Examination Conventions 2025/26
Honour School of Materials Science

Contents

1. Introduction

Examination conventions are the formal record of the specific assessment standards for the course or courses to which they apply. They set out how examined work will be marked and how the resulting marks will be used to arrive at a final result, a progression decision and/or classification of an award.

These conventions apply to the Honour School of Materials Science for the academic year 2025-26. The supervisory body responsible for approving these examination conventions is the Department of Materials' Academic (Undergraduate) Committee (DMAC).

2. Rubrics for individual papers

All written papers are assessed by closed-book, in-person examination. Each examination will be invigilated. All examination papers will be handwritten.

The only types of calculators that may be used in examinations are from the following series:

CASIO fx-83

CASIO fx-85

SHARP EL-531

Candidates are required to clear any user-entered data or programmes from memories immediately before the exam begins. The invigilators may inspect any calculator during the course of an exam.

Candidates for the degree of Master of Engineering in Materials Science

(Candidates for the degree of Bachelor of Arts in Materials Science should refer to Appendix 1)

Each written paper is assessed by a three-hour examination.

All General Papers comprise eight questions from which candidates attempt five. Each question is worth 20 marks. The maximum number of marks available on each general paper is 100. There is no strict rule about how many questions are set on each lecture course in the General Papers. As a result, (i) it should not be assumed that a question will be set on every lecture course and (ii) some questions may require knowledge from across the core courses from Years 1 and 2.

Materials Option Papers comprise one section for each twelve-hour Options lecture course, each section containing two questions worth 25 marks, with the marks for each part indicated on the question paper: candidates are required to answer one question from each of any three sections and a fourth question drawn from any one of the same three sections. The maximum number of marks available on each option paper is 100.

Candidates may substitute a Supplementary Subject or Foreign Language option for A17517S1 Entrepreneurship Coursework, in accordance with the procedures set out in the course handbook.

Assessment Unit	Rubric	Format
A17944H1 Materials General Paper 1: Lifecycle, Processing and Engineering of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17945H1 Materials General Paper 2: Electronic Properties of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17946H1 Materials General Paper 3: Mechanical Properties of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17947H1 Materials General Paper 4: Structure and Thermodynamics of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A10778H1 Materials Options Paper 1	Answer **FOUR** questions only, one from each of any three sections and a fourth question drawn from any one of the same three sections.	Handwritten
A10779H1 Materials Options Paper 2	Answer **FOUR** questions only, one from each of any three sections and a fourth question drawn from any one of the same three sections.	Handwritten
A10780S1 Reports of Practical Work in Materials	Refer to Part I course handbook	Submission
A11031S1 Industrial Visit Reports	Refer to Part I course handbook	Submission
A17517S1 Entrepreneurship Coursework	Refer to Part I course handbook	Submission
A10781S1 Team Design Project	Refer to Part I course handbook	Submission
A10783S1 Introduction to Modelling in Materials Science	Refer to Part I course handbook	Submission
A17442S1 Atomistic Modelling	Refer to Part I course handbook	Submission
A10782S1 Advanced Characterisation of Materials	Refer to Part I course handbook	Submission
A10784S1 Subject of Investigation - Research Project	Refer to Part II course handbook	Submission

3. Marking Conventions

3.1 University scale for standardised expression of agreed final marks [EAF 11.1]

All agreed final marks for individual papers and formally assessed coursework are expressed as whole numbers on a 0–100 scale (University Standardised Marks, USMs):

70-100	First
60-69	Upper second
50-59	Lower second
40-49	Third
30-39	Pass
0-29	Fail

3.2 Qualitative marking criteria for different types of assessment

Qualitative descriptors, based on those used across the Mathematical, Physical and Life Sciences Division, are detailed below:

70-100	The candidate shows excellent problem-solving skills and excellent knowledge of the material over a wide range of topics, and is able to use that knowledge innovatively and/or in unfamiliar contexts. The higher the mark in this band the greater will be the extent to which these criteria will be fulfilled; for marks in the 90-100 range there will be no more than a very small fraction, circa 5-10%, of the piece of work being examined that does not fully meet all of the criteria that are applicable to the type of work under consideration. The 'piece of work' might be, for example, an individual practical report, a question on a written paper, or a whole written paper.
60-69	The candidate shows good or very good problem-solving skills, and good or very good knowledge of much of the material over a wide range of topics.
50-59	The candidate shows basic problem-solving skills and adequate knowledge of most of the material.
40-49	The candidate shows reasonable understanding of at least part of the basic material and some problem solving skills. Although there may be a few good answers, the majority of answers will contain errors in calculations and/or show incomplete understanding of the topics.

30-39	The candidate shows some limited grasp of basic material over a restricted range of topics, but with large gaps in understanding. There need not be any good quality answers, but there will be indications of some competence.
0-29	The candidate shows inadequate grasp of the basic material. The work is likely to show major misunderstanding and confusion, and/or inaccurate calculations; the answers to most of the questions attempted are likely to be fragmentary.

Qualitative Criteria for the Part II Thesis

90-100	Thesis rated very highly in all categories of the assessment guidelines. Typically this would be an extremely high quality thesis showing extensive evidence of original thought, results very well analysed and put in context, very well presented, and with no important deficiencies.
80-89	Thesis demonstrating very strong performance across most areas, with some minor weaknesses in one or two areas. Typically this would be a very high quality thesis showing evidence of original thought, results very well analysed and put in context, very well presented, but with some minor deficiencies.
70-79	Very strong overall performance, but with significant weakness in one area or minor weaknesses in several. Typically this would be a high quality thesis showing some evidence of original thought, results well analysed and put in context, well presented. May be deficient in one or two areas accounting for a minority of the whole.
60-69	Strong overall performance, but with significant weaknesses in several areas. Typically the work would have been competently carried out and reasonably well presented and analysed. This mark range should be achievable by an average student with reasonable effor
50-59	Satisfactory overall performance, but with serious weaknesses in at least one area. Typically the work would have been carried out mostly with competence, but with some flaws (e.g. errors, misinterpretations). Little evidence of original thought.
40-49	Poor overall performance with serious weaknesses in several areas. No evidence of original thought.
30-39	Poor overall performance with serious weaknesses in the majority of areas. The thesis of a candidate who has done little work and has presented this work poorly.
0-29	Very poor performance with little or no meaningful content.

3.3 Verification and reconciliation of marks [EAF 11.2]

Part I Written Papers

During the marking process the scripts of all written papers remain anonymous to the markers. The markers are guided by the suggested exemplar answer and marking schemes.

All papers are double marked, blind, by a course lecturer (assessor) and an examiner. Each marker awards a mark to the nearest 0.5 for each question. After individual marking, the two markers

confer to reach an agreed mark for each question. If the differences in marks are small (2 marks in General Papers; 2.5 marks in Options Papers), the two marks are averaged without rounding.

Otherwise, the markers identify the discrepancy and read the answer again, either in whole or in part, to reconcile the differences and record their reason. If after this process the markers still cannot agree, they seek the help of the Chair, or another examiner as appropriate, to adjudicate.

An integer total mark for each paper is awarded, with decimal values of 0.5 or above rounded up.

Part I Coursework

Second year practicals are assessed continually by senior demonstrators in the teaching laboratory . Part I examiners have the authority to set a practical examination.

Reports on **Industrial Visits and Industrial Talks** are single-marked by the Industrial Visits Academic Organiser.

The following coursework assessment units are double-marked, blind: **Entrepreneurship, Team Design Project, Introduction to Modelling in Materials, Advanced Characterisation of Materials, and Atomistic Modelling**. This refers to the fact that each marker records an independent mark before seeing the other marker's mark. It does not imply that the candidate is anonymous to the marker. The markers confer to reach an agreed mark for the assessment unit, which is reported alongside the pair of initial marks. Simple averaging is permitted where the initial marks differ by no more than 10% of the total marks available. In all other cases, the markers review the submission and reconcile the difference through discussion before determining a final agreed mark.

For the **Team Design Project**, supervisors submit written reports, which are taken into account in determining final marks. The same pair of examiners assess both written reports and presentations.

The lead organiser for **Introduction to Modelling in Materials** submits to the Assessors and Examiners of the module a short report which provides (i) a summary of the availability of the software & hardware required for each mini-project and (ii) any other pertinent information.

The lead organiser for **Characterisation of Materials** submits to the Assessors and Examiners of the module a short report which provides, by sample set only, (i) a summary of the availability of appropriate characterization instruments and/or data during the two-week module and (ii) any other pertinent information. An analogous report is provided by the lead organiser for **Atomistic Modelling** in respect of the software & hardware required for the project. One of the Examiners oversees the marking process for Characterisation of Materials and Atomistic Modelling, sampling submissions to ensure consistency between the different pairs of assessors and the two modules.

Overall initial and agreed final marks for each coursework assessment unit are expressed in USMs (see 3.1) and rounded to the nearest integer, with decimal values of 0.5 or above rounded up.

Part II Coursework

The Part II project is assessed by means of a thesis. The marking criteria are published in the Part II Course Handbook. The assessment takes into account a written report from the candidate's supervisor and the viva voce examination.

The Supervisor's report is divided into Parts A & B: Part A provides simple factual information that is of significance to the examiners, such as availability of equipment, and is seen by the two markers before they read and assess the thesis. Part A does not include personal mitigating circumstances

which, subject to guidance from the Proctors, normally are considered only in discussion with all Part II examiners thus ensuring equitable treatment of all candidates with mitigating circumstances. Part B of the supervisor's report provides their opinion of the candidate's engagement with the project and covers matters such as initiative and independence; it is not seen by the examiners until the discussion held after the viva.

Two Part II examiners (or one examiner and one assessor) read the thesis, together with Part A of the supervisor's report, and each of them independently allocates an initial mark based on the guidelines published in the course handbook (double-blind marking). In addition, the thesis will be seen by one of the two external examiners.

A viva voce examination is held: the purpose of the viva is to clarify any points the readers believe should be explored, and to ascertain the extent to which the work reported is the candidate's. Any examiners who have supervised the candidate's Part II project or are their college tutor will not be present at the viva or the subsequent discussion. Four individuals will have specified examining roles: Two examiners, or one examiner and an assessor, who have read the thesis entirely; the external examiner to whom the thesis was assigned; and an examiner acting as the session Chair who will complete any necessary documentation for that viva. A discussion involving all examiners present is held after the viva, during which Part B of the supervisor's report is taken into account. The outcome of the discussion is an agreed mark for the project. In arriving at the agreed mark the examiners will take into account all of the following, (i) the comments and initial marks of the original markers, (ii) the candidate's understanding of their work as demonstrated during the viva and (iii) the opinion of the external examiner who has seen the thesis.

If the two initial marks allocated in advance of the viva differ significantly (that is, by more than 10% of the maximum available for a Part II project) this will be addressed explicitly during the discussion after the viva. In the majority of other cases, the viva has only a small influence on the agreed mark awarded to a Part II thesis.

3.4 Scaling [EAF 11.8]

Part I Written Papers

Adjustment to marks, known as scaling, may be applied by the Examiners where in their academic judgement:

- a paper was more difficult or easy than in previous years, and/or
- a paper has generated a spread of marks which are not a fair reflection of student performance on the University's standard scale for the expression of agreed final marks, i.e. the marks do not reflect the qualitative marks descriptors.

Such scaling is used to ensure that candidates' marks are not advantaged or disadvantaged by any of these situations. In each case, examiners will establish if they have sufficient evidence for scaling. Scaling will only be considered and undertaken after moderation of a paper has been completed, and a complete run of marks for all papers is available.

If it is decided that it is appropriate to use scaling, the examiners will review a sample of papers either side of the classification borderlines to ensure that the outcome of scaling is consistent with academic views of what constitutes an appropriate performance within in each class.

Detailed information about why scaling was necessary and how it was applied will be included in the Examiners' report and the algorithms used will be published for the information of all examiners and students.

Part I Coursework

Adjustment to marks, known as scaling, normally is not necessary for coursework.

The Practical Courses Organiser reviews the marks for the practicals before they are considered by the examiners, drawing to their attention (i) any anomalously low or high average marks for particular practicals and (ii) any factors that impacted on the practical course, such as breakdown of a critical piece of equipment.

Part II Coursework

Scaling normally is not necessary for the Part II theses.

3.5 Short-weight convention and departure from rubric in examinations

The rubric on each paper indicates a prescribed number of answers required (e.g. "candidates are required to submit answers to no more than (x) questions"). Candidates are asked to indicate on a covering sheet which questions, up to the prescribed number, they are submitting for marking. If this information is not provided then the examiners will mark the first (x) questions in numerical order by question number. The examiners will NOT mark questions in excess of the prescribed number. If fewer questions than the prescribed number are attempted:

a. each missing attempt will be assigned a mark of zero,
b. for those questions that are attempted no marks beyond the maximum per question indicated on the paper will be awarded and
c. the mark for the paper will still be calculated out of 100.

In addition, for the Materials Options Papers, the examiners will mark questions from the number of sections prescribed by the rubric. Should a candidate attempt questions from more than the number of sections prescribed, the examiners will mark those questions from the sections in the order listed by the candidate on the covering page, up to the maximum prescribed. If the information is not provided on a covering page then the examiners will mark the sections in alphabetical order by section delineator (section A, section B, etc.).

3.6 Penalties for late or non-submission of submitted work [EAF 8.2; ER 14]

For Assessment Units consisting of a single submission (Entrepreneurship, Team Design Project, Introduction to Modelling in Materials, Advanced Characterisation of Materials, Atomistic Modelling, Subject of Investigation - Research Project, and An Extended Essay on an approved topic in Materials Science) the scale of penalties agreed by the board of examiners in relation to late submission is set out below. Details of the circumstances in which such penalties might apply can be found in the Examination Regulations (Regulations for the Conduct of University Examinations, Part 14.) Failure to submit a required assessment more than 14 calendar days after the deadline will result in failure of that Part of the Second Public Examination.

Lateness	Cumulative mark penalty
Up to one day (*submitted on the day but after the deadline)*	Deduction of 10% of the maximum marks available.
Each additional day	Additional deduction of 5% of the maximum marks available per day (e.g. two days late = 15%; three days late = 20%). Each weekend day counts as a full calendar day for the purposes of mark deductions.
Max. deducted marks up to 14 days late	Deductions are cumulative. The total deduction will not reduce the mark below 40%.
More than 14 calendar days after the deadline	Fail

For Assessment Units consisting of multiple submissions (e.g. practical scientific reports, reports on industrial visits, and reports on invited talks), late submission or non-submission penalties are applied to the individual component.

Late submission of an **individual practical scientific report** will attract penalties calculated as a percentage of the maximum marks available for that report, as follows:

Lateness	Cumulative mark penalty
Up to one day (*submitted on the day but after the deadline)*	Deduction of 10% of the maximum marks available for the individual scientific report
Each additional day	Additional deduction of 5% of the maximum marks available per day (e.g. two days late = 15%; three days late = 20%). Each weekend day counts as a full calendar day for the purposes of mark deductions.
Max. deducted marks up to 14 days late	Deductions are cumulative. The total deduction will not reduce the mark for the individual scientific report below 40%.
More than 14 calendar days after the deadline	Fail

Late submission of an **individual industrial visit/talk report** will result in a mark of 0 (non-satisfactory) for that report.

Failure to submit an individual practical scientific report, industrial visit report, or invited talk report more than 14 calendar days after the deadline will normally be regarded as failure to complete the relevant Assessment Unit satisfactorily and will therefore result in failure of Part I of the Second Public Examination.

3.7 Penalties for over-length work and departure from approved titles or subject-matter in submitted work [ER 16]

Where a candidate submits a piece of written coursework which exceeds the limit prescribed by the relevant regulation/the course handbook, the examiners will apply a penalty of up to 10% of the maximum mark available for the piece of work.

3.8 Penalties for poor academic practice in submitted work [EAF 8.4.3]

Substantial guidance is available to candidates on what constitutes plagiarism and how to avoid committing plagiarism (see the Course Handbook)

The Examination Board shall deal wholly with cases of poor academic practice in submitted work where the material under review is small and does not exceed 10% of the whole. Assessors should mark work on its academic merit with the board responsible for deducting marks for matters such as derivative or poor referencing. Determined by the extent of poor academic practice, the board shall deduct between 1% and 10% of the marks available for the piece of work in question.

Any more serious cases of poor academic practice should always be referred to the Proctors.

3.9 Penalties for non-attendance at examinations [EAF 11.9.1; ER 14]

Unless the Proctors have accepted a submission requesting absence from an examination, under Section 14 of the Regulations for the Conduct of University Examinations, failure to attend a written examination in Part I or the viva voce examination in Part II will result in the failure of the whole Part (technical fail).

3.10 Penalties for late submission of online examination scripts [EAF 9.3.2]

This does not apply since all examination papers are handwritten.

3.11 Penalties relating to practical classes

Attendance at the practical classes for **A10780S1 Reports of Practical Work in Materials** is compulsory and will be monitored by the Teaching Lab Technician.

The following mark penalties relating to practical classes apply:

For non-attendance at labs for part of or all of a practical without approval: A deduction equivalent to the number of marks available for notebook assessment for that practical or 5% ($^{3}/_{60}$) of the total marks available for the assessment unit in the event of a practical assessed via report.

For starting an experiment without permission: The number of marks available for notebook assessment for that practical or 5% ($^{3}/_{60}$) of the total marks available for the assessment unit in the event of a practical assessed via report.

For failure to hand in the practical book at the end of each day: $^{1}/_{60}$ of the total marks available for the assessment unit.

The exam board will also be presented with the attendance information for students, specifying where non-attendance has been excused, and will make the final decision on application of penalties and/or progression.

4. Progression rules and classification conventions

4.1 Qualitative descriptors of classes

Class I Honours 70 – 100	The candidate shows excellent problem-solving skills and excellent knowledge of the material over a wide range of topics, and is able to use that knowledge innovatively and/or in unfamiliar contexts.
Class II(i) Honours 60 – 69	The candidate shows good or very good problem-solving skills, and good or very good knowledge of much of the material over a wide range of topics.
Class II(ii) Honours 50 – 59	The candidate shows basic problem-solving skills and adequate knowledge of most of the material.
Class III Honours 40 - 49	The candidate shows reasonable understanding of at least part of the basic material and some problem solving skills. Although there may be a few good answers, the majority of answers will contain errors in calculations and/or show incomplete understanding of the topics.
Pass 30 - 39	The candidate shows some limited grasp of basic material over a restricted range of topics, but with large gaps in understanding. There need not be any good quality answers, but there will be indications of some competence.
Fail 0 - 29	The candidate shows inadequate grasp of the basic material. The work is likely to show major misunderstanding and confusion, and/or inaccurate calculations; the answers to most of the questions attempted are likely to be fragmentary only.

4.2 Classification rules

Candidates for the degree of Master of Engineering in Materials Science

(Candidates for the degree of Bachelor of Arts in Materials Science should refer to Appendix 1)

In calculating the year outcomes and the final degree classification, the following weightings are applied to the various assessment units.

	Assessment Unit	Weighting
Part I	Entrepreneurship Coursework or Foreign Language Option or Supplementary Subject (Quantum Chemistry; History & Philosophy of Science)	0.2
	General Paper 1	1.0
	General Paper 2	1.0
	General Paper 3	1.0
	General Paper 4	1.0
	Options Paper 1	1.0
	Options Paper 2	1.0
	Reports of Practical Work in Materials	0.6
	Industrial Visit Reports	0.1
	Team Design Project	0.5
	Introduction to Modelling in Materials Science	0.3
	Advanced Characterisation of Materials or Atomistic Modelling	0.3
Part II	Subject of Investigation	4.0

Part I

The marks as agreed by the board of examiners are converted into outcomes for Part I as follows:

Honours Pass	An overall weighted average mark of 40.0 or above. AND A mark of 40 or above in at least four of the six written papers. AND A mark of 40 or above in each coursework assessment unit.
Pass	An overall weighted average mark of 30.0 or above. AND A mark of 30 or above in each coursework assessment unit.
Fail	An overall weighted average mark of below 30.0 OR a mark of below 30 in any coursework assessment unit.

The examiners do not divide the categories further at Part I.

Part II

Once marking of Parts I and II is complete, an overall weighted average mark is calculated for each candidate and classification is determined.

Award of the M.Eng. degree requires an Honours Pass in Part I and a mark of at least 40 in Part II.

Candidates who do not achieve a mark of at least 40 in Part II are not eligible for the M.Eng. degree, irrespective of their overall weighted average mark.

Part II Mark	**Part II Outcome**	**Final Award**
Mark ≥ 40	Classified Honours	M.Eng, with classification based on the overall weighted average: First Class: A weighted average mark of 70.0 or above Upper-Second Class: A weighted average mark of 60.0 or above Lower-Second Class: A weighted average mark of 50.0 or above Third Class: A weighted average mark of 40.0 or above
Mark ≥ 30 and < 40	Pass	Unclassified B.A. (Hons) on the basis of Part I performance.
Mark < 30	Fail	Unclassified B.A. (Hons) on the basis of Part I performance.

In terms of the degree awarded, there is no difference between a Pass and a Fail in Part II.

Classification is based solely on the overall weighted average mark, except in borderline cases, where the profile of marks across assessment units may be considered. A candidate shall be considered borderline if their final average mark lies within 1 percentage point below the relevant classification boundary. In borderline cases the examiners use their discretion and consider the quality of the work the candidate has presented for examination over the whole profile of FHS assessments; thus for Part I outcomes the Part I assessments, and for overall degree outcomes the assessments for both Parts I and II. The external examiners often play a key role in such cases.

4.3 Progression rules

No candidate for the degree of Master of Engineering in Materials Science may present themselves for examination in Part II unless they have (a) been adjudged worthy of Honours by the Examiners in Part I and (b) normally obtained a minimum overall weighted average mark of 50.0 in the Part I Examination.

Candidates adjudged worthy of honours and obtaining a minimum weighted average mark of 50.0 in the Part I Examination normally proceed to Part II, but they may leave after Part I, in which case an Unclassified Honours B.A. degree will be awarded.

Candidates adjudged worthy of honours in Part I who do not obtain a minimum weighted average mark of 50.0 in the Part I Examination may leave after Part I, in which case an unclassified Honours B.A. degree will be awarded, or may retake Part I the following year, subject to college approval. See section 5.

Candidates who are not adjudged worthy of honours in Part I will not be allowed to proceed to Part II. They may leave with a B.A. (without honours) or may retake Part I the following year, subject to college approval. See section 5.

4.4 Use of vivas [EAF 10]

There are no vivas in the Part I examination.

In Part II, a viva voce examination is held for all candidates.

The purpose of the viva is to clarify any points the readers believe should be explored, and to ascertain the extent to which the work reported is the candidate's.

It is stressed that it is the scientific content of the project and the candidate's understanding of their work that is being considered in the viva.

5. Resits [EAF 13]

Part I

In the event that a candidate obtains an overall weighted average mark of less than 50 in Part I, a resit is permitted. Such a candidate may re-enter for the whole of the Part I examination on one occasion only, normally in the examining session in Trinity Term following the examiners' original decision. The examination will cover the same material as the original examination and will follow the same rubric. If such a candidate is adjudged worthy of honours and achieves an overall average mark of 50.0 or more in Part I, the candidate may progress to Part II but will carry forward only a capped overall mark of 50.0 for Part I.

Part II

Candidates cannot normally retake Part II because the Examination Regulations require that they must pass Part II within one year of passing Part I.

6. Consideration of mitigating circumstances [EAF Annex E]

A candidate's final outcome will first be considered using the classification rules/final outcome rules as described above in section 4. The exam board will then consider any further information they have on individual circumstances.

Where a candidate or candidates have made a submission, under Part 13 of the Regulations for Conduct of University Examinations, that unforeseen circumstances may have had an impact on their performance in an examination, a subset of the board (the 'Mitigating Circumstances Panel') will meet to discuss the individual applications. The Panel will evaluate, on the basis of the information provided to it, the relevance of the circumstances to examinations and assessment, the strength of the evidence provided in support, and the extent of the impact. The Panel will also note whether all or a subset of papers were affected, being aware that it is possible for circumstances to have different levels of impact on different papers. The board of examiners will separately consider whether and how to adjust a candidate's results as a result of the mitigating circumstances, taking into account both the Panel's considerations of the notice(s) and the scripts/submissions and marks.

Candidates who have indicated they wish to be considered for DDH/DDM will first be considered for a classified degree, taking into account any individual MCE. If that is not possible and they meet the DDH/DDM eligibility criteria, they will be awarded DDH/DDM.

7. Details of examiners and rules on communicating with examiners

Internal Examiners

Professor Sebastian Bonilla

Professor Marina Galano

Professor Nicole Grobert

Professor Saiful Islam

Professor James Marrow

Professor Keyna O'Reilly (Chair)

Professor Mauro Pasta

External Examiners

Professor Paul Midgley, University of Cambridge

Professor Russell Goodall, University of Sheffield

Candidates should not under any circumstances contact individual internal or external examiners.

Appendix 1

B.A. in Materials science (Exit Award Only)

In their 3rd year, a candidate may opt to transfer out of the M.Eng. programme and seek to exit with a classified B.A. award, via one of the following routes:

Route 1 – Transfer to the B.A. at the start of the 3rd year

Route 2 – Transfer to the B.A. at the end of the 3rd year

Route 1

Such a candidate will have studied a reduced subset of Options courses and undertaken an additional element of coursework, comprising a literature-based research module. In this case, the candidate will sit a shorter version of the Option papers as all other Part I candidates and for each paper will answer only two questions in a reduced timeframe of 1.5 hours. The literature-based research module will be assessed by means of an extended essay of up to 4,000 words which is submitted to the examiners, who will also take into account a written report from the candidate's academic advisor for this research module. The essay is double marked, blind, by two examiners.

General Papers are assessed by a three-hour, closed-book examination.

Options Papers are assessed by a 90-minute, closed-book examination.

All examinations are in-person and handwritten.

Paper	**Rubric**	**Format**
A17944H1 Materials General Paper 1: Lifecycle, Processing and Engineering of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17945H1 Materials General Paper 2: Electronic Properties of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17946H1 Materials General Paper 3: Mechanical Properties of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A17947H1 Materials General Paper 4: Structure and Thermodynamics of Materials	There are **EIGHT** questions in this paper. Answer **FIVE** questions.	Handwritten
A16774H1 Materials Options Paper 1	Answer **TWO** questions only, from two different sections.	Handwritten
A16775H1 Materials Options Paper 2	Answer **TWO** questions only, from two different sections.	Handwritten

A10780S1 Reports of Practical Work in Materials	Refer to course handbook	Submission
A11031S1 Industrial Visit Reports	Refer to course handbook	Submission
A17517S1 Entrepreneurship Coursework	Refer to course handbook	Submission
A10781S1 Team Design Project	Refer to course handbook	Submission
A10783S1 Introduction to Modelling in Materials Science	Refer to course handbook	Submission
A17442S1 Atomistic Modelling	Refer to course handbook	Submission
A10782S1 Advanced Characterisation of Materials	Refer to course handbook	Submission
A16776S1 An Extended Essay on an approved topic in Materials Science	Refer to course handbook	Submission

Candidates may substitute a Supplementary Subject or Foreign Language option for A17517S1 Entrepreneurship Coursework, in accordance with the procedures set out in the course handbook.

Route 2

Such a candidate will have completed the same elements of assessment as for Part I of the M.Eng, as listed in Section 2 and in addition will be required to undertake a literature-based research module during the Long Vacation following the written papers. Consideration of all the results will be made by the examiners in the Trinity term of the year following the written papers. The literature-based research module will be assessed by means of an extended essay of up to 4,000 words which is submitted to the examiners, who will also take into account a written report from the candidate's academic advisor for this research module. The essay is double marked, blind, by two examiners.

Marking Conventions and Penalties

The examiners will apply the conventions that relate to the M.Eng. as detailed above in Section 3 to all elements of assessment for the B.A.

Classification Conventions

The qualitative descriptors of classes given in Section 4.1 also apply to the B.A.Once marking is completed, an overall weighted average mark is calculated for each candidate and classification then takes place. In calculating the final degree classification, the following weightings are applied to the various units of assessment for the BA in Materials Science.

	Assessment Unit	Weighting
Route 1	Entrepreneurship Coursework or Foreign Language Option or Supplementary Subject (Quantum Chemistry; History & Philosophy of Science)	0.2
	General Paper 1	1.0
	General Paper 2	1.0
	General Paper 3	1.0
	General Paper 4	1.0
	Options Paper 1	0.5
	Options Paper 2	0.5
	Reports of Practical Work in Materials	0.6
	Industrial Visit Reports	0.1
	Team Design Project	0.5
	Introduction to Modelling in Materials Science	0.3
	Advanced Characterisation of Materials or Atomistic Modelling	0.3
	An Extended Essay on an approved topic in Materials Science	0.5
	Assessment Unit	**Weighting**
Route 2	Entrepreneurship Coursework or Foreign Language Option or Supplementary Subject (Quantum Chemistry; History & Philosophy of Science)	0.2
	General Paper 1	1.0
	General Paper 2	1.0
	General Paper 3	1.0
	General Paper 4	1.0
	Options Paper 1	1.0
	Options Paper 2	1.0
	Reports of Practical Work in Materials	0.6
	Industrial Visit Reports	0.1
	Team Design Project	0.5
	Introduction to Modelling in Materials Science	0.3
	Advanced Characterisation of Materials or Atomistic Modelling	0.3
	An Extended Essay on an approved topic in Materials Science	0.5

Classified Honours

To be adjudged worthy of Honours normally a candidate must obtain a minimum overall weighted average mark of 40.0, obtain a minimum mark of 40 in each of at least four of the six written papers, and obtain a mark of 40 or above in each coursework assessment unit.

Subject to being adjudged worthy of honours, classification is based solely on the overall mark:

First Class: A weighted average mark of 70.0 or above
Upper-Second Class: A weighted average mark of 60.0 or above
Lower-Second Class: A weighted average mark of 50.0 or above
Third Class: A weighted average mark of 40.0 or above

The candidate's profile of marks from each element of assessment is taken into account only in borderline cases. A candidate shall be considered borderline if their final average mark lies within 1 percentage point below the relevant classification boundary.

Pass

A weighted average mark of 30.0 or above and a mark of 30 or above in each coursework assessment unit. The examiners consider that the candidate's overall performance has reached an adequate standard but is not worthy of Honours. The candidate is awarded a B.A. (without honours).

Fail

A weighted average mark of less than 30.0, or a mark of below 30 in any coursework assessment unit. The examiners consider that the candidate's overall performance is not worthy of a B.A.

Resits

In the event that a candidate obtains an overall weighted average mark of less than 40.0, a resit is permitted. Such a candidate may re-enter for the whole of the examination on one occasion only, normally in the year following the examiners' original decision. The examination will cover the same material as the original examination and will follow the same rubric. If such a candidate is adjudged worthy of honours, as defined under 'Classified Honours' above, the examiners may award a 3rd class Honours classification. The Examiners shall be entitled to award a Pass to a candidate who has reached a standard considered adequate but who has not been adjudged worthy of Honours on the occasion of this resit.