes. The expected format is that classes will be 2h in duration: 1.5h to go through the material plus 30mins for questions raised by students.

Payment: No charges fall on Colleges. If the class is delivered by a non-UTO the Department will pay at lecture rate.

Feedback: There will be no CamCORS reports for 3E3 and 3E10. In order to gain benefit from the arrangements which have been put in place, students are expected to work through examples papers themselves and attend the scheduled examples classes.

(Note that this is loosely based on the model followed for Part IIB modules, where the expectation is that two of the 16 scheduled lecture slots will be used for examples classes.)

What are supervisions for?

Supervisions are normally provided as a supplement to lectures, with aims including the following:

1. Elucidate and contextualize lecture material.
2. Help students to plan and schedule their work by providing deadlines for working through examples papers.
3. Ensure students can complete the examples papers to as good a standard as is reasonable.
4. Provide feedback to students on their progress.

Engineering supervisions tend to centre on examples papers, so mainly addressing points 2 and 3. For third-year students, point 4 is achieved patchily and is very dependent on the experience and diligence of the supervisor. A baseline might be that students know that they are coping if they can do the examples sheets and Tripos questions. This requires that there are high-quality informative cribs that students can use to augment and assess their understanding.

What is expected from a third-year engineering supervision and what does it cost?

Following Department guidelines, the agreed normal allowance for third-year modules is four supervisions (three + one synoptic/revision, not always used), ideally in groups of 2, but 3 or 4 are not uncommon. Supervisions are scheduled after students have attempted examples papers, and it is expected that most of the supervision will be taken up with discussing the paper, with the supervisor helping the students to work through parts they have found difficult, sorting out underlying problems and drawing together parts of the course. By the end of the supervision students should be able to complete these papers. In addition, they should have had authoritative guidance on any questions they may have on lecture notes, or on Tripos questions they have attempted on their own

initiative. Supervisors are expected to be thoroughly familiar with the course and the examples sheets.

Supervisors provide feedback for students and College via CamCORS reports for each student. Supervisions are paid for by Colleges. Colleges should be budgeting £67.60 per student per module (doubleton supervision rate 2014-15 is £33.80). Note that actual costs are lower on average (bigger group sizes; often only three supervisions given).

What should a crib contain?

Cribs for examples papers and Tripos papers are extensively used by students as a source of essential material for understanding and revising the course. A good crib will (depending on the type of course) provide the sorts of answers that will help students to understand the material, so it may explain some concepts and give all the steps in calculations, together with helpful tips and comments. If the paper is essay-based, the crib might include some commentary and an essay plan. For Tripos cribs for all types of papers, a note of what students got wrong or found difficult is very helpful.

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