

Computer Science and Joint Schools Admissions 2020*

12 January 2021

Application statistics

In 2020 a total of 1596 UCAS applications were received across the three undergraduate Computer Science degrees, for entry in 2021 or deferred entry in 2022. 306 applicants were shortlisted, and 111 were offered places for entry in 2021 or deferred entry in 2022. Table 1 shows the breakdown by course applied for at each stage of the admissions process.

Table 1: Number of applicants, shortlisted applicants, and offers made, by course applied for

	Applications	Shortlisted	Offers
Computer Science	842	127	38
Computer Science and Philosophy	151	45	13
Mathematics and Computer Science	603	134	60

The number of applications for Computer Science and for Mathematics and Computer Science continues to rise, with a slight decrease in applications for Computer Science and Philosophy. This year saw a particularly strong field for Mathematics and Computer Science, and there was a corresponding change in the proportion of candidates offered places for Mathematics and Computer Science compared with the other two Computer Science degrees. Across the three Computer Science degrees, applications have almost doubled since the 2016/17 admissions cycle, but the number of places has not kept pace with this. As a result, many very able applicants were not offered a place.

Of those 1596 applicants,

- 1543 (96.7%) successfully registered to sit the Mathematics Admissions Test (MAT) by the registration deadline, which was at 18:00 GMT on 15 October 2020.
- 25% of applicants submitted an open application.
- 909 applicants (57%) offered A-levels.

Applications for deferred entry

16 applicants applied for deferred entry in 2022. Of these, 7 were shortlisted and interviewed. A small number of these were offered places.

Gender

- 381 applicants were female (23.9% of the total). A small number of applicants did not specify their gender.
- Of the 381 female applicants, 59 were shortlisted and invited to interview, comprising 19.3% of the total shortlisted applicants.
- 25 shortlisted female applicants were offered places, making up 22.5% of the total offers.

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Domicile

- 47.9% of all applicants were domiciled in the UK; 11.8% were domiciled in the EU not including the UK; 40.3% were domiciled outside the EU.
- 51% of shortlisted applicants were domiciled in the UK; 9.5% were domiciled in the EU not including the UK; 39.5% were domiciled outside the EU.
- 51.4% of students who were offered places were domiciled in the UK; 13.5% were domiciled in the EU not including the UK; 35.1% were domiciled outside the EU.

Admissions Processes

Mathematics Admissions Test (MAT)

All applicants are expected to sit the Mathematics Admissions Test prior to shortlisting. This year the test was taken on Wednesday 4 November 2020. Of the 1543 applicants who successfully registered to sit the test, 1514 sat it on the day. Most applicants sat it in their school or in another registered test centre, with a small number sitting the test via remote invigilation where Covid-19 conditions meant the test could not safely be taken in school or at a test centre, and where it was possible to arrange remote invigilation.

The 29 applicants who successfully registered for the test but were unable to sit it due to unexpected circumstances beyond their control were considered on the basis of their UCAS form. 4 were invited to interview, and were invited to sit a short MAT-like multiple choice paper via remote invigilation prior to their interviews.

Table 2 gives the mean score by course applied for at each stage of the admissions process.

Table 2: Mean MAT scores of applicants at each stage of the selection process

	All applicants	Shortlisted applicants	Offer holders
Computer Science	49.5	77.7	83.4
Computer Science and Philosophy	52.4	73.7	75.4
Mathematics and Computer Science	60.0	82.3	87.5

Figures 1 and 2 show admissions outcome by MAT score for the 1514 applicants who sat the MAT on Wednesday 4 November 2020. Applicants for Computer Science and for Computer Science and Philosophy are asked to attempt MAT questions 1, 2, 5, 6, and 7. Applicants for Mathematics and Computer Science are asked to attempt questions 1, 2, 3, 5, and 6.

Shortlisting

In light of the competition for places, the purpose of shortlisting is to identify those applicants who are most likely to succeed in the rest of the selection process, giving interviewers time to consider each shortlisted applicant carefully. The number of shortlisted applicants was therefore restricted to slightly less than 3 for each quota place.

Shortlisting was performed in accordance with the stated **admissions criteria**.¹ All applicants are expected to sit the Mathematics Admissions Test prior to shortlisting, including questions designed to assess aptitude for Computer Science. Details of the test and several past papers and specimen papers with solutions can be found **online**. Tutors are guided by a statistically validated score derived from the MAT and the applicant's performance at GCSE relative to other students at their pre-16 school; they exercise discretion within thresholds determined for each degree subject by the subject coordinator. They take into account all information from the UCAS form and any relevant contextual information such as educational background or

¹For further discussion of what Computer Science tutors look for in an applicant, see **here**.

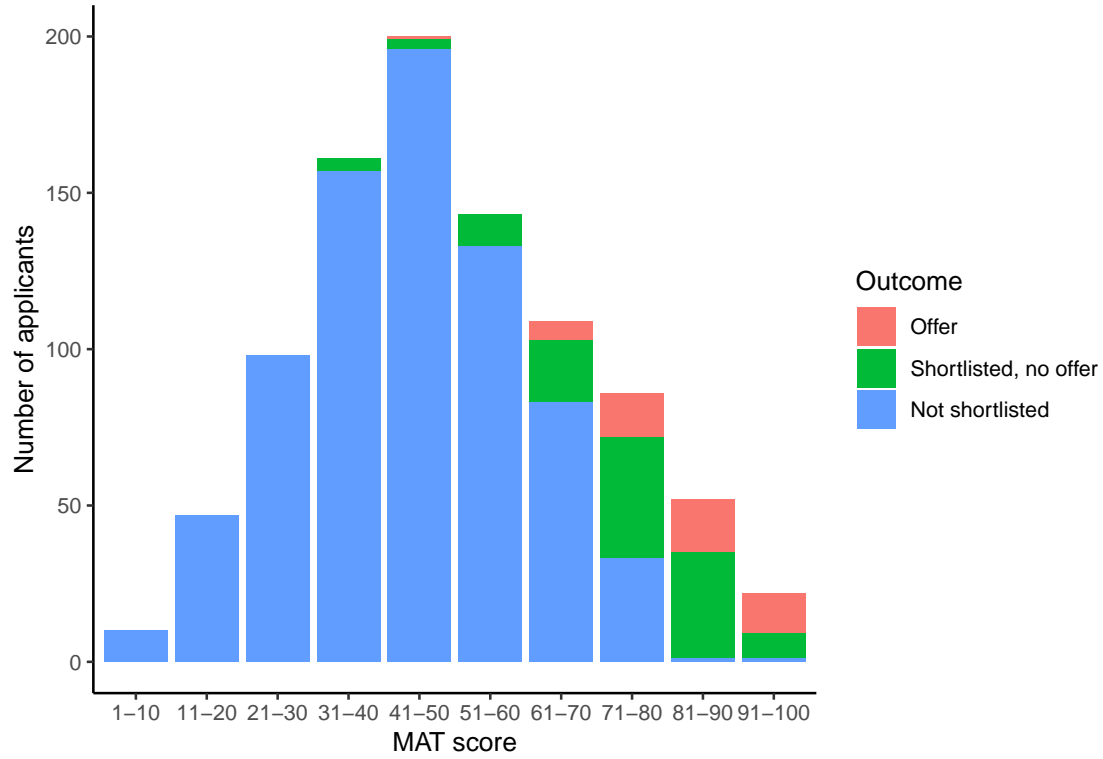


Figure 1: Outcome by MAT score: Computer Science and Computer Science and Philosophy applicants

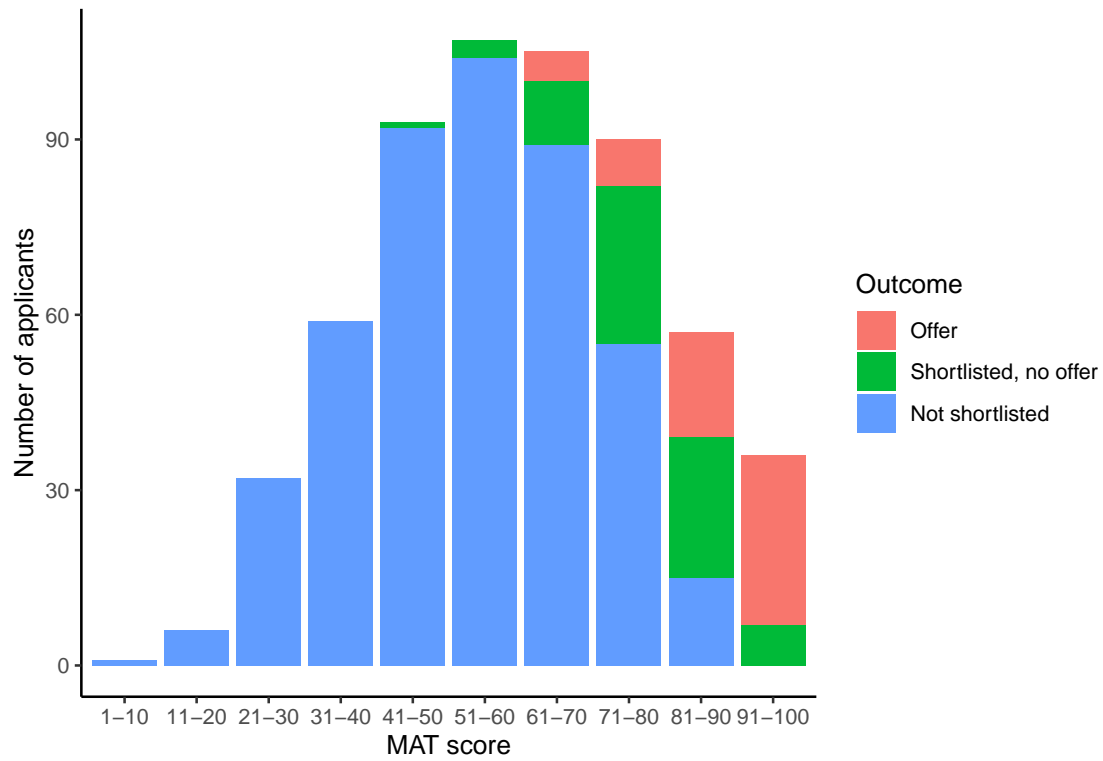


Figure 2: Outcome by MAT score: Mathematics and Computer Science applicants

extenuating circumstances. Shortlisting decisions are reviewed by the subject coordinator in order to ensure consistency between colleges.

Among this year's 306 shortlisted applicants,

- 172 (56.2%) had taken five or more GCSEs. Among those candidates, the mean number of GCSEs at grades 9/8/A* was 8.
- 176 (57.5%) offered A-levels:²
 - All shortlisted A-level applicants offered A-level Mathematics.
 - 162 (92%) offered A-level Further Mathematics.
 - 117 (66.5%) offered A-level Computer Science or Computing.

After shortlisting takes place, if an individual college has an unusually high number of shortlisted applicants per place, that college may opt to reallocate a proportion of those applicants to a college with fewer shortlisted applicants per place (assuming that there exists such a college which is willing to receive the shortlisted applicants). The aim of this process is to increase fairness for applicants by evening out competition across colleges and ensuring that shortlisted applicants' chances of an offer are not affected by having applied to a heavily oversubscribed college. In December 2020, 9 shortlisted applicants were reallocated via this procedure, and 3 of those applicants were subsequently offered places by the colleges to which they were reallocated.

Interviews

All shortlisted applicants were invited for interview in mid-December. This year, due to Covid-19, all interviews took place remotely by video call or telephone, often using a shared virtual whiteboard. Each applicant is associated with a first college, either of their choosing, or selected for them in a way that aims to even out the competition for places across the colleges. Each applicant is also associated with a second college chosen randomly with the same aim.

Applicants were interviewed by both their first and second colleges, and a small number were invited to further interviews at a third college. Applicants for joint degrees are typically given separate interviews in the two subjects. In December 2020 most applicants were interviewed twice by their first college and once or more by their second college.

Interviews are academic and subject-focused in nature. The applicant's performance in each interview is judged according to the admissions criteria, codified on a numeric scale against agreed descriptors, and shared among all tutors involved in admissions, together with the applicants' UCAS forms and their test results.

Making offers

The colleges use various procedures in a coordinated effort to ensure that the strongest applicants are admitted across the University irrespective of the college considering their application. These include complete transparency of all information gained about each applicant, supported by an online information system, and a final meeting where the strongest unplaced applicants are identified and open offers are agreed. This year, 29.7% of offers made came from a college other than the applicant's application college, or are open offers (meaning that the applicant is offered a place at Oxford at a college that will be determined in August).

Where an applicant for a joint honours degree has performed strongly in one of their subjects but will not be made an offer for the joint degree, tutors may consider offering them a place for a relevant single honours degree.³ A small number of applicants for joint honours courses were offered places for single honours courses.

²For the Computer Science degrees, Mathematics is essential at A-level or equivalent. Further Mathematics is very strongly recommended. Computer Science/Computing can be helpful and interesting if available, but it is by no means a requirement: tutors are just as happy for applicants to explore their interest in the subject outside of the school curriculum.

³Applicants for Mathematics and Computer Science may be considered for offers for either Mathematics or Computer Science. Applicants for Computer Science and Philosophy may be considered for offers for Computer Science. The University does not offer a single honours undergraduate course in Philosophy.

Where an applicant is eligible and would benefit from it, tutors may nominate them for the **Opportunity Oxford** scheme. A small number of applicants were offered places through Opportunity Oxford.

Following the end of the selection process, colleges write to applicants via UCAS with the results of their application. Standard conditions apply to those taking A-levels, the International Baccalaureate or Scottish Highers; for other applicants, tutors will seek advice from the subject coordinator or the college's admissions tutor in determining a comparable set of conditions.

MAT results and feedback

MAT scores are not released to applicants until the selection process has concluded and they have received their decision. Scores will be sent to applicants via email by the Department of Computer Science in January, shortly after colleges have communicated application outcomes.

Other than the release of MAT scores, feedback to applicants is a matter for individual colleges. Most do not automatically send feedback apart from the decision itself. Applicants may seek feedback from their first college about any aspect of the admissions process, but should wait until the process is complete and they have received their decision before doing so. Details of the procedure for requesting feedback may be found **here**.