

Job Description

Associate Professor or Professor of Geotechnical Engineering

[Imperial College London](#), seeks an Associate Professor/Professor to join the Department of Civil and Environmental Engineering within the Faculty of Engineering.

We are Imperial – a world-leading university for science, technology, engineering, medicine and business (STEMB), where scientific imagination leads to world-changing impact.

As a global top ten university in London, we use science to try to understand more of the universe and improve the lives of more people in it. Across our nine campuses and throughout our Imperial Global network, our 22,000 students, 8,000 staff, and partners work together on scientific discovery, innovation and entrepreneurship. Their work navigates some of the world's toughest challenges in global health, climate change, AI, business leadership and more.

Founded in 1907, Imperial's future builds on a distinguished past, having pioneered penicillin, holography and fibre optics. Today, Imperial combines exceptional teaching, world-class facilities and a habit of interdisciplinary practice to unlock scientific imagination.

Imperial has four academic faculties – [Engineering](#), [Medicine](#), [Natural Sciences](#) and [the Imperial Business School](#), as well as a significant number of [interdisciplinary research centres](#) focusing on challenging world problems.

Imperial has a leadership model comprising the [President, Professor Hugh Brady](#), and the [Provost and Deputy President, Professor Peter Haynes](#).

Please refer to [further particulars](#) for more information about Imperial.

1. The Post

Job Title:	Associate Professor or Professor in Geotechnical Engineering
Department/Division	Geotechnics Section, Department of Civil and Environmental Engineering
Faculty:	Engineering
Campus location:	South Kensington Campus
Job Family/Level:	Academic Job Family, Associate Professor or Professor
Accountable to:	Head of the Geotechnics Section
Responsible to:	
Key working relationship (Internal):	Other members of college including academic staff, college support staff, technical staff, research staff, and students
Key working relationship (external):	Academic staff from other Universities, collaborators, funders' representatives and industry and network partners
Working hours:	As reasonably necessary but normally not less than 35 hours per week
Contract type:	Full-time Open ended

2. Background of the post

The Geotechnics Section is one of the largest and most successful geotechnical research groups in Europe, with a wide ranging and high-quality programme of research and teaching activities that focus on both fundamental and applied aspects of soil mechanics, geotechnical engineering and engineering geology. We are seeking an additional member of academic staff to complement our existing team and support our education and research missions.

3. Information about the Faculty of Engineering

The [Faculty of Engineering](#) is one of four faculties within Imperial College London and is led by the Dean, [Professor Omar Matar FREng](#). The Faculty seeks to provide international leadership in engineering research and education and is widely recognised as a [world leading engineering school](#). Our departments consistently excel in prominent league table rankings, as does Imperial as a whole. Our Faculty is unique in the UK in supporting world-class education and fundamental research across the full range of engineering disciplines. All [ten of our academic departments](#) are located on our London campuses, giving a concentration of talent that creates a stimulating and vibrant research culture which promotes multidisciplinary collaborations and attracts internationally leading researchers and scholars.

Our academic departments deliver world-class education in engineering in order that our graduates possess the skills, knowledge and attitudes necessary to become international leaders in engineering industry and academia. We provide our students with an outstanding engineering education, which brings together cutting-edge researchers, exceptional teachers and state-of-the-art facilities in inspiring physical and virtual environments. Students at Imperial will meet, work and live with people studying every aspect of engineering.

The Faculty is home to 1,746 staff (421 academics, 828 researchers and 496 support staff) and 7,929 students (of whom around 1,700 are research students). The Faculty is a powerhouse in research across the engineering sciences, with research funding in excess of £100m per year.

The Faculty of Engineering is based at the South Kensington and White City campuses and comprises ten Departments covering all aspects of Engineering:

- [Aeronautics](#)
- [Bioengineering](#)
- [Chemical Engineering and Chemical Technology](#)
- [Civil and Environmental Engineering](#)
- [Computing](#)
- [Design Engineering](#)
- [Earth Science and Engineering](#)
- [Electrical and Electronic Engineering](#)
- [Materials](#)
- [Mechanical Engineering](#)

The Faculty was formed in August 2001 and formally inaugurated in August 2002.

4. The Department of Civil and Environmental Engineering

The overall mission of our Department is to solve global challenges across the natural and built environment through world leading education, research and innovation. We focus on interactions between the built environment and the natural world and recognise that civil and environmental engineering are crucial to meeting the major challenges faced by society; including climate change, economic recovery, growing population and urbanisation, conservation of natural resources, development of renewable energy sources, sustainable transport, environmental quality and infrastructure ageing and resilience. Our graduates possess the skills, knowledge and attitudes necessary to lead society's response to these challenges.

The Department is located in its own building (the Skempton Building) on the main College campus, in South Kensington, London. It is organised into six sections, which act as focal points for research and specialised teaching. These are:

- Environmental and Water Resource Engineering
- Fluid Mechanics
- Geotechnics
- Materials
- Structures
- Transport

In the recent UK Research Assessment Exercise (REF 2021), 75% of our research was considered 4* (highest rating), and the remaining 25% at 3* (unit of assessment: engineering). The Department ranks consistently highly across a number of prominent league tables. In 2026, the Department was ranked 7th in the world by QS World University Rankings.

4.1 Staffing and size of the Department

The Department has 56 academic staff, supported by technical, and administrative, and around 50 Research Fellows/Assistants. The Geotechnics section has three full-time technical staff members.

Many of our staff hold positions on technical and code committees, government and professional bodies, as well as acting as advisors or consultants to UK and overseas research institutes, companies and governments.

4.2 Research

The Department is active in all the major areas of Civil Engineering research. The Department's research strategy focuses on four challenge-based themes:

- I. Resilient and secure built environment,
- II. Connected efficient cities
- III. Engineering net zero and beyond
- IV. Sustainable natural environment

The Department has extensive links with industry, leading universities, and research and professional organisations throughout the world. The Department has its own library, housing books, journals, periodicals and reports, and each section has large and well-equipped laboratories which cover all the sub-disciplines of Civil Engineering, all of which have undergone extensive refurbishment and upgrading in recent years. The Department has three open access computer laboratories, and all research groups have their own dedicated computing resources.

The Geotechnics Section has expertise in geotechnical laboratory testing, finite element modelling, discrete element modelling, field monitoring and remote observation. This expertise supports research to advance engineering solutions in areas including offshore renewable energy, geothermal energy, resilience of geotechnical infrastructure (embankments, tunnels, slopes, etc), geotechnical aspects of construction, nuclear waste disposal.

The Geotechnics Laboratory includes state of the art element testing equipment (<https://www.imperial.ac.uk/geotechnics/research/facilities-and-expertise/>) and the Centre for Infrastructure Materials has advanced imaging facilities (<https://www.imperial.ac.uk/infrastructure-materials/laboratory/>).

4.3 Education

The Department offers a four year MEng undergraduate programme, which aims to provide a high level undergraduate education which prepares the brightest and best students to work at the highest level in the profession, either as practitioners or researchers. The current enrolment is 120 students each year. The first two and a half years of the course contain core material which will enable graduates to work towards Chartered Engineer status, and the final year and a half offers a wide range of elective subjects. The MEng Curriculum is outlined on the College website (<https://www.imperial.ac.uk/study/courses/undergraduate/civil-engineering/>)

The Department has a well-established programme of MSc courses which are updated regularly. The portfolio is based on the expertise of the six sections: Environment, Fluid Mechanics, Geotechnics, Materials, Structures and Transport. From 2027 the Geotechnics Section will offer 3 MSc Programmes, which share a number of common modules:

- Geotechnical Engineering (with options to specialize in Advanced Geotechnical Engineering, Geoenvironmental Engineering, Earthquake Engineering, or Data Science)

- Geological Engineering
- Geotechnical Engineering with Offshore Renewables

A more detailed description of each of these programmes is available on the College website (<https://www.imperial.ac.uk/civil-engineering/prospective-students/postgraduate-taught-admissions/msc-geotechnical-engineering/>).

4.4 Relationship with other departments and faculties

Collaboration with other Departments and Faculties is encouraged. The college provides a number of forums for collaboration with other departments and faculties, these include

- The Grantham Institute for Climate Change - <https://www.imperial.ac.uk/grantham/>
- The Energy Futures Lab - <https://www.imperial.ac.uk/energy-futures-lab/>
- The Thomas Young Centre - <https://thomasyoungcentre.org/event/tyc-mini-symposium-data-driven-materials-design/>

5. The Post – Key Result Areas, Main Duties And Responsibilities

The appointee will be expected to plan, resource, and direct an original and impactful research programme in Geotechnical Engineering. While we welcome applications from any area of geotechnical engineering / geological engineering, we are particularly interested in applicants with an expertise in field testing / in-situ monitoring and testing, geoenvironmental engineering including brownfield development, underground infrastructure, earthworks, geological engineering, geotechnical earthquake engineering, or sustainable geotechnics. Applicants should be able to show that their research can contribute to address the challenges of delivering low carbon energy, mitigate the risks posed by climate change, contribute to develop sustainable resilient infrastructure, or address the UN sustainable development goals.

The applicant's research profile should complement the current research activity in the Geotechnics Section. Capacity to meet this expectation should be clear from the candidate's research portfolio; we expect each candidate to include a 2 page attachment summarizing their research interests, vision and ideas on how they would attract funding to support this vision. The appointee will be expected to conduct research projects on their own and also to develop collaborative projects, in particular with other members of the Department and College.

5.1 Research

- To develop a broad range of research within department.
- To direct, lead, or contribute to, a research area at the highest scientifically rigorous levels.
- To supervise, train and mentor research staff and students at the highest scientifically rigorous levels.
- To obtain funds and research grants and to encourage and guide junior research staff to do the same.
- To manage research projects.
- To write reports for research sponsors and to take part in Audit.
- To publish high-quality research in peer reviewed journals.
- To attend and present work at national and international conferences.
- To develop contacts with other research organisations, both academic and commercial.

- To collaborate with and strengthen links with colleagues within the Faculty of Engineering across all departments and contribute to the work of the Faculty and Imperial.
- To play a role in the national and international research community and learned societies.
- To attend and contribute to research and administrative meetings within the Department as and when requested.
- To foster scientific collaborations through organising, attending and contributing to multidisciplinary meetings, within the Department and with other appropriate parties at Imperial.

5.2 Education - Teaching and Training

- To teach and examine courses at all levels – undergraduate, masters and higher research degrees – through lectures, seminars, tutorials, course work and personal supervision.
- To plan and review own approach to teaching.
- To act as a coach and role model through excellent practice and mentoring of colleagues.
- To supervise PhD candidates.
- To provide pastoral support for students.
- To contribute to curriculum development.
- To take a leading role in, or contribute to, the development of teaching and teaching methods and assessment.
- To contribute to the enhancement of quality teaching within the field.
- To act as an external examiner for postgraduate students.
- To work with national bodies on curriculum development and quality assurance.

5.3 Strategy and Business Planning

- To participate in the business planning and objective setting process for the academic team and the departments
- To make a significant contribution to building and establishing links between the appropriate departments and colleagues in other parts of Faculty and wider Imperial.
- To play an active part in the strategic planning of financial, staff and research resources.
- To represent the Department, Faculty and Imperial at external meetings, as appropriate.

5.4 Leadership and Team Working

- To demonstrate excellent leadership skills with regard to individual performance, academic teams, the department, Faculty, Imperial, and when participating in national/international initiatives.
- To work collaboratively with all members of the multi-disciplinary team and wider university as required.
- To resolve conflict and difficult situations through negotiation and discussion, involving appropriate parties.
- To adhere to Imperial guidelines on leave including reporting absence.

5.5 Management and Administrative duties

- To lead, or play an active part in the management of financial, staff and research resources, in line with Imperial's policy and procedures.
- To play a supportive role in unit administration, as appropriate.
- To undertake appropriate administrative tasks in support of the department's teaching and research activities.
- To attend relevant academic or management committees.
- To comply with all Imperial and departmental policies.

- To undertake other appropriate administrative duties commensurate with the grade of the post.

5.6 Staff Management

- To take responsibility for the appointment, management and development of Imperial staff, in line with our policy and procedure.
- To participate in team objective setting as part of the annual job planning cycle.
- To be responsible for the Annual Review Conversation (ARC) with staff who report to the post holder.

Job descriptions cannot be exhaustive, and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

6. Annual Review Conversation (ARC) And Mentoring

Annual Review Conversation (ARC)

[The Annual Review Conversation \(ARC\)](#) is an opportunity for staff to have a discussion with their line manager, focusing on everything they need to thrive at work. Building on regular one-to-one meetings, ARC aims to recognise ongoing contributions and plan for the future based on individual and departmental needs and aspirations. Staff are required to participate in these schemes when requested to do so by the Dean of the Faculty or Heads of Departments. ARCs are conducted annually, in conjunction with the line manager.

Mentoring

Imperial will provide a mentor to the appointee through our Mentoring at Imperial scheme.

[Mentoring at Imperial | Administration and support services | Imperial College London](#)

Imperial's mentoring scheme, available to all our job families and Faculties, is a widely used development tool that enhances effectiveness, confidence, and career advancement. Mentoring is based on a trusting, mutually respectful relationship where one colleague supports another's development with their expertise and knowledge. Most mentoring occurs between senior and junior colleagues, although peer mentoring is also possible. Through confidential one-to-one conversations, mentees are encouraged and challenged to achieve their potential and aspirations.

7. Workplace Environment and Inclusivity

The post holder will have office facilities, and access to administrative support at the South Kensington campus.

All members of our community are expected to follow the [Imperial Values & Behaviours framework](#). Our values are:

- Respect
- Collaboration
- Excellence
- Integrity

- Innovation

Employees are also required to comply with all Imperial policies and regulations paying special attention to:

- Overseas working
- External interests
- Smoke-free policy
- Probation periods

All employees must undertake specific training and assume responsibility for safety-relevant to specific roles, as set out on [Imperial's Website Health and Safety Structure and Responsibilities](#) page.

Imperial is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/

Imperial believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the our care are treated with full respect, and that all staff involved with this work show due consideration at every level: Find out more about [animal research](#) at Imperial

Culture and inclusion

Our values are not just a statement on our webpage, they are the fuel behind our commitment towards equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all.

We therefore encourage candidates to apply irrespective of age, disability, marriage or civil partnership status, pregnancy or maternity, race, religion and belief, gender reassignment, sex, or sexual orientation.

Imperial has a Race Equality Charter [action plan](#) in place after receiving the bronze award in November 2021. We are also a [Disability Confident Leader](#) and [Stonewall Diversity Champion](#).

All staff members are encouraged to engage with our staff networks, including:

- [Imperial As One](#) for Black, Asian and Minority Ethnic staff and allies
- [Able@Imperial](#) for staff with disabilities and allies
- [Imperial Pride Network](#) for LGBTQ+ staff and allies

Our other networks include the [Black Postdoctoral Network](#), [Parents](#), and [Carers'](#) networks.

Imperial has [family leave policies](#) which are available to staff irrespective of gender identity, sexual orientation, gender expression, biological sex, or transitioning. There is also a [flexible working policy](#).

The [Inclusion Team](#) provides advice, guidance and training for all staff to raise awareness of equality, diversity and inclusion, with senior leadership support (including that of the Associate Provosts for EDI).

8. Person Specification

Applicants will be assessed against the following person specifications, taking into account the level of the position for which they are applying:

E – Essential: Requirements without which the job could not be done.

D – Desirable: Requirements that would enable the candidate to perform the job well.

Requirements – Associate Professor	Essential (E) and Desirable (D)
Education	
PhD in Geotechnical Engineering or related field or equivalent	E
Knowledge and Experience	
An established national reputation and a developing international reputation and expertise in the field of Geotechnical Engineering	E
Research interests which complement current research activity in the Geotechnics Section	E
Evidence that their research can contribute to (i) address the challenges of delivering low carbon energy, (ii) mitigate the risks posed by climate change, (iii) contribute to develop sustainable resilient infrastructure, or (iv) address the UN sustainable development goals	E
Expertise in one or more of the following: field testing / in-situ monitoring and testing, geoenvironmental engineering including brownfield development, underground infrastructure, earthworks, geological engineering, geotechnical earthquake engineering, or sustainable geotechnics.	D
A significant track record in attracting high levels of research funding	E
Evidence of contribution to the development and performance of colleagues through coaching and mentoring	E
Experience and capability to act as a role model in areas of research, teaching and management as appropriate	E
Extensive experience in leading the design of research programmes	E
An excellent record of research, evidenced by a portfolio of research publications, confirming national/ international standing (commensurate with career stage)	E
Experience of training Undergraduate and Postgraduate students	E
Experience of supervision of higher degrees (PhD)	E
Evidence of management and administration experience	E
Skills and Abilities	
Ability to communicate well, conveying ideas and concepts clearly and effectively	E
A high level of analytical capability	E
Ability to make a significant contribution to the management of a department	E

Requirements – Associate Professor	Essential (E) and Desirable (D)
Proven skills in leading, motivating, developing and managing the performance of colleagues, ensuring the effective performance and development of a leading research department	E
Good leadership skills	E
Ability to work under pressure	E
Good organisational and management skills	E
Ability to work within a multidisciplinary team	E
Collaborative and able to build and sustain effective working relationships, both internally and externally	E
Ability to demonstrate a coherent and sustainable research programme, with clear future plans that align with and strengthen the Department's research priorities and strategic objectives.	E

Requirements – Professor	Essential (E) and Desirable (D)
Education	
PhD in Geotechnical Engineering or related field or equivalent	E
Knowledge and Experience	
An international reputation and expertise in the field Geotechnical Engineering	E
Research interests which complement current research activity in the Geotechnics Section	E
Evidence that their research can contribute to (i) address the challenges of delivering low carbon energy, (ii) mitigate the risks posed by climate change, (iii) contribute to develop sustainable resilient infrastructure, or (iv) address the UN sustainable development goals	E
Expertise in one or more of the following: field testing / in-situ monitoring and testing, geoenvironmental engineering including brownfield development, underground infrastructure, earthworks, geological engineering, geotechnical earthquake engineering, or sustainable geotechnics.	D
A sustained track record in attracting high levels of research funding	E
Evidence of contribution to the development and performance of colleagues through coaching and mentoring	E
Experience and capability to act as a role model in areas of research, teaching and management as appropriate	E
Extensive experience in leading the design of research programmes	E
An excellent record of research, evidenced by a portfolio of research publications, confirming international standing	E
Experience of training undergraduate and postgraduate students	E
Experience of supervision of higher degrees (PhD)	E
Evidence of management and administration experience	E
Skills and Abilities	
Ability to communicate well, conveying ideas and concepts clearly and effectively	E
A high level of analytical capability	E

Requirements – Professor	Essential (E) and Desirable (D)
Ability to make a significant contribution to the management of a department	E
Proven skills in leading, motivating, developing and managing the performance of colleagues, ensuring the effective performance and development of a leading research department	E
Excellent leadership skills	E
Ability to work under pressure	E
Good organisational and management skills	E
Ability to work within a multidisciplinary team	E
Collaborative and able to build and sustain effective working relationships, both internally and externally	E
Ability to demonstrate a coherent and sustainable research programme, with clear future plans that align with and strengthen the Department's research priorities and strategic objectives.	

Personal attributes for all levels	Essential (E) and Desirable (D)
A willingness to undertake any necessary training and development activities for the role	E
The understanding and vision required to contribute to the setting and delivery of strategic goals.	E
A willingness to engage in collaborative research	E
A commitment to high quality teaching and fostering a positive learning environment for students	E
A commitment to work as part of a team in assisting the smooth running of the Group and its research and teaching programmes	E
A personal commitment to the vision and values of Imperial, including high quality teaching and research.	E
Supportive and tolerant	E
A willingness to undertake any necessary training and development activities for the role	E

9. Salary And Conditions of Service

A full set of terms and conditions will be given to the successful candidate, together with the Imperial's most important policies, which affect staff. The principal terms and conditions are as follow:

Associate Professor

The post will be at the **Associate Professor level** of the **Academic Job Family** and the associated salary range is available at: <https://www.imperial.ac.uk/human-resources/pay-and-pensions/salaries/academic/>

Incremental progression and any performance payments will be in accordance with procedures governing Associate Professor level in the Academic Job Family. Annual increment date is 1 October up to the maximum of the standard salary scale. For those starting between 2 April – 30 September, subject to satisfactory performance, the first increment will be on the first of the month after six months in post.

Annual cost of living increases will be determined by Imperial through its local collective bargaining machinery.

Professors

The post will be at the **Professor level** of the **Academic Job Family** and the associated salary is available at: <https://www.imperial.ac.uk/human-resources/pay-and-pensions/salaries/academic/>

Any salary increases or performance payments will be determined in accordance with procedures which govern senior academic staff.

Annual cost of living increases will be determined by Imperial College through its local collective bargaining machinery.

Salaries are payable on the 24th of each month, except in December, or on the preceding working day where the 24th falls on a weekend, by transfer to a bank or building society account. Deductions in respect of income tax and National Insurance contributions will be made from salaries at the statutory rates.

Academic staff normally take annual leave during Imperial vacations and by arrangement with the Head of Department in the light of academic and departmental requirements. Annual leave entitlement is 43 days for full time staff (pro rata entitlement for part time staff). This is inclusive of 8 days for public holidays and a total of 8 [University closure days](#) each year when Imperial is closed over Easter and Christmas.

At the beginning of the leave year staff will be required to allocate the appropriate number of days of their mandatory leave entitlement to cover the Imperial's Closure days and Public holidays that fall within that leave year. For part-time staff the allocation should cover their normal working days that fall upon an Imperial closure day, bank or public holiday during that leave year.

The occupational pension scheme is the [Universities Superannuation Scheme \(USS\)](#). Staff members who are already members of the Federated Superannuation System for Universities (FSSU) or the National Health Service Superannuation Scheme (NHSPS) may, if they are still eligible, retain their membership in these schemes.

Unless stated otherwise in the offer of employment, or agreed by the head of department, the appointment may be terminated by either side by giving a minimum of three months' notice in writing. For academic members of staff who wish to give notice of their intention to resign from Imperial, the last day of service should fall on one of the following dates: 31 December; 31 March; 30 June or 30 September or at the end of a term by agreement with the Head of Department.

All staff have a probationary period of six months, with the exception of Assistant Professors who normally serve three years.

Staff on a fixed term contract receive notice of the ending of their employment within that contract. No further contractual notice will be given unless the contract is to terminate prior to the end date specified in the offer of employment. In these circumstances, the notice from the Imperial would be as above.

Total Remuneration Package

Our [Total Remuneration Package \(TRP\)](#) includes our sector-leading package of pay, pensions and recognition as well as our range of benefits.

We have many initiatives to support staff in their personal life ([flexible working](#), [private health insurance](#), [staff networks](#), [support for staff](#), [childcare](#) and [carers](#)

[Benefits](#) to support an active lifestyle and health initiatives, such as the [cycle to work scheme](#), and access to onsite [leisure facilities](#).

Childcare

Our staff have access to the [Early Years Education Centre](#) (EYEC) which is the Imperial's 'Outstanding' Ofsted-rated nursery, located at the South Kensington Campus. We also have other [affiliated nurseries](#) located at other campuses.

Imperial offers [support with EYEC fees](#) in the form of a salary sacrifice scheme enabling parents to pay fees before tax and national insurance contributions are taken.

10. Applications

Our preferred method of application is online, on our website at the following link: [Imperial Career's site](#) (select "Job Search"). Please apply online, uploading any relevant supporting documents such as a cover letter, full CV, teaching and research statements (max 2 pages each, added as attachments) which should include:

- degrees (including universities and dates);
- past and present posts, list of publications;
- brief description of current and future research plans;
- teaching statement and evidence of teaching scores;
- information on research grants and contracts which have been obtained, student supervision, etc;
- information regarding public engagement undertaken with research activities. Examples include: participating in festivals, working with cultural venues; creating opportunities for the public to inform research; researchers and the public working together to inform policy; citizen researchers and web-based experiments, public debates, etc.

The two-page teaching statement and a two-page research statement (which can be added as attachments) should each give an indication of prior experience and future vision for the role at Imperial College.

All candidates will be contacted after the shortlisting is completed.