

## ***Job Description and Selection Criteria***

<b>Post</b>	<b>Professorship of Civil Engineering</b>
<b>Department/Faculty</b>	<b>Department of Engineering Science</b>
<b>Division</b>	<b>Mathematical, Physical and Life Sciences</b>
<b>College</b>	<b>Brasenose</b>

### **Overview of the post**

The Department of Engineering Science and Brasenose College seek to appoint to the Statutory Professorship of Civil Engineering with effect from 1 October 2025, or as soon as possible thereafter. A non-stipendiary Fellowship with the College is attached to this Professorship.

This post is a Statutory Professorship. Statutory Professorships are held by academics of the highest calibre, with an international level of academic excellence and a world-leading research reputation. There are currently 15 Statutory Professors within the Department of Engineering Science, working alongside about 130 further academics, the majority of whom are either Associate Professors or full (titular) Professors. Statutory Professors exercise broad academic leadership across their department and college, and more widely in their subject at the national and international level. They can serve as Head of Department if asked to do so by the relevant academic division. For a description of academic posts at Oxford, please see <https://hr.admin.ox.ac.uk/academic-posts-at-oxford>.

This appointment is a key part of the strategic plan for the Department and University. The Professor of Civil Engineering is expected to provide strategic academic and research leadership in Civil Engineering and will contribute appropriately to the administration of the subject area, and in the wider Department. They will work collaboratively with their academic colleagues to develop the direction of Civil Engineering research and teaching at Oxford, aligned with developments and initiatives in the subject area in the UK and internationally, and to further advance and promote the subject within the University to ensure its continued success.

You should possess an outstanding research record and will be of internationally recognised stature in Civil Engineering, broadly interpreted across the sub-disciplines. Your specialised interests will likely extend or complement current activities in the Civil and Offshore Engineering research group, within which Civil Engineering sits, including in structural engineering and materials, geotechnical engineering or environmental fluid mechanics (see <https://eng.ox.ac.uk/civil/research/>). You will be expected to pursue a research programme at the forefront of the subject internationally, providing research leadership of the highest calibre to colleagues working in this field, and embracing the opportunity to shape the direction of Civil Engineering research within the Department and the wider University. Furthermore, you will play a leading role in the planning and development of the proposed **E**ngineering and **T**echnology innovation **H**ub at **OS**ney (ETHOS) building, which will provide state-of-the-art laboratory and office space for Civil Engineering at Oxford. You will contribute appropriately to the recruitment of new academics, including providing mentorship to those appointed, as well as take initiative for the funding and management of appropriate shared resources to underpin a thriving research community in Civil Engineering, including line management of support staff.

Applications are particularly welcome and encouraged from women, black, and minority ethnic candidates, who are under-represented in academic posts in Oxford. The University holds an Athena SWAN bronze award and a Race Equality Charter bronze award at institutional level in recognition of its efforts to introduce organisational and cultural practices that promote gender and racial equality so as to create a better working environment for all. All contributing departments place a strong emphasis on developing a workplace based

on principles of equality and diversity and all also hold Athena SWAN awards – a bronze award in the case of Engineering Science. Further information can be obtained from [equality@admin.ox.ac.uk](mailto:equality@admin.ox.ac.uk) and from <http://www.mpls.ox.ac.uk/equality-and-diversity/athena-swan> within the MPLS Division.

For more information or an informal conversation, please contact our executive search partner Talent Edu at [MHolleran@TalentEdu.com](mailto:MHolleran@TalentEdu.com) or telephone: +44 (0)203 290 2907. All enquiries will be treated in strict confidence; they will not form part of the selection decision.

## **Duties of the post**

You will be a member of both the University and the College community. You will be part of a lively and intellectually stimulating research community which performs to the highest international levels in research and publications and will have access to the excellent research facilities which Oxford offers. In the University you are expected to bring a high level of academic and research leadership to your subject area. You will also have a role to play in the running of the College as a trustee and a member of the Governing Body of Brasenose College.

The main duties of the post are as follows:

- Research and the general supervision and leadership of research in Civil Engineering and more generally in the Department of Engineering Science;
- Teaching, including lectures, classes, laboratory demonstration, supervision of undergraduate and masters' projects, and supervision of doctoral students;
- University examining, as and when requested to do so by a committee for the nomination of examiners;
- Academic service, including participation and chairing of relevant committees in the Department and in the wider University, and undertaking relevant administrative roles.

### **For Brasenose College:**

- Serve as a Trustee of Brasenose College, an educational charity, with an share in the administrative work of the College, including attendance at Governing Body.
- Participate in the intellectual life and academic activities of the College.
- Act as a point of contact (College Advisor) to Brasenose College graduate students in relevant disciplines, providing pastoral advice and encouragement. This is in addition to the formal academic supervision provided by the Department.

## **Headship of Department**

Every Statutory Professor who is employed by the University, unless individually exempted, has an obligation to accept the headship of the department or faculty in which their post is held, if invited to do so by the divisional board. Recent practice, however, has been that the Head is chosen by an election within the Department every five years, and the Department's choice is ratified by Council. The present Head of Department is Professor Clive Siviour.

## **Selection criteria**

Applications will be judged only against the criteria which are set out below. You should ensure that your application shows clearly how your skills and experience meet these criteria.

The University is committed to fairness, consistency, and transparency in selection decisions. Members of electoral boards (selection committees) will be aware of the principles of equality of opportunity, fair selection, and the risks of bias. There will be both female and male board members wherever possible.

If, for any reason, you have taken a career break or have had an atypical career and wish to disclose this in your application, the electoral board will take this into account, recognising that the quantity of your research may be reduced as a result.

The successful candidate will demonstrate the following:

### ***Essential***

- A substantial international reputation in scholarship and research in Civil Engineering, including research that makes a significant positive impact on society alongside an excellent and sustained publication record in international journals.
- The vision, leadership and ability to manage a substantial research team, to train, guide and motivate research students and colleagues, and to establish a leading research presence in the University.
- The ability to develop and present proposals for funding, and an established record in attracting research grant support.
- An ability and readiness to contribute to the development and management of the Department of Engineering Science and the wider University.
- Past record and commitment to providing effective teaching at undergraduate and postgraduate level, including supervision of graduate students.
- The ability to communicate effectively (written and orally).
- A commitment to creating an inclusive and supporting academic environment enhancing equality, diversity, and inclusion in academic life.

### ***Desirable***

- Future research plans that complement the existing research activities within the civil engineering group.
- A track record of engagement with the wider engineering profession at a senior level.
- A track record of collaboration beyond research specialism (e.g. across structures, fluids and geotechnics or more widely) and the ability to lead large interdisciplinary projects.

## How to apply

Applications should be submitted via the TalentEdu website at <https://talentedu.com/jobs/civil-engineering>.

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

Please provide details of three referees and indicate whether we may contact them without seeking your permission. Referees should not write directly to the University or to TalentEdu, but may be contacted at any stage in the recruitment process if the electoral board requests your references.

The University and colleges welcome applications from candidates who have a disability or long-term health condition and is committed to providing long term support. The University's disability advisor can provide support to applicants with a disability, please see <https://edu.admin.ox.ac.uk/disability-support> for details. Please let us know if you need any adjustments to the recruitment process, including the provision of these documents in large print, audio or other formats. If we invite you for interviews, we will ask whether you require any particular arrangements at the interview. The University Access Guide gives details of physical access to University buildings <https://www.accessguide.ox.ac.uk/>.

All applications must be received by **12:00 UK time on Monday 24 February 2025**.

All applications will be considered by the electoral board as soon as possible after the closing date. Interviews are expected to be held in **late April or early May 2025**.

The electoral board is free to search for other candidates at this or any subsequent stage in its proceedings. You will be kept informed of the progress of your application at each stage, but in some cases there may be a delay while deliberations are ongoing. All shortlisted candidates will be interviewed and will be asked to give a short presentation to the electoral board as part of the interview. The composition of the electoral board will be published in the University Gazette (<https://gazette.web.ox.ac.uk/>) when it is finalised.

## The Department of Engineering Science

Engineering teaching and research takes place at Oxford in a unified Department of Engineering Science whose academic staff are committed to a common engineering foundation as well as to advanced work in their own specialties, which include most branches of the subject. We have especially strong links with computer science, materials science, medicine and the Saïd Business School.

Teaching and Research activities fall under 8 broad headings, though there is much overlap and there are no hard boundaries: Biomedical, Chemical and Process, Civil and Offshore, Control, Electrical and Optoelectronic, Information (Robotics, Computer Vision and Machine Learning), Solid Mechanics and Materials, and Thermofluids and Energy.

The Department is currently ranked 5<sup>th</sup> and 3<sup>rd</sup> in the world (Engineering & Technology) by *Times Higher Education* and *QS* respectively. For more information on the Department see [www.eng.ox.ac.uk](http://www.eng.ox.ac.uk).

### *Teaching*

We aim to admit 170-180 undergraduates per year, all of whom take 4-year courses leading to the MEng degree. The courses are accredited at MEng level by the major engineering Institutions. The syllabus has a common core extending through the first two years. The third year includes specialist options, a computation project, and a group design project. The fourth year includes further specialist material and an individual research project.

### *Research*

Research in the Department is particularly strong. Direct funding of research grants and contracts, from a variety of sources, amounts to an annual turnover of approximately £70m. We have strong collaborative links with other departments, particularly Computer Science, Materials Science, Medicine and the Saïd Business School.

In the most recent national assessment of university research, REF2021, the Department was ranked second in the UK for overall research quality with 71% of submissions which met the requirements for the highest grading of 4\*(research that is world-leading in terms of originality, significance, and rigour), and was ranked top for research impact and joint top for overall research environment.

### *People*

The Department employs 140 academic staff, including 15 statutory professors, 6 research chairs, and 42 full professors. We have approximately 600 research students and about 250 postdoctoral researchers, as well as experienced teams of teaching support staff, professional services and administrative staff, and technicians. The Department values wellbeing and career development for all members of the community and actively fosters a welcoming and inclusive working environment.

### *Facilities*

The Department has modern, well-equipped laboratories and workshops, which together with offices, lecture theatres and other facilities have a net floor area of about 25,000 square metres.

## Civil Engineering at Oxford

The Professor of Civil Engineering will bring research leadership to Civil Engineering, as part of the Civil and Offshore Engineering Research Group, which operates as a unified grouping crossing the boundaries between structural engineering, geotechnical engineering and environmental fluid mechanics. In addition to the Statutory Professor, there are currently 13 full-time senior academics in the Group, including a Royal Academy of Engineering Research Chair and six full Professors, working alongside a UKRI Future Leaders Fellow, 3 Departmental Lecturers, a Career Development Fellow, 15 post-doctoral researchers and approximately 60 doctoral research students. The Group is supported by a technician and an administrative assistant and hosts around 5 academic visitors at any point in time.

The Civil and Offshore Engineering Research Group carries out outstanding research in a range of areas:

- geotechnical engineering, with a particularly strong record in offshore applications;
- structures, with strengths in structural dynamics, deployable structures and structural materials;
- fluids, where there is a long-standing record of leading work in ocean wave mechanics.

Much of the group's research is focused on offshore renewable energy, with major teams devoted to offshore wind and to tidal stream power, collaborating closely with industry. The group's webpages can be found at <https://eng.ox.ac.uk/civil/research/>.

Major investments in new research facilities are underway or complete, including the development of a structural testing laboratory, a climate-controlled geotechnical laboratory, and a research-quality wave and current hydraulic flume. Longer term the group plans to move to the **E**ngineering and **T**echnology Innovation **H**ub at **O**sney (ETHOS) building, currently at an early stage of design, located centrally in Oxford, which will provide bespoke state-of-the-art laboratory and office space for Civil and Offshore Engineering at Oxford. The appointee will likely take a leading role in the planning and development for this proposed new building.

Civil engineering academics contribute to the teaching of core engineering topics in the first two years of the Engineering Science MEng course, and lead in the delivery of the specialised civil engineering options in the third and fourth years.

## The Mathematical, Physical, and Life Sciences Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities and the MPLS Division is home to our non-medical sciences, with 9 academic departments that span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. Our research tackles major societal and technological challenges – whether developing new energy solutions or improved cancer treatments, understanding climate change processes, or helping to preserve biodiversity, and is increasingly focused on key interdisciplinary issues. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, and with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

The disciplines within the MPLS Division regularly appear at the highest levels in rankings, including the Times Higher Education and QS world rankings. Nationally, the quality of the Division's research outputs and environment, and the resulting impact, was recognised through strong performances in the UK Research Excellence Framework in both 2014 and 2021.

MPLS is proud to be the home of some of the most creative and innovative scientific thinkers and leaders. Our researchers have been awarded some of the most significant scientific honours and we have a strong tradition of attracting and nurturing the very best early career researchers who regularly secure prestigious fellowships and faculty positions. MPLS is at the forefront of promoting equality, diversity and inclusion within the Collegiate University. We provide support to our departments to enable them to diversify their staffing, providing benefits to all, offer an array of development opportunities, and we are pleased to note that all academic departments in the Division hold Athena Swan Awards.

We have around 7,000 full and part-time students (including approximately 3,500 graduate students) and play a major role in training the next generation of leading scientists. Oxford's international reputation for excellence in teaching is reflected in its position at the top of the major league tables and subject assessments. Through a mixture of lectures, practical work and the distinctive college tutorial system, students develop their ability to solve diverse mathematical, scientific and engineering problems.

MPLS is dedicated to bringing the wonder and potential of science to the attention of audiences far beyond the world of academia. We have a strong commitment to supporting public engagement in science through initiatives including the Oxford Sparks portal ([www.oxfordsparks.ox.ac.uk](http://www.oxfordsparks.ox.ac.uk)) and a large variety of outreach activities; these are crucial activities given so many societal and technological issues demand an understanding of the science that underpins them. We also bring the potential of our scientific efforts forward for practical and beneficial application to the real world and our desire, aided by the work of Oxford University Innovation and Oxford Sciences Innovation, is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, please visit: [www.mpls.ox.ac.uk](http://www.mpls.ox.ac.uk)

## **Brasenose College**

Oxford has 39 self-governing and independent Colleges, enabling academic staff and students to reap the benefits of belonging to a small, interdisciplinary community as well as a large, internationally renowned University. The collegiate system fosters a strong sense of community, bringing together leading academics and students across subjects, and from different cultures and countries. Brasenose was founded in 1509, making it one of the longest-established members of the collegiate University. Across all years, there are approximately 375 undergraduates and 250 enrolled graduates at Brasenose recruited from increasingly diverse backgrounds. The College's paramount objective is the pursuit of academic excellence and it is concerned to foster research as well as high-quality teaching. 43 Fellows and the Principal comprise the College's Governing Body. Of these, five are Professorial Fellows including four Statutory Chairs in Comparative Law, Civil Engineering, Ancient History, and Molecular Immunology. Members of the Governing Body act as the trustees of the Charity.

As a Professorial Fellow, you will be welcomed into the Brasenose community, and through our various events, and especially over lunch (which is very popular and well-attended), offered the chance to interact with a broad range of other academics across many different disciplines. The appointment offers scope to become as involved in the social and intellectual life of the College as you wish. Throughout the year, there are also opportunities to invite guests – a hospitality allowance (detailed below) encourages Fellows to do this. Brasenose also seeks to be a family-friendly community.

For more information about the College see <https://www.bnc.ox.ac.uk/>

The appointee will be elected to a Professorial Fellowship at Brasenose College. The Fellowship carries full membership of the College's Governing Body, together with membership of the College's Senior Common Room, and full rights at common table (breakfast, lunch and dinner free of charge when the kitchens are open). The Fellow may also be invited to sit on College committees.

Engineering is strongly represented in Brasenose. The College admits up to 6 undergraduates in Engineering each year together with typically 5 graduate students to read for research degrees. The College has three Fellows in Engineering: Professor Harvey Burd, Professor Perla Maiolino, and Professor Ed Walsh.

For more information please visit: <https://www.bnc.ox.ac.uk/>.

## **About the University of Oxford**

Oxford's departments and colleges 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.

Oxford's self-governing community of international scholars includes Professors, Associate Professors, other college tutors, senior and junior research fellows and a large number University research staff. Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues.

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

While Oxford has long traditions of scholarship, it is also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. It consistently has the highest external research income of any university in the UK (the most recent figures are available at [www.ox.ac.uk/about/organisation/finance-and-funding](http://www.ox.ac.uk/about/organisation/finance-and-funding)), and regularly creates spinout companies based on academic research generated within and owned by the University. Oxford is also recognised as a leading supporter of social enterprise.

Oxford admits undergraduate students with the intellectual potential to benefit fully from the small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body, who are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information please visit [www.ox.ac.uk/about/organisation](http://www.ox.ac.uk/about/organisation).



## University Benefits, Terms and Conditions

### Standard duties

(i) to lecture, or hold classes, in at least two of the three university terms and to give at least thirty-six lectures or classes in all and not less than twelve in each of two terms. In the Department of Engineering Science this may be replaced by other teaching, examining or administrative duties requiring similar time commitment, as required by the department; and

(ii) to undertake research and original work and the general supervision of research and advanced work in your subject and department, and to assist students in their studies by advice or informal instruction.

It is expected that professors will generally participate in the business and affairs of the relevant faculty or department.

### Salary

Your salary will be determined after appropriate consultation. There is an annual 'cost-of-living' review. In addition you will be eligible for consideration, in regular reviews, for Professorial Merit Pay.

An additional pensionable allowance will be payable in respect of any period during which you are Head of Department/Faculty Board Chair. (Any allowance payable for a period of less than three years will not, however, be pensionable.) See <https://hr.admin.ox.ac.uk/academic-staff-pay> for further details.

Details of University policy in the following areas can be found at the links provided.

### Pension

<https://finance.admin.ox.ac.uk/uss>

### Sabbatical leave

<https://governance.admin.ox.ac.uk/legislation/council-regulations-4-of-2004>

### Outside commitments

<https://hr.admin.ox.ac.uk/holding-outside-appointments>.

### Intellectual Property

<https://governance.admin.ox.ac.uk/legislation/council-regulations-7-of-2002>

### Managing conflicts of interest

<https://researchsupport.admin.ox.ac.uk/governance/integrity>

### Membership of Congregation

<https://www.ox.ac.uk/about/organisation/governance>

<https://governance.admin.ox.ac.uk/legislation/statute-iv-congregation>

**Family support**

<https://hr.admin.ox.ac.uk/family-leave-for-academic-staff>.

<https://childcare.admin.ox.ac.uk/home>

<https://www.newcomers.ox.ac.uk/>

**International Staff**

<https://welcome.ox.ac.uk/>

<https://staffimmigration.admin.ox.ac.uk/>

**Relocation**

<https://finance.admin.ox.ac.uk/relocation-scheme-arrangements#collapse1094916>

**Promoting diversity**

<https://edu.admin.ox.ac.uk/home>

**Other benefits and discounts for University employees**

<https://hr.admin.ox.ac.uk/discounts>

**Pre-employment screening**

<https://jobs.ox.ac.uk/pre-employment-checks>.

**Length of appointment**

<https://hr.admin.ox.ac.uk/academic-posts-at-oxford#collapse1532056>

**Retirement**

The University operates an employer justified retirement age for academic posts of 30 September immediately preceding the 70th birthday. See <https://hr.admin.ox.ac.uk/the-ejra>

**Data Privacy**

<https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy>

<https://compliance.admin.ox.ac.uk/data-protection-policy>

## **College Benefits**

As a Professorial Fellow of Brasenose College you will be entitled to the following benefits:

- election to a non-stipendiary Professorial Fellow, with Governing Body membership;
- a full meal allowance with an entitlement to invite guests (the costs of wine and guests will be chargeable);
- membership of the Senior Common Room;
- an academic budget of £2,260 per annum;
- a hospitality budget of £476 per annum;

The College has a medical insurance scheme, which Professorial Fellows can participate in at their own expense.