DEPARTMENT OF

## MATERIALS 2023 UG ADMMSSIONS EXERCISE - FEEDBACK LEAFLET

## 1. Overview of the 2023 UG Admissions Exercise - M.Eng in Materials Science (MS)

In the 2023 exercise we received 210 applications. The majority of applicants were studying, or had completed, either A-levels or the IB.

In the present admissions exercise we seek to fill thirty-eight places for entry in October 2024. A further four places for entry in October 2024 were offered in previous admissions exercises.

126 candidates were short-listed for interview in December 2023 and subsequently forty-five were offered places for entry in October 2024. No candidates were offered deferred places. All interviews were conducted by video-link.

104 of the 126 short-listed applicants are studying for, or had completed, A-level or Pre-U; 11 of these candidates taking three subjects, the remaining 93 four or more subjects.
Considering only Maths, Physics and Chemistry, for this subset of 104 short-listed applicants the mean number of A*/D1/D2 grades (predicted or achieved) per candidate is 2.6, compared to 2.8 in 2022, 2.7 in 2021, 2.7 in 2020, 2.4 in 2019, 2.7 in 2018 and 2.3 in both 2017 \& 2016.

35 candidates within the above subset of 104 were offered a place.
Considering only Maths, Physics and Chemistry, for these 35 offer-holders the mean number of A*/D1/D2 grades (predicted or achieved) per candidate is 2.7 compared to $2.9,2.8,2.8,2.6,2.7,2.5 \& 2.4$ in 2022, 2021, 2020, 2019, 2018, 2017 \& 2016 respectively.
8 of 24 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.

| 2023 MATERIALS UG ADMISSIONS | By Gender ${ }^{1}$ |  | By Type of School |  |  | Contextual ${ }^{3}$ <br> Bands A \& B | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Man | Woman | UK State Maintained | UK Independent | Other ${ }^{2}$ |  |  |
| Applications | 137 | 68 | 64 | 40 | 106 | 30 | $210^{4}$ |
| Short-listed | 88 | 35 | 49 | 24 | 53 | 25 | 126 |
| Offers | 30 | 13 | 18 | 9 | 18 | 8 | 45 |
| Success ${ }^{5}$ (\%) | 22 | 19 | 28 | 23 | 17 | 27 | 21 |

${ }^{1}$ A small number of applicants either preferred not to state their gender or indicated they use another term. Owing to the small numbers and consequent risks of identifying individuals, separate data for these candidates are not provided. ${ }^{2}$ Primarily schools that are not in the UK.
${ }^{3}$ UK candidates in Bands A or B of the Oxford Composite Contextual Measure of Disadvantage.
${ }^{4} 33$ of these applicants opted not to specify a preferred college. 2 applied for deferred places.
${ }^{5}$ 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 $2 A^{*} / D 1,{ }^{6}$ | 3 A*/D1,2 |
| :---: | :---: | :---: | :---: | :---: |
| 2023 short-listed (126) | 104 | 2.61 | 33 | 71 |
| 2023 offer holders (45) | 35 | 2.69 | 10 | 25 |
| 2022 offer holders (46) | 39 | 2.87 | 4 | 35 |
| 2021 offer holders (42) | 34 | 2.79 | 6 | 28 |
| 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 |

${ }^{6}$ 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




## 4. How we made our 2023 Decisions: Procedures \& Outcomes for Short-listing, Final Decisions and Offer

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'. Each applicant is graded independently by two Tutors, one from the applicant's first choice college and the other from a different college. If the two grades awarded to an applicant differ by $\leq 1$ the average is recorded, if they differ by more than one the Materials Admissions Coordinator (AC) will grade the UCAS application and then act to reconcile the difference between the two Tutors' UCAS grades; often the reconciliation will result in the average UCAS grade being calculated as the mean of all three UCAS grades. 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 $A^{*} A^{*} A A$ predicted at A-levela ${ }^{\text {a }}$, including Maths (M) and Physics (P), and preferably Chemistry (C) too; with the $A^{*}$ grades in $M, P$ or $C$ (or in Further Maths if $C$ is not studied at $A$-level); and a strong or better, evidenced reference.
${ }^{\text {a Exceptions }}$ 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 2023 exercise 99 of 210 applicants received an average UCAS grade in the range 8.5 to 10 ; for the 99 the number of GCSE A* grades ranged from 1 to 13 (excluding candidates who sat fewer than six GCSEs) and, for those of the 99 offering A-level or Pre-U, and considering only Maths Physics \& Chemistry, the number of A*/D1/D2 grades at A-level was 1, 2 or 3 .
2. A pre-interview grade is determined as follows: $0.8 \times A v g$ UCAS Grade $+0.02 x$ PAT 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 2023 exercise 38 places were available for entry in October 2024 (4 places for entry in 2024 had been committed in previous admissions exercises); we selected for interview the 98 highest ranked candidates plus a further $28^{\mathrm{b}}$ from the remaining 112 candidates. These 28 candidates were those from the 112 who, on further careful consideration, based on all of the pre-interview information available to us, including taking into account contextual data and mitigating circumstances (including those associated with the PAT), were judged on balance to have the highest potential to succeed on the programme. At short-listing, the ranking positions of these 28 candidates ranged from 99 to 199.
${ }^{\mathrm{b}}$ This number is an increase of $79 \%$ compared to the average over the previous five admissions exercises: an increase we made in part in response to the PAT 'Technical Special Circumstances' submissions received this year.
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 preinterview 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 and mitigating circumstances. 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 $n^{\text {th }}$ ranked. When appropriate this discussion includes contextual information.

In the 2023 exercise 45 offers were made to candidates with nominal post-interview ranks in the range 1 to 61 .
7. A standard minimum offer of $A^{*} A A$ 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.

