



Job title	Chief Technician
Grade	5
Salary range	£30,505-£34,866
Staff Group	Technician (Assistant Staff)
Department / Institution	Department of Engineering

# **Role-specific information**

## **Role Summary**

This role is based at the Department of Engineering's site in Central Cambridge within the Mechanics, Materials and Design Division (Division C). Reporting to the Divisional Laboratory Manager, the role-holder will support several labs across this Division, supporting laboratory and production activities, including mechanical engineering, superconductivity and materials. The role-holder will deliver a specialist technical service to staff and students within this area, providing guidance, specialist advice and support on designing, commissioning, upgrading and using mechanical engineering equipment to all individuals who use the mechanics labs to conduct research and teaching.

The role-holder will have a good understanding of standard lab practices to support preparation of specimens in both mechanics and superconductivity laboratories as well as knowledge of basic materials testing and characterisation methods in order to provide specialist support. The role-holder will have oversight for ensuring that appropriate safety procedures are followed in the Mechanics Laboratory when the Divisional Lab Manager is not present. The role also involves assisting with undergraduate teaching, in particular working with undergraduate project students in their third and fourth years as well as providing broader support across divisional lab spaces outside of term to give better coverage when key staff members take annual leave.

## Key Responsibilities

1	Provide support for research projects and undergraduate teaching-related projects. Design, develop, manufacture and modify experimental equipment, protocols and techniques from general verbal instructions and rough sketches, source and order components for mechanical rigs, prepare and collate results for interpretation by self and others, use results to make changes to experiments.
2	Provide technical advice to research students and researchers in the design of experiments. Advise on mechanical test methods that could be used, taking into account time and financial constraints.
3	Maintenance and running of the research laboratory and teaching laboratories. Instruct research students and undergraduates in the correct application, use and maintenance of equipment, laboratory procedures (e.g. correct safety procedures in handling research equipment) and routine experimental techniques. Ensure the laboratory has adequate stocks, disposables and equipment.
4	Demonstrate and provide training in routine mechanical engineering techniques and procedures following established protocols. Record and interpret data and present the findings. Provide technical advice on the design of experiments.

5	Liaise with their line manager to ensure codes of practice and relevant safety regulations are implemented and observed within the research laboratory, carry out risk assessments.
6	Responsibility for the maintenance and repair of equipment. When unable to repair equipment, liaise with relevant companies and oversee repair or replacement.
7	Provide guidance to staff, researchers and students on experimental and analysis techniques, introduce new staff and researchers to health and safety procedures within the laboratory.
8	Monitor laboratory resources including, expenditure within a set budget, source new suppliers, place orders for consumables, and equipment when required, process invoices and delivery notes.
9	Manufacture of parts and specimens: select the most appropriate materials, components and manufacturing methods to make specialist parts for mechanical engineering rigs to a high quality, taking into account aspects such as performance, time and available funding.

# Person Profile

This section details the knowledge, skills and experience we require for the role:

Education & qualifications	A qualification equitable to HND/HNC, level 4/5 vocational qualifications or an equivalent level of practical experience
Specialist knowledge & skills	<ul> <li>Knowledge of the relevant regulations and practice</li> <li>Good IT skills</li> <li>High degree of precision and accuracy</li> <li>Excellent communication skills</li> <li>Demonstrate Factual and theoretical knowledge within a relevant area.</li> <li>Ability to work to a high degree of precision and accuracy in the manufacture of mechanical parts</li> </ul>
Interpersonal & communication skills	Excellent communication skills
Relevant experience	<ul> <li>Practical experience of laboratory technician general engineering research and teaching work</li> <li>Experience in providing training to groups and on a one-to-one basis</li> <li>Experience in manual machining and the use of workshop tooling would be beneficial.</li> </ul>
Additional requirements	Manual dexterity and eye to hand co-ordination

# Terms and Conditions

Location	Department of Engineering, Trumpington Street, Cambridge CB2 1PZ
Working pattern	Full time, Monday to Friday
Hours of work	Your normal hours of work are 37.75 hours per week, Monday to Friday. Your times of work will be notified to you by your institution
Length of appointment	Three years in the first instance as an appointment to this post relies on the availability of finite funds for a specific purpose that are not part of the University's general revenues.
Probation period	6 months
Annual leave	43.5 days, including public holidays
Pension eligibility	Cambridge University Assistants' Contributory Pension Scheme (CPS). You will automatically be enrolled to become a member of CPS (Contributory Pension Scheme) – a defined benefit and defined contribution pension scheme. For further information please visit: <u>www.pensions.admin.cam.ac.uk/</u>
Retirement age	The University does not operate a retirement age for assistant staff.

# Screening Check Requirements

## Right to work in the UK

We have a legal responsibility to ensure that you have the right to work in the UK before you can start working for us. If you do not have the right to work in the UK already, any offer of employment we make to you will be conditional upon you gaining it. If you need further information, you may find the Right to Work page within the 'Applying for a job' section of the University's Job Opportunities pages helpful (please see <a href="http://www.jobs.cam.ac.uk/right/have/">http://www.jobs.cam.ac.uk/right/have/</a>).

## Health declaration

Once an offer of employment has been made the successful candidate will be required to complete a work health declaration form.

## Qualifications

The person specification for this position lists qualifications that are essential and/or desirable. Please note that if you are offered the post you will be asked to provide your relevant original certificates of these qualifications.

### References

Offers of appointment will be subject to the receipt of satisfactory references.

## **Application Process**

To submit an application for this vacancy, please click on the link in the 'Apply online' section of the advert published on the University's Job Opportunities pages. This will route you to the University's Web Recruitment System, where you will need to register an account (if you have not already) and log in before completing the online application form.

The closing date for applications is Monday 25 November 2024. If you have any questions about this vacancy or the application process, please contact the HR Office on 01223 332615 or by email on <u>hr-office@eng.cam.ac.uk</u>.

# General Information

The University of Cambridge is one of the world's oldest and most successful universities. We are a renowned centre for research, education, and scholarship that makes a significant contribution to society. The University is consistently ranked amongst the top universities in the world. Our affiliates have won more Nobel Prizes than any other University.

Our sustained pursuit of academic excellence is built on a long history of first-class teaching and research within a distinctive collegiate system. For eight centuries our ideas and innovations have shaped the world. Our principal goal is to remain one of the world's leading universities in an increasingly competitive global higher education sector. Today the University of Cambridge is at the centre of a cluster of over 4,300 businesses employing 58,000 people.

Our capital investment projects include the West Cambridge site, the North West Cambridge development and the growth of the Biomedical Campus in the south of the city. The North West Cambridge development includes the opening of a primary school – the first in the UK to be managed by a University. So we are deeply embedded in, and committed to serving, our local community. These are all conspicuous signs of a University that is not only adapting to new needs, but also anticipating the future.

Our mission is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence. Our core values are:

- freedom of thought and expression; and
- freedom from discrimination.

## About Us

The University is one of the world's leading academic centres. It comprises 150 faculties and departments, together with a central administration and other institutions. Our institutions, museums and collections are a world-class resource for researchers, students and members of the public representing one of the country's highest concentrations of internationally important collections. The University has an annual income of £2 billion. Research income, won competitively from the UK Research Councils, the European Union (EU), major charities and industry, exceeds £500 million per annum and continues to grow.

The Colleges and the University remain committed to admitting the best students regardless of their background and to investing considerable resources both in widening access and financial support. The 31 Colleges are self-governing, separate legal entities which appoint their own staff. Many academic staff are invited to join a College as a Teaching Fellow, which provides a further social and intellectual dimension. The Colleges admit students, provide student accommodation and deliver small group teaching. The University awards degrees and its faculties and departments provide lectures and seminars for students and determine the syllabi for teaching and conducting research.

Our instinct for seeking out excellence and setting up enduring and mutually beneficial collaborations has led us to establish strategic partnerships across the globe. Whether it is the successful Cambridge-Africa Programme involving universities in Ghana, Uganda and elsewhere on the African continent; or the close association with the government of India to pursue new research in crop science; or the creation, with Germany's Max Planck Institutes, of a Cambridge-based centre for the study of ethics, human economy and social change – international partnerships are now an inextricable part of the University's make-up.

There is much more information about the University at http://www.cam.ac.uk/univ/works/index.html.

# The Department of Engineering

The Department of Engineering is the largest department in the University of Cambridge, representing approximately 10% of the University's activities by the majority of common metrics, and is one of Europe's largest integrated engineering departments. It achieves the highest standards in both research and teaching. Its international reputation attracts the best students, academics, sponsors and partners from around the world. The Department is accommodated on two sites; one in central Cambridge and four satellite buildings in West Cambridge.

The Department seeks to benefit society by creating world-leading engineering knowledge that fosters sustainability, prosperity and resilience. We share this knowledge and transfer it to industry through publication, teaching, collaboration, licensing and entrepreneurship. By integrating engineering disciplines in one department, we can address major challenges and develop complete solutions, serving as an international hub for engineering excellence.

The Department is committed to promoting gender equality as part of a landscape of encouraging diversity, tolerance and a culture of mutual support. The dedicated Diversity Committee oversees equality, diversity and inclusion related activities in the Department, and holds regular events to promote Engineering to under-represented groups. The Department was first granted an Athena SWAN Silver Award in 2017, which was renewed in September 2020 to recognise the Department's ongoing commitment to advancing the careers of women in STEMM. The Department of Engineering continues to make excellent progress towards achieving gender balance amongst its staff and students. More information on the Athena SWAN Charter can be found <u>here</u>.

The Department has six Academic Divisions and two Services Divisions as follows:

	Division A – Acoustics, Energy, Fluid Mechanics and Turbomachinery
Academic Divisions	Division B – Electrical Engineering
	Division C - Mechanics, Materials and Design
	Division D – Civil, Structural and Environmental Engineering with Sustainable Development
	Division E – Manufacturing and Management
	Division F – Information Engineering
Services Divisions	Division V – HR Office, Research Office, Graduate Studies Office, Teaching Office (including Faculty Board and Exams), Finance Office, Library, Building and Estate Services, Information and Computing Services
	Division W – Design and Technical Services

The size and two site location means it is especially important to have an effective organisational structure in place. All staff are assigned to the appropriate Academic or Support Service Division on appointment so that the line of management responsibility is clear. This role is based in Division C.

More information on the Department can be found at <u>www.eng.cam.ac.uk</u>.

## Working at the University

Working at Cambridge you will join a diverse, talented and innovative community, with more than 18,000 students and over 16,000 staff from all walks of life and corners of the world. The University continually explores strategies to attract and retain the best people. It is committed to supporting its staff to achieve their best. We are a fair, diverse and inclusive society and we believe our staff are our greatest asset. There is strong commitment to developing institutional leadership and supporting and encouraging staff development at all levels.

We offer a variety of roles including academic, research, professional, managerial and support roles. We also offer extensive benefits and excellent learning opportunities within a stimulating working environment. The University's estate is undergoing the most significant transformation in its history. Cambridge has been able to create a new science and technology campus to the west of the city centre, and is now expanding further to the north west of Cambridge including investing in affordable homes for University key workers and community facilities. Even with our continued development, the University remains within walking or cycling distance across the campus. The University is a major partner on the Cambridge Biomedical Campus and we continue to redevelop our historic city centre sites demonstrating our determination to ensure that we can offer the best facilities and opportunities for our staff and students.

### Equality and Diversity

The University has built its excellence on the diversity of its staff and student community. We aim to be a leader in fostering equality and inclusion, and in promoting respect and a sense of belonging for all. We encourage applications from all sections of society. All appointments are made on the basis of merit. We have an Equal Opportunities Policy, along with a range of diversity networks for women, black and minority ethnic and lesbian, gay, bisexual and transgender staff. More details are available here: http://www.equality.admin.cam.ac.uk/

The University has a bronze Race Equality Charter aware, with framework for improving the representation, progression and success of minority ethnic staff and students within higher education. Furthermore, the University's Athena SWAN award recognises and celebrates good practice in recruiting, retaining and promoting women.

### Living in Cambridge

From beautiful University and College buildings, museums and art galleries, quaint gardens and punts on the River Cam, to a vibrant restaurant and café scene, our employees are surrounded by the wonderful features of this unique city.

You can find a wide-range of high street shops and 3 shopping centres, with independent alternatives at the historic market and nestled within the passageways in the city centre. You will find a cinema, bowling alley, a nightclub and various live performances at the Cambridge Leisure Park, with further entertainment options at the Corn Exchange, Arts Theatre and the ADC Theatre. Further information can be found on the <u>Visit</u> <u>Cambridge</u> website.

If you prefer the faster pace of life, London is a 45 minute train journey away. For those travelling from overseas, Stansted Airport is just 45 minutes away and Heathrow Airport under 2 hours away. The University is a short distance from a host of other attractions such as Ely Cathedral, Newmarket Races and various wildlife parks and stately homes. Cambridge is also within easy reach of the beautiful Broads and coastlines of Norfolk and Suffolk.

### **Relocation Support**

The University recognises the importance of helping individuals to move and settle into a new area. We provide support and guidance to those relocating internationally or domestically to take up a post at the University of Cambridge, liaising with other University offices and selected partners to ensure comprehensive relocation support is available. This includes: accommodation, childcare, schools, banking, immigration and transport. lf would like further information, vou please visit https://www.accommodation.cam.ac.uk/.

The Shared Equity Scheme and the Reimbursement of Relocation Expenses Scheme provide financial assistance to qualifying new members of staff with the costs of relocating to Cambridge.

## Accommodation Service

The University Accommodation Service helps staff, students and visiting scholars who are affiliated to the University in their search for suitable accommodation in Cambridge. The dedicated accommodation team can provide access to a wide range of University-owned furnished and unfurnished properties, and has a database of private sector accommodation available for short and long-term lets. For further information and to register with this free service please visit <u>https://www.accommodation.cam.ac.uk/</u>

## What Cambridge can offer

We offer a comprehensive reward package to attract, motivate and retain high performing staff at all levels and in all areas of work. The University offers a wide range of competitive benefits, from family leave entitlement, to shopping and travel discount schemes. Our generous annual leave package contributes to the positive wellbeing of our University employees. Sabbatical leave enables academics to focus on research and scholarship, whilst still maintaining their full salary. The University also has a <u>career break</u> scheme for academic and academic-related staff, with additional flexible working policies for all other staff.

#### Pay and benefits

The University salary structure includes automatic service-related pay progression in many of its grades and an annual cost of living increase. In addition to this, employees are rewarded for outstanding contribution through a number of regular pay progression schemes. The University offers attractive pensions schemes for employees, with an additional benefit of a salary exchange arrangement providing tax and national insurance savings. Payroll giving is also a simple, tax-efficient way for employees to make monthly donations to charity.

#### CAMbens employee benefits

We offer a CAMbens scheme for University employees, providing access to online and in-store shopping discounts and cashback. With more than 2,000 participating retailers, employees can save money on a wide range of household expenses, from groceries and clothes, to holidays and insurance and much more. A range of local discounts are also available, helping employees to save money whilst also supporting local Cambridge businesses and a CAMbens Cycle to Work salary sacrifice scheme is also available, which enables employees to save money on transport costs. A 10% discount rate on the <u>purchase of train season tickets</u>, bulk buy tickets and an interest free travel to work loan are also available for staff of the University.

#### Family-friendly policies

The University recognises the importance of supporting its staff. We have a range of family-friendly policies to aid employees' work-life balance including a generous maternity, adoption and shared parental leave entitlement of 18 weeks' full pay and emergency family care support via Emergency Childcare (https://www.emergencychildcare.co.uk/) as well as back-up care for adult dependants which can be booked directly by staff through www.helpinghandshomecare.co.uk. Other family-friendly support includes: Our highly regarded workplace nurseries, a childcare salary exchange scheme and a high-quality holiday Playscheme may be available to help support University employees with caring responsibilities (subject to demand and qualifying criteria). Further childcare information can be found here: https://www.childcare.admin.cam.ac.uk/

The <u>Newcomers and Visiting Scholars Group</u> is an organisation within the University run by volunteers whose aim is to help newly arrived wives, husbands, partners and families of Visiting Scholars and members of the University to settle in Cambridge and give them an opportunity to meet local people. The Office of Postdoctoral Affairs supports the postdoctoral community within Cambridge. Further details are available here: <u>https://www.opda.cam.ac.uk/</u>

#### Your wellbeing

The University's Sport Centre, Counselling Services and Occupational Health are just some of the support services available to University employees to promote their physical and mental wellbeing. There are many societies in Cambridge catering for almost every taste and interest. Whether you want to take part in a sport, participate in music or drama, pursue a hobby, or join a political group, you will almost certainly find that a society exists for this purpose.

The University also hosts the <u>Cambridge Science Festival</u> and <u>Cambridge Festival of Ideas</u>, as well as <u>Open</u> <u>Cambridge</u> weekend, which together attract over 50,000 visitors per year. The festivals are a great opportunity to get your first taste of public engagement, through volunteering, supporting hands-on activities or proposing a talk.

#### **Development opportunities**

We support new employees to settle in through various activities. The encouragement of career development for all staff is one of the University's values and we put this into practice through various services and initiatives. Our Personal and Professional Development Department provides development opportunities and courses for all University employees. These include face-to-face sessions, online learning modules and webinars. Employees may also apply for financial support to undertake training that will lead to a qualification. We offer reduced staff fees for University departments and institutions. The CareerStart@Cam programme also supports employees in assistant staff roles who do not hold higher education qualifications to develop their skills, experience and qualifications.

## Information if you have a Disability

The University welcomes applications from individuals with disabilities. We are committed to ensuring fair treatment throughout the recruitment process. We will make adjustments to enable applicants to compete to the best of their ability wherever it is reasonable to do so and, if successful, to assist them during their employment. Information for disabled applicants is available at: <a href="http://www.admin.cam.ac.uk/offices/hr/staff/disabled/">http://www.admin.cam.ac.uk/offices/hr/staff/disabled/</a>

If you prefer to discuss any special arrangements connected with a disability, please contact the HR Office, who are responsible for recruitment to this position, on 01223 332615 or by email on hroffice@eng.cam.ac.uk Alternatively, you may contact the HR Business Manager responsible for the department you are applying to via <u>hrenquiries@admin.cam.ac.uk</u>