# MATERIALS 2020 UG ADMISSIONS EXERCISE – FEEDBACK LEAFLET

## 1. Overview of the 2020 UG Admissions Exercise – M.Eng in Materials Science (MS)

In the 2020 exercise we received 178 applications. Two of these applicants did not register for the PAT and, in the absence of mitigating circumstances, therefore were not short-listed for interview. The majority of applicants were studying, or had completed, either A-levels or the IB.

We seek to fill forty-one places for entry in October 2021.

111 candidates were short-listed for interview in December 2020 and subsequently forty-six were offered places for entry in October 2021 and two were offered deferred places for entry in October 2022.
All interviews were conducted by video-link.

96 of the 111 short-listed applicants are studying for, or had completed, A-level or Pre-U; 16 of these candidates taking three subjects, the remaining 80 four or more subjects.
Considering only Maths, Physics and Chemistry, for this subset of 96 short-listed applicants the mean number of A*/D1/D2 grades (predicted or achieved) per candidate is 2.7, compared to 2.4 in 2019, 2.7 in 2018 and 2.3 in both 2017 & 2016.

39 candidates within the above subset of 96 were offered a place.
Considering only Maths, Physics and Chemistry, for these 39 offer-holders the mean number of A*/D1/D2 grades (predicted or achieved) per candidate is 2.8, compared to 2.6, 2.7, 2.5 & 2.4 in 2019, 2018, 2017 & 2016 respectively.
5 of 21 candidates who are studying for, or had completed, the IB were offered a place.

## 2. Statistics
Please note these statistics fluctuate from year to year as a result of the relatively small sample sizes.

| 2020 MATERIALS UG ADMISSIONS | By Gender | | By Type of School | | | Contextual[2] Bands A & B | TOTAL |
|---|---|---|---|---|---|---|---|
| | Male | Female | UK State Maintained | UK Independent | Other[1] | | |
| Applications | 118 | 60 | 56 | 39 | 83 | 31 | 178[3] |
| Short-listed | 76 | 35 | 44 | 22 | 45 | 28 | 111 |
| Offers | 32 | 16 | 29 | 5 | 14 | 17 | 48 |
| Success[4] (%) | 27 | 27 | 52 | 13 | 17 | 55 | 27 |

[1] Primarily schools that are not in the UK

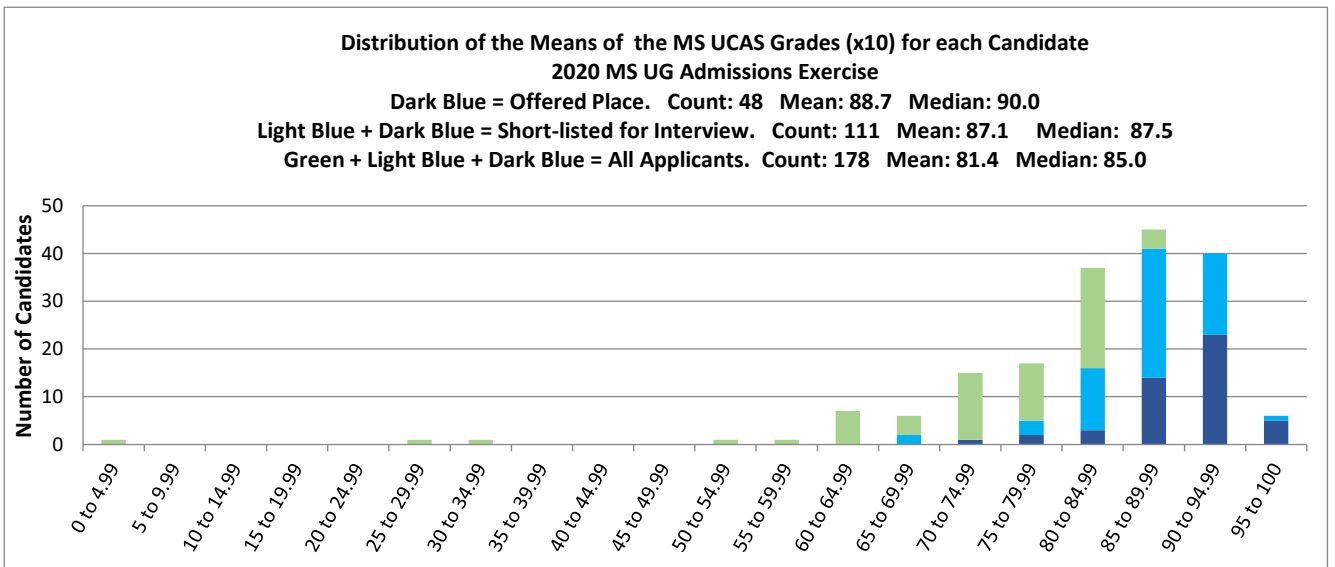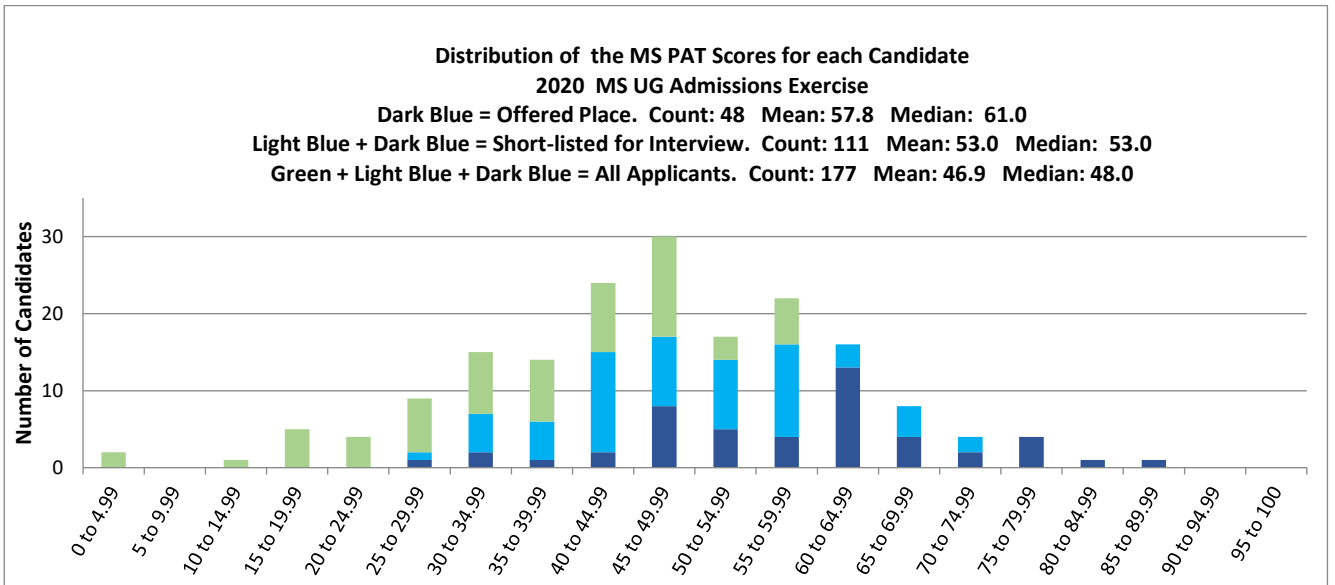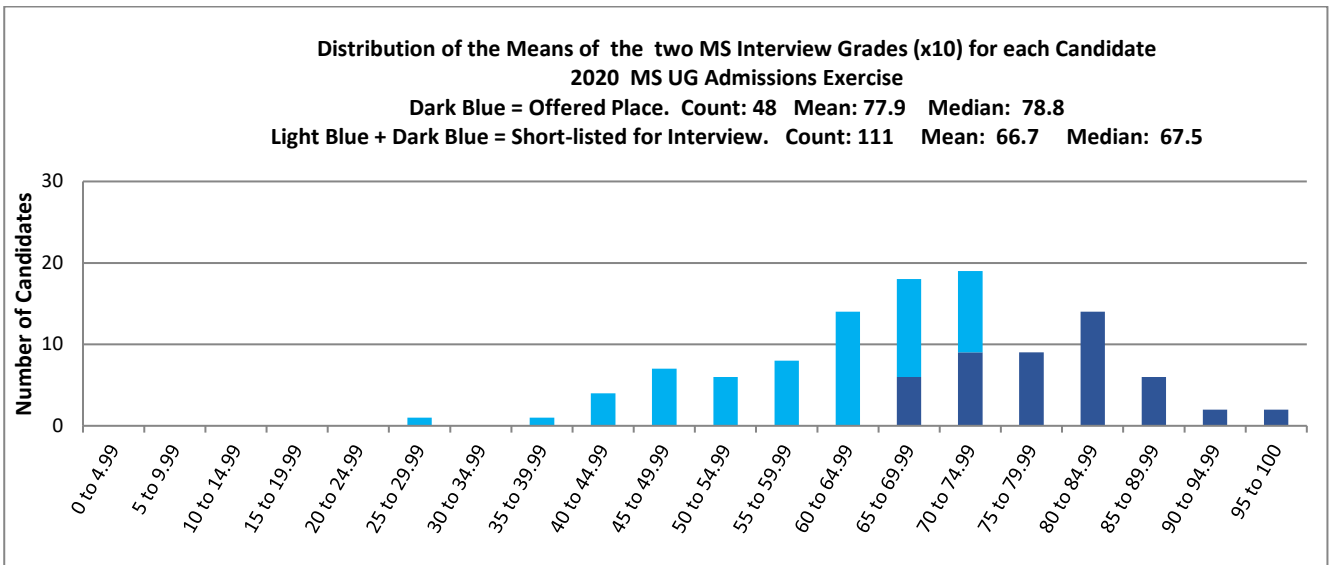[2] UK candidates in Bands A or B of the Oxford Composite Contextual Measure of Disadvantage

[3] 27 of these applicants opted not to specify a preferred college. 4 applied for a place deferred to October 2022

[4] Proportion of applicants in this category to whom a place was offered

| No. of candidates with 0 to 3 A*/D1/D2 grades (predicted or actual) in Maths, Phys & Chem at A-level or Pre-U | | | | |
|---|---|---|---|---|
| Group | No. taking A-level or Pre-U | Avg A*/D1,2 per candidate | 0, 1 or 2 A*/D1,2 [5] | 3 A*/D1,2 |
| 2020 short-listed (111) | 96 | 2.68 | 25 | 71 |
| 2020 offer holders (48) | 39 | 2.82 | 7 | 32 |
| 2019 offer holders (51) | 42 | 2.57 | 16 | 26 |
| 2018 offer holders (50) | 43 | 2.74 | 10 | 33 |
| 2017 offer holders (47) | 37 | 2.51 | 13 | 24 |
| 2016 offer holders (42) | 38 | 2.45 | 15 | 23 |

[5] Owing to the small numbers, and consequent risk of identifying individuals, separate data for candidates with 0, 1 or 2 A*/D1,2 grades are not provided

## 3. Distributions over candidates of Interview grades, Written Test Scores (PAT), and UCAS-form-based grades

**Distribution of the Means of the two MS Interview Grades (x10) for each Candidate**
**2020 MS UG Admissions Exercise**
**Dark Blue = Offered Place. Count: 48   Mean: 77.9   Median: 78.8**
**Light Blue + Dark Blue = Short-listed for Interview.   Count: 111     Mean: 66.7     Median: 67.5**



**Distribution of the MS PAT Scores for each Candidate**
**2020 MS UG Admissions Exercise**
**Dark Blue = Offered Place. Count: 48   Mean: 57.8   Median: 61.0**
**Light Blue + Dark Blue = Short-listed for Interview. Count: 111   Mean: 53.0   Median: 53.0**
**Green + Light Blue + Dark Blue = All Applicants. Count: 177   Mean: 46.9   Median: 48.0**



**Distribution of the Means of the MS UCAS Grades (x10) for each Candidate**
**2020 MS UG Admissions Exercise**
**Dark Blue = Offered Place.  Count: 48   Mean: 88.7   Median: 90.0**
**Light Blue + Dark Blue = Short-listed for Interview.   Count: 111   Mean: 87.1     Median: 87.5**
**Green + Light Blue + Dark Blue = All Applicants. Count: 178   Mean: 81.4   Median: 85.0**

### 4. How we made our 2020 Decisions: Procedures & Outcomes for Short-listing, Final Decisions and Offers

By means of the procedures described below we seek to admit students of high academic merit and potential.

1. *An average 'UCAS grade' on a scale of 0 to 10 is determined from the information on the UCAS forms*. The grade takes into account all of the information available on the UCAS form including predicted and achieved exam results in GCSE, AS-level and A-level (or their equivalents), motivation, reference and contextual information, as outlined in our published ['Admissions Policy & Criteria'](). The Tutors grade the first choice applicants from their colleges and the Materials *Admissions Coordinator* (AC) grades all applicants. If the two grades awarded differ by ≤ 1 the average is recorded, if they differ by more than one an attempt is made to resolve the difference – if this is not possible a representative of the Tutors awards a third grade and the average of all three grades is recorded. The UCAS grades are determined independently of the PAT scores. For applicants who opt not to specify a college choice this first choice college is assigned randomly, so as to even out the number of first choice candidates per available place per college. To achieve the highest 'UCAS grades' of 8.5 to 10 a candidate would typically have: six or more A* at GCSE; at least A*A*A* or A*A*AA predicted at A-level[a], including Maths and Physics, and preferably Chemistry too (with the A* grades in Maths, Physics or Chemistry); and a strong or better, evidenced reference. [a]Exceptions to these typical A-level scores could include candidates who are judged to present strong mitigating circumstances, relevant contextual data and/or an extremely strong reference.

   In the 2020 exercise 91 of 178 applicants received an average UCAS grade in the range 8.5 to 10; for the 91 the number of GCSE A* grades ranged from 2 to 11 (excluding candidates who sat less than seven GCSEs) and, for those of the 91 offering A-level or Pre-U, and considering only Maths Physics & Chemistry, the number of A* grades at A-level ranged from 1 to 3.

2. *A pre-interview grade is determined as follows*: 0.8xAvg UCAS Grade + 0.02xPAT score. (Note: The UCAS grade is on a scale of 0-10, while the PAT score is on a scale of 0-100).

3. *Short-listing decisions are made at a pre-interview meeting of the Tutors and AC.* Informed by a list of applicants ranked according to the pre-interview grade, short-listing is carried out according to the criteria in our published 'Admissions Policy & Criteria'. The ranking list includes details of actual and predicted exam grades at GCSE, AS level and A-level (or equivalents), including grades identified by subject for the key subjects relevant to Materials (Maths, Physics, Chemistry and Further Maths). Typically the number of candidates invited for interview will be between two and three times the number of places available.

   In the 2020 exercise 41 places were available for entry in October 2021; we selected for interview the 90 highest ranked candidates plus a further 21 from the remaining 88 candidates. These 21 candidates were those from the 88 who, on further careful consideration, based on **all** of the pre-interview information available to us, including taking into account contextual data, were judged on balance to have the highest **potential** to succeed on the programme. The ranking positions of these 21 candidates ranged from 91 to 165.

4. *All shortlisted applicants are allocated interviews with Materials Tutors at two different colleges.* One of these interviews is with the applicant's first choice college. The second Materials interview is with a college allocated by the AC according to an iterative algorithm that assigns applicants to the college with the greatest 'need', taking into account the pre-interview grades of the candidates and the distribution of candidates and grades between first-choice colleges compared to the number of places they have available.

5. *Interview notes are made and the Tutors from each interviewing college award an interview grade and an overall grade (in each case using a scale of 0-10).* The overall grade takes into account the full profile of information on the candidate; including interview performance, all of the information on the UCAS form, and the PAT score, as indicated in our published 'Admissions Policy & Criteria'. *The average of the two overall grades leads to a final grade.* Interview notes are recorded on a structured interview report form.

6. *A final selection meeting is held, comprising Tutors from all seven colleges that offer the M.Eng in Materials Science degree programme and chaired by the AC, at which the Tutors declare the offers they wish to make*. The meeting is provided with a concise profile of information for all interviewed candidates, including contextual data. The candidates are discussed in order of rank based on the average overall grade, but it is recognised that this grade has an associated element of uncertainty and therefore the *n* available offers are not normally made simply to the first *n* candidates in the ranking; there is detailed discussion of the merits of those candidates defined by a fairly broad band either side of the $n^{th}$ ranked. When appropriate this discussion includes contextual information.

   In the 2020 exercise 48 offers were made to candidates with nominal post-interview ranks in the range 1 to 67.

7. *A standard minimum offer of A*AA at GCE A-level, or an equivalent, to include Maths and Physics, with the A* in one of Maths, Physics or Chemistry is set. Very occasionally a higher or lower offer may be set for particular candidates if agreed by the selection meeting.*

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