EC.15.21

Marking & classing criteria in examinations for the Engineering Tripos and the Manufacturing Engineering Tripos

The Faculty Board of Engineering recommends to the Examiners for the 2016 Tripos examinations the following assessment criteria:

1. Marking criteria for questions

Marks of 70% to 100% to be given for an answer which is substantially complete and correct, and which displays an excellent understanding and analytical ability.

Marks of 60% to 69% to be given for an answer which, although moderately incomplete or incorrect, displays a good understanding and analytical ability.

Marks of 50% to 59% to be given for an answer which, although significantly incomplete or incorrect, displays a sound understanding and analytical ability.

Marks of 40% to 49% to be given for an answer which, although seriously incomplete or incorrect, displays a basic understanding and analytical ability.

2. Marking criteria for essay-based questions

Answers to essay questions should be clear, accurate, relevant to the question set and supported by appropriate use of evidence and examples. Additional credit is given where the following qualities are displayed:

- effective organisation and prioritisation of material, usually on the basis of a theme or argument. A collage of information with no coherent argument should be avoided;
- clear and logical analysis with theory used to advance the analysis;
- knowledge of relevant lecture material and related literature;
- effective and appropriate use of personal experience;
- originality in discussion and analysis.

Marks of 70% to 100% to be given for an essay which demonstrates excellent knowledge and understanding of the material and displays most of the requirements referred to above.

Marks of 60% to 69% to be given for an essay which shows a good grasp of the material, and an ability to detect underlying assumptions, adopt a critical stance and see interconnections between different ideas.

Marks of 50% to 59% to be given for an essay which is for the most part an accurate but descriptive account. Rehearsed material may be reproduced that is only partly relevant or poorly organised or unclear. If there is originality or insight it is not sufficient to compensate for incomplete, superficial or erroneous features of the answer.

Marks of 40% to 49% to be given for an essay which displays a basic familiarity with the material, but is seriously incomplete and shows errors of understanding.

3. Classing criteria for the whole examination

Marks may be scaled by the Examiners or Assessors as approved by the Chairman of Examiners for the Tripos examination in question. Further details are given in the Faculty Board Guidelines to Examiners and Assessors.

The orders of merit on which the class boundaries are drawn identify candidates by number only. Class divisions are drawn according to the Examiners' judgement on the candidates' performance, but with regards to the proportions in each division over the preceding years

Classed Tripos examinations (Parts IA, IB and IIA)

Candidates are placed in order of merit according to the aggregate mark for written papers, coursework and project work.

The list of those awarded Honours is divided into classes I, II.1, II.2 and III. It is expected that the proportions of classes awarded for the Engineering Tripos will **approximately** follow the following percentages of the total number of candidates:

Class	Part IA	Part IB	Part IIA*
I	30%	30%	30%
II.1	50%	50%	50%
II.2 and below	20%	20%	20%

Because of the small cohort size the Faculty Board does not specify proportions for Part IIA Manufacturing Engineering, but expects examiners to have due regard for comparability with Engineering Part IIA.

For Part IIA Engineering the standard of a Distinction should be set at a high level and normally only the top 1 or 2% of candidates would be considered. Distinctions should be awarded to a continuous unbroken sequence of candidates at the top of the order of merit. The Part IIA Engineering class list is posted by engineering area. NB. Distinctions are not awarded for Part IIA Manufacturing Engineering.

Part IIB examinations

Part IIB Engineering and Manufacturing Engineering are not classed but candidates are awarded Honours, Honours with Merit, or Honours with Distinction depending on their performance.

Part IIB Engineering

In Part IIB Engineering, marks for the written papers are added to the normalised coursework marks (excluding the project) to produce an aggregate mark for each candidate. The Examiners determine the award of grades based on the aggregate mark for written papers and normalised coursework, together with the separate mark for the project.

The pass criterion for the M.Eng degree requires candidates to achieve a II.2 standard or better (typically the II.2 boundary is 50%) in combined project and module marks. Compensation for poor marks in the modules through good work in the project is permitted but candidates must achieve at least a third class standard (typically 40%) in their combined module marks and at least a II.2 standard in the overall project mark. Candidates who obtain first-class marks in both their project and their modules will be awarded a Distinction. Candidates who have not obtained a Distinction, but who obtain at least a II.1 in both the project and the modules will be awarded a Merit. The Faculty Board have left the precise definition of first-class and upper second-class to be determined by the Examiners.

Part IIB Manufacturing Engineering

In Part IIB Manufacturing Engineering, separate orders of merit will be produced for examination credit (the aggregate mark of the two written papers and the module assessments), and coursework credit (the aggregate mark of the industrial assignments and robot lab). These results will be combined to form an aggregate order of merit.

Candidates who achieve a first-class standard in both examination and coursework credit will be awarded a Distinction. Candidates who have not obtained a Distinction but achieve at least a II.1 standard in both elements will be awarded a Merit. The pass standard for the award of the MEng degree will require at least a II.2 standard in both elements.

Secretary to the Faculty Board of Engineering, September 2015