

Physics

2022 Admissions Round Feedback

Please note this is subject admissions feedback from the 2022 selection round - there will be changes each year, and these pages are only retained to provide a general indication of process.

The Physics admissions tutors would like to thank all applicants for the time and care they put into their applications. We are also grateful to referees for proving their supporting statements and for the encouragement and support they give to applicants.

There were 1633 applicants to the University for Physics, of whom 492 were shortlisted for interviews. Ultimately, 200 offers were made for entry in 2023. In Keble, there were 141 applicants for seven places. Thirty-five of these applicants were shortlisted, seventeen of whom were allocated to other colleges for interview.

The shortlisting was primarily based on the results of the Physics Aptitude Test and the contextual data reflecting the socio-economic conditions of each applicant. We also considered the applicants' past achievements listed in their UCAS form, as well as their referee reports. Because no centralized GCSE examinations were offered in 2021, the applicants' GCSE marks were given less weight this year than normally.

A detailed report on the aptitude test and applications for Physics across the University, including details of the shortlisting process, is available on the Physics website at https://www.physics.ox.ac.uk/system/files/file_attachments/AdmissionsReportDec2022.pdf.

Each shortlisted applicant was given three interviews, two with Keble tutors (lasting 30 minutes each) and one at another randomly assigned college. Interviews were again online this year, using Microsoft teams and Miro whiteboard for shared working. Each of the two interviews contained a mix of physics and mathematics questions. They were designed to evaluate performance according to a number of criteria:

- Motivation: How serious are you about studying physics? When have you become interested in the subject and what have you done to pursue this interest?
- Mathematical ability and skills: in particular, whether you can express physical ideas using mathematics.
- Reasoning: ability to analyse and solve problems using logic and critical thinking.
- Physical intuition: Perhaps a better word is "understanding" or "imagination". You should be able to envision how a physical system will behave even though you may not have had any hands-on experience with that system.
- Communication: ability to present precise arguments both verbally and mathematically, as well as to understand our questions and explanations.

We are not looking for candidates who have memorized a large number of physics formulae. The interviews are like mini-tutorials about basic physics principles and effects

and require the candidates to apply their mathematical skills to describing physical phenomena. They are designed to test the candidates' ability to "think on their feet" and to respond to guidance given by the interviewers. We do not expect immediate and polished answers to the physics problems discussed during the interviews.

The interview and test results as well as contextual information on the UCAS forms were collated by the department and available to all Colleges for the final selection process. The process is designed to ensure that the best suited candidates are offered a place to read physics, irrespective of College choice.

In their assessment of individual applications, the tutors took account of contextual data concerning relative individual and school performance as well as some background characteristics related to place of residence. This information is available only for applicants from within the UK. An explanation of how the University uses contextual data can be found here: <https://www.ox.ac.uk/admissions/undergraduate/applying-to-oxford/decisions/contextual-data>.

This year tutors were also aware of the potential and uneven impact of the Covid-19 pandemic on both learning and assessment.

The final outcome was that Keble made seven offers for 2023 and one for 2024. Five Keble applicants received offers at other colleges.