

UNDERGRADUATE ADMISSIONS AND OUTREACH

Job title	Senior Statistical Data Analyst
Division	University Administration and Services
Department	Undergraduate Admissions and Outreach
Location	University Offices, Wellington Square, Oxford, OX1 2JD
Grade and salary	Grade 8: £48,235 - £57,255 per annum
Hours	Part-time 0.8 FTE 30 hours per week
Contract type	Permanent
Reporting to	Head of Analysis and Evaluation UAO
Vacancy reference	177628
Additional information	This vacancy requires an enhanced DBS check

Background to the role

The role of Senior Statistical Data Analyst sits within the Evaluation & Analysis team within the Undergraduate Admissions and Outreach (UAO) department and is line managed by the Head of Analysis & Evaluation.

UAO's Evaluation and Analysis team plays a significant part in helping the University meet its admissions and access targets, as agreed with the higher education regulators, such as the Office for Students. The evaluation and analysis team works closely with the different teams within UAO providing data insights to inform business practice and forward thinking. The team also collaborates frequently with the Student Data Management and Analysis team (SDMA), and senior stakeholders from the different colleges and courses across the university.

A range of methodological approaches are used to evaluate admissions and outreach, ranging from statistical techniques such as regression, multi-level modelling, and simulations, to surveys, focus groups, and experimental designs.

On the admissions side, the team reviews the fairness and effectiveness of current admissions processes, existing admissions measures, and contextual data. A second strand of our support focusses on promoting evidence-based practice in specific areas of monitoring and evaluation, by developing workshops for access and outreach staff across the collegiate university. These workshops investigate topics such as developing logical models, creating planning datasets, standardised survey templates and more.



The role

In this role, you will contribute to the analysis and evaluation of the Oxford Admissions Processes to support the University's Access and Participation Plan (APP). You will analyze admissions data to inform strategic direction in these areas.

The Senior Statistical Analyst is the team's lead statistician, and is responsible for designing and delivering a programme of statistical analysis and research, as well as acting as a centre of technical expertise on statistical methods and the communication of statistical findings.

The Senior Statistical Analyst will spend the majority of their time designing and delivering pieces of statistical research, working with a high degree of independence and liaising directly with senior colleagues and other stakeholders to establish research questions, agree appropriate methodologies and communicate findings clearly, accessibly and persuasively.

They will be able to advise colleagues on what data is available, both internally and from national datasets, and on the feasibility of pursuing specific lines of enquiry.

They will be conducting course level analysis of assessment processes for undergraduate admissions, working in close collaboration with senior academic staff and admissions coordinators, to review their effectiveness and fairness, and to identify evidence-based improvements.

For example, using modelling techniques such as regression and machine learning to investigate selection decisions, and how these decisions are influenced by applicant characteristics.

Knowledge of assessment theory and practice, and familiarity with concepts such as reliability and validity is essential for this role.

You will be closely collaborating with the Admissions Operations team, developing robust data models to inform admissions processes and reporting. In particular, you will be working on further developing contextual data for admissions. For example, improving the quality of school performance data and developing effective models for contextualizing applicant performance during admissions.

You will be asked to work collaboratively with a wide range of senior stakeholders, as you will be making a significant contribution to the analysis of applicant and on-course student data in Oxford, and to shape the University's admissions processes data reporting provision.

Strong data management skills alongside experience of data analysis, visualisation, and quality assurance are required. You will have multiple opportunities to showcase your strong data handling and analytical skills, initiative, and creativity.

Responsibilities

1. Lead UAO's programme of admissions and outreach statistical analyses, working with senior colleagues across UAO and the Academic Divisions and Departments to identify priorities, agree a schedule of work with reference to internal strategic priorities and the national HE agenda, and to evaluate and triage ad hoc research requests.
2. To analyze and evaluate the Oxford Admissions Processes to drive the strategic direction in this area. To achieve this, you will:
 - a. Lead and develop reviews of admissions processes – managing the key relationships between the senior stakeholders involved in the project and the course being reviewed.

- b. Process, analyze, interpret, and present quantitative as well as qualitative information in clear and accessible formats. You will be expected to use your data analytic skills to drive strategic direction in an evidence-based way.
 - c. Design and implement bespoke analyses, ensuring they are robust and fit for purpose. For example, modeling hypothetical changes to current admissions processes.
 - d. Provide accurate contextual data for admissions and work on further developing effective models for contextualising applicant performance during admissions.
3. Act as primary source of team expertise on statistical methods and their proper applications, ensuring the validity, applicability and efficiency of statistical analysis produced by UAO, and providing colleagues with advice and training on the appropriate use of statistical techniques.
4. Design, develop and deliver discrete analytical research projects focused on applicant and student data, working with senior academic and administrative colleagues to develop the project briefs, advising them on the most appropriate research design and identifying research requirements, anticipated audience and project timelines.
5. Extract data from the university's main student record systems, other internal datasets and externally sourced datasets, using a range of reporting and data manipulation tools, and use initiative to resolve data conflicts, where standard processes do not offer a solution and where a deeper level of analysis is required.
6. Present complex statistical and analytical findings both verbally and in writing to senior administrators, senior admissions committees responsible for the development of admissions and outreach policy. Establish and maintain networks of internal stakeholders and external contacts across HEP networks and the HE statistics community, maintaining a good awareness of sector developments and best practice and seeking to raise the profile of student statistics at Oxford. Ensuring clarity and accessibility for audiences with varying levels of statistical expertise, and being able to defend challenges made against statistical approaches and reassure colleagues that a robust statistical approach was taken.
7. Work with colleagues within UAO and across the collegiate university to identify potential improvements to data capture, analysis and reporting to enhance the university's student data analysis portfolio, including advising on incorporation of statistical analyses into standard data reporting, and improving the alignment between in-depth research papers and data dashboards.
8. Plan and organise work both personally and where leading on projects that require input from several colleagues, showing the ability to make efficient use of resource, delegate effectively, communicate requirements clearly and monitor project progress.
9. Maintain a good degree of familiarity with internal and external comparative data sources (e.g. Office for National Statistics, Department for Education, National Pupil Database, Higher Education Statistics Agency, Higher Education Access Tracker, UCAS data analysis), understanding the opportunities and limitations presented by each of these and the ability to advise senior colleagues on the feasibility of different lines of enquiry or research techniques.
10. Compile and prepare the analyses, reviews and briefings on national and international research literature, policies and methodologies around university admissions, selection, and testing.
11. Carry out any other reasonable duties or provide support to other members of the team, as required by the Head of the Evaluation and Analysis team or the Deputy Director of UAO.

Selection criteria

Essential selection criteria

Applicants are expected to be able to demonstrate the following competencies and experience. During recruitment consideration will be given to applicants who may not have proven experience in all areas, but who have demonstrable capability to develop the required competencies. Post holders are expected to meet these criteria during their term of appointment and will be monitored through the usual channels such as annual personal development reviews.

1. Strong education background including a first degree in a subject containing a significant element of mathematics or statistics, or equivalent professional experience; a higher qualification relating to data analysis would be advantageous.
2. Excellent understanding of common and advanced statistical methods and extensive experience with one or more statistical packages (e.g. Python, R, SPSS,...).
3. Experience using Power BI, Python, R or similar tools to produce data dashboards for a range of stakeholders and an understanding of the theory of data visualisation. . Knowledge of current issues within higher education, including specialist knowledge in the field of admissions, outreach, widening access and retention in Higher Education.
4. Proven experience of managing large-scale data-related projects with the ability to produce accurate and detailed work, to tight deadlines, with excellent time management.
5. Ability to communicate effectively orally and in writing with staff across the university, including at a senior level, and experience in writing statistical reports in plain English with excellent attention to detail.
6. Ability to act as a subject matter expert, translating complex data problems and concepts into appropriate and accessible outputs, and to provide advice and training to non-expert colleagues.
7. Strong stakeholder engagement skills, showing a customer-focused approach to delivery, but with the confidence to argue robustly to ensure valid methodologies, appropriate timescales, and strategically aligned prioritisation of competing projects.
8. Commitment to ethos of continuing service improvement and continuing professional development, looking to improve your own skillset and the quality of our service over time.
9. Ability to work well within a team, including collaborating via online tools (e.g., MS Teams, Trello), and to delegate effectively and supervise the work of colleagues on specific projects.
10. Strong ability to develop and implement innovative statistical methodologies to assess University admissions.
11. Ability to perform statistical modelling of hypothetical changes to the admissions process.
12. Experience of using qualitative and quantitative research methods including interviews, focus groups and surveys. That includes developing research questions within a specific context and analysing detailed and complex data from a variety of sources and generate original ideas by building on existing concepts.
13. The ability to deal with data-related projects and complex quantitative data to generate expert data insights (e.g., counterfactual analysis).
14. Strong skills in design and development of research instruments including surveys and questionnaires – knowledge and experience of psychometric principles – e.g., validity and reliability.

15. Awareness of the issues relating to the provision and analysis of outreach and applicant data; especially in relation to data protection, quality assurance and enhancement.
16. Project management experience and the ability to document project progress and risks effectively.

Desirable selection criteria

1. Proficiency in using qualitative data analysis software such as NVivo or similar.
2. Be familiar with educational research in the areas of equity in education and widening participation. Write and present papers at seminars/conferences, and lead seminars to disseminate research findings.
3. Experience working with student data within a higher education provider, preferably including experience of SITS/e:Vision.
4. Good awareness of issues relating to the processing and analysis of student data, including data protection and information security, quality assurance processes, and sensitivities around special category data.

Pre-employment screening

Standard checks

All offers of employment are made subject to standard pre-employment screening, as applicable to the post.

If you are offered the post, you will be asked to provide proof of your right-to-work, your identity, and we will contact the referees you have nominated. You will also be asked to complete a health declaration (so that you can tell us about any health conditions or disabilities so that we can discuss appropriate adjustments with you), and a declaration of any unspent criminal convictions.

We advise all applicants to read the candidate notes on the University's pre-employment screening procedures, found at: www.ox.ac.uk/about/jobs/preemploymentscreening/.

Additional security pre-employment checks

- A satisfactory enhanced Disclosure and Barring Service (DBS) check

About the University of Oxford

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities and we rank first in the UK for university spin-outs, and in recent years we have spun out 15-20 new companies every year. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit www.ox.ac.uk/about/organisation.

Undergraduate Admissions and Outreach

The Undergraduate Admissions and Outreach department (UAO) provides a stimulating and challenging working environment in one of the most strategically important areas of higher education administration, working with colleagues throughout the University and in other institutions; with potential applicants in the UK and overseas; and with parents and advisers. Our work is varied and can be broadly divided into four areas: the admissions process and policy development, student recruitment, course information and guidance, and access and widening participation.

UAO oversees admissions to the Colleges for undergraduate courses and is the contact between the University of Oxford and UCAS. We provide guidance for Oxford colleges and centrally co-ordinate the admissions process. We also co-ordinate interviews for overseas applicants in a number of international locations. We provide data and management information on admissions and recruitment and support training courses on admissions-related matters.

A key role of the UAO is to provide a central schools and colleges liaison service for the University and Colleges in order to ensure a strong recruitment strategy across the UK, Europe and Internationally. Activities include school and college visits, higher education fairs, student conferences, open days, and a wide variety of teacher events. We deal with thousands of young people every year and our teams travel throughout the UK and beyond.

UAO coordinate and deliver Oxford's undergraduate outreach with young people across the UK, contributing to a variety of projects with differing scope and scale. All working towards the University's Access targets (<http://www.admin.ox.ac.uk/edc/otherdocuments/accessagreement/>) and other strategic priorities relating to access and admissions at the University of Oxford and wider Higher Education context.

In addition, UAO services a number of committees, responds to government consultations, and staff attend a number of nationally and regionally based groups. In association with the University's Public Relations Office, we deal with the media and develop policy in areas of access and admissions alongside colleagues in the colleges and the University.

More information about our activities and admissions to Oxford can be found at www.ox.ac.uk/study.

University Administration and Services

The central administrative sections of the University are collectively called University Administration and Services (UAS). UAS comprises structures to:

- Support the University's core academic purposes of teaching, learning and research
- Ensure the University can meet the requirements of government, funding bodies and other external agencies
- Facilitate the attainment of the objectives set out in the [University's Strategic Plan](#).

UAS comprises University-wide functions, encompassing the key areas of academic administration, research services, finance, personnel, estates, IT services and external affairs as well as a number of other functions. Further information about the work of each section, together with contact details and the profiles of the head of each section, can be found on the [UAS sections page](#).

Academic Administration Division

The Academic Administration Division (AAD) is the University's group of services focused on students and learning. We provide support and information that students need to thrive in their academic and personal lives, and encourage the professional and educational development of our staff. We operate in close collaboration with

colleagues in central, divisional, departmental, and college administration, as well as with academic staff and students.

The AAD's work supports the student career from pre-admission through to graduation and beyond, and promotes the development of coherent systems and services across Oxford to underpin this. We focus on:

- **Student recruitment:** Attracting the best undergraduate and postgraduate students through outreach and admissions, and advising students through the admissions process.
- **Student services:** Offering high-quality services to students once they arrive at Oxford, including counselling and disability services, sports, language courses, a careers service, and fees and funding.
- **Student administration:** Managing the University's student data, registration, examinations, and degree ceremonies, advising on visas and immigration; and developing our student systems.
- **Educational policy:** Helping to develop and implement educational policies, upholding legislation, and providing quality assurance.

We also **support academic and professional staff** and the wider Oxford community through our language, sport, and professional and educational development services.

The AAD comprises: the Careers Service, Education Policy Support, Graduate Admissions, the Language Centre, the Oxford Learning Institute, Fees and Funding, Student Registry, Student Systems, Student Welfare and Support Services, Undergraduate Admissions and Outreach, and University Sport. They are supported by two professional support functions: AAD Administration and AAD Communications.

How to apply

Applications are made through our e-recruitment system and you will find all the information you need about how to apply on our Jobs website <https://www.jobs.ox.ac.uk/how-to-apply>.

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

As part of your application you will be asked to provide details of two referees and indicate whether we can contact them now.

You will be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants)

Please upload all documents **as PDF files** with your name and the document type in the filename.

All applications must be received by **midday** UK time on the closing date stated in the online advertisement.

Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

If you need help

Help and support is available from: <https://hrsystems.admin.ox.ac.uk/recruitment-support>

Non-technical questions about this job should be addressed to the recruiting department directly please contact hildward.vandormael@admin.ox.ac.uk

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.

Important information for candidates

Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: <https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy>. The University's Policy on Data Protection is available at: <https://compliance.admin.ox.ac.uk/data-protection-policy>.

The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. The University has adopted an EJRA of 30 September before the 69th birthday for all academic and academic-related staff in posts at **grade 8 and above**. The justification for this is explained at: <https://hr.admin.ox.ac.uk/the-ejra>

For **existing** employees, any employment beyond the retirement age is subject to approval through the procedures: <https://hr.admin.ox.ac.uk/the-ejra>

There is no normal or fixed age at which staff in posts at **grades 1–7** have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

Equality of opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

Benefits of working at the University

Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See <https://hr.admin.ox.ac.uk/staff-benefits>

University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See www.club.ox.ac.uk and <https://www.sport.ox.ac.uk/>.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <https://welcome.ox.ac.uk/>

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See <https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme>

Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See <https://hr.admin.ox.ac.uk/my-family-care> Childcare

The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries.

For full details, including how to apply and the costs, see <https://childcare.admin.ox.ac.uk/>

Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see <https://edu.admin.ox.ac.uk/disability-support>

Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at <https://edu.admin.ox.ac.uk/networks>

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See www.newcomers.ox.ac.uk.