



**Harper Adams  
University**

**University Engineer  
Candidate Information Pack**



**Harper Adams is a friendly, talented community of more than 600 employees, working to ensure that everyone on the planet has access to food, and that this is achieved sustainably. Our work contributes to planetary health, animal health and wellbeing, and ultimately how this contributes to human health. We are passionate about what we do, and are committed to making a difference.**

Harper Adams University is committed to the wellbeing of our employees, and their personal and professional development. This is reflected in our annual employee survey - employees tell us they're proud to be a part of the university and that it is a good, safe place to work where they feel trusted to do their jobs and supported by their managers.

Whilst many of our teaching, research and knowledge exchange activities are delivered or coordinated from an attractive campus in rural Shropshire, our impact and reach is regional, national and international. We offer free staff parking, leisure facilities, and we are only a short drive from the busy market town of Newport.

Some of the benefits of working at Harper Adams University are:

- Beautiful rural location
- Generous holiday entitlement
- On campus retail, catering and gym facilities
- Opportunity to purchase additional holiday
- Opportunities for agile working
- Employee Assistance Programme
- Disability Confident Employer
- Enhanced maternity benefits
- Enhanced sickness absence payments
- Cyclescheme supporter
- Workwear provided

Situated on a single campus in rural and scenic Shropshire, the University, and its surrounding area, provide an excellent working and living environment for staff and students alike, yet the University campus is only one hour from the UK's second city of Birmingham. Around 3,000 HE students attend the University, primarily on sandwich courses, which include a year-long industrial placement. Undergraduate and postgraduate degrees and apprenticeships are offered. The University also welcomes individuals who wish to undertake CPD or similar professional training to support their careers in the agri-food chain and rural industries.

The University was founded by Thomas Harper Adams in 1901 on the original farmland of the Harper Adams Estate. The University estate includes amenity areas, woodland, and a commercial farm of 205 hectares; with rented land, the total area farmed is approximately 494 hectares, spread over several locations with cereals, potatoes, forage maize and grassland carrying a dairy herd, sheep, beef, pig and poultry units.

The Privy Council awarded taught degree awarding powers to Harper Adams in 1996 and research degree awarding powers in 2006. Full University Title was granted by Her Majesty's Privy Council in December 2012. The University changed its legal status to that of a Company Limited by Guarantee in July 2012 and remains one of a small number of Universities which

are Registered Charities. Her Royal Highness The Princess Royal became the University's first Chancellor in 2013.

### **Academic Provision**

The University offers a wide range of courses including Foundation and Honours degrees, in addition to shorter awards designed to meet the continuing professional development needs of those already in the workplace. The subjects are wide ranging and cover Agriculture, Applied Life Sciences, Animal Science and Health, Business, Countryside, Engineering, Food and Land & Property Management. The University has also focused on developing its postgraduate education and research and there are a growing number of postgraduate students at both diploma, masters and PhD level.

Harper Adams has built up an international reputation for the quality of its courses and has achieved the highest possible ratings in recent Quality Assurance Agency reviews.. There is active encouragement of research and the University took part in the last Research Excellence Framework (REF) exercise. 60% of our submitted research was rated either internationally excellent or world. Our extensive programme of research and education for professionals in the land-based and food chain sectors supports a high profile of business and community reach-out work, short course delivery for businesses and technology transfer activities supported by strong industry links and partnerships with companies including Saputo Dairy UK (formerly Dairy Crest), CLAAS and Ice Robotics.

Current high-profile projects include the Hands-Free Farm – following on from the world-first Hands Free Hectare autonomous farming success; controlled traffic farming and development of laser weeding.

### **Recognition**

Harper Adams is consistently positioned highly in a range of national ratings, performance measures and league tables.

The University was the highest performing modern university in The Times and Sunday Times Good University Guide 2016 to 2022.

In the QS World Rankings for Agriculture and Forestry published in March 2022, Harper Adams was ranked first in the world for its reputation with employers.

Harper Adams University is a six-time winner of the Whatuni? Student Choice Award for best job prospects

The University is ranked Top 5 in the UK for student satisfaction, based on the results of the National Student Survey 2022, and more UK-based, full-time, first degree undergraduates from Harper Adams University are in work or further study than from any other university in the country, according to 2022 Graduate Outcomes figures.

### **Facilities**

Harper Adams has extensive, well-equipped facilities and is constantly investing in its campus. Facilities include a range of modern teaching facilities and an extensive library, a variety of IT suites including an engineering design centre, newly extended laboratory facilities, a field laboratory and a livestock project centre, a glasshouse complex, an agricultural engineering unit with a large, covered soil working area and a number of

sustainable technology installations. New facilities opened since 2017 include new laboratories, an Agri-Tech Innovation Hub and SMART Dairy Unit. A Veterinary Education Centre opened 2021, in support of existing programmes and the new Harper & Keele Veterinary School. Capital funding to support the development of many of these facilities has been provided through the work of the Development Trust.

The University also provides a range of training and professional development opportunities via its staff development programme.

### **Catering and Sports Facilities**

The University's Students' Union operates a small gym and squash courts that staff may use on the payment of a nominal fee. The University has bowling green and tennis courts that are available for staff use during the summer period. A variety of University catering outlets provide access to lunch facilities on campus.

For further details about the University, please visit our website:

<http://www.harper-adams.ac.uk>

## **JOB DESCRIPTION**

**Title of the post:** University Engineer (Full time, permanent)

**Department:** Estates & Facilities

**Reporting to:** Head of Estates & Facilities

### **The Estates and Facilities Team**

The Estates and Facilities Department provides a number of essential services to Harper Adams University and is responsible for managing, maintaining and developing the infrastructure and building fabric of the campus and outlying properties, including:

- Undertaking and regularly reviewing a maintenance programme which takes account of short, medium and long term needs of all estates buildings and infrastructure.
- Implementing planned maintenance works identified and funded within the various maintenance programmes as well as providing reactive maintenance dealing with day-to-day requirements, including the provision of an out-of-hours emergency service.
- Providing a professional, technical service to the University for the design, construction and procurement of capital projects including new buildings, refurbishment/remodelling of existing buildings and demolitions.
- Identifying and recording the use of space and advising on ways of increasing space utilisation.
- Procuring and managing utilities and services.
- The delivery of a wide-range of customer-facing services, including: estates maintenance services, capital development, environment and sustainability management, housekeeping and laundry services, reception, security, portering and postal services.

### **Main Duties and Responsibilities**

The role is responsible for the operation, maintenance and legislative compliance of building services and engineering infrastructure (local building systems as well as centralised systems and the district heating), the operation of the Building Management System (BMS), water abstraction and water treatment, low carbon technologies and utilities. Reporting to the Head of Estates and Facilities.

The person in the role will be a highly experienced, credible and skilled engineer with in-depth technical knowledge in the field who will work across the University including the University Farm and tenanted buildings.

1. Put in place suitable and sufficient management, operational and maintenance arrangements to ensure that the building services and engineering infrastructure operates efficiently, is compliant with relevant legislative and statutory requirements

and supports the strategic requirements. Make sure that any scheduled maintenance occurs at appropriate times so as to minimise adversely affecting the operation.

2. Be responsible for ensuring that the building services and engineering infrastructure of the University is fit for purpose. Where upgrade or replacement work is required, develop proposals, prepare business cases and seek agreement for any capital investment.
3. Be responsible for the developing, agreeing and delivering the operational heating and power strategy.
4. Be responsible for the setting, monitoring and management of the utilities budget, adhering to strict financial controls. Undertake bill validation to ensure that the University is paying the correct amount for utilities.
5. Be responsible for the procurement and contract management of utilities in accordance with the University Financial Regulations including (but not limited to) woodchip, gas, water and electricity, fuel oil, wood pellets and LPG. Use best practice and negotiating methods to get best value and secure the most advantageous terms and conditions.
6. Ensure sufficiency of the utilities (water, gas, electricity and other fuels) to meet the University current and future demand. Provide forecasting on utilities and identify budget implications and any capital investment necessary to either to increase supply or reduce demand to maintain sufficiency.
7. To develop the University's metering and data collection systems on building services, engineering infrastructure and utilities. Provide data analysis and reports to inform the operation of building services and engineering infrastructure as well as strategic planning and future budgeting of revenue budgets and capital investment.
8. Be responsible for the submission and administration of grants, loans or other incentive schemes associated with utilities efficiency, low carbon technologies, renewables.
9. Be responsible for the management and implementation of any capital works on the building services or engineering infrastructure. Support estates and facilities colleagues in wider capital development of new buildings or refurbishment works on building services and engineering infrastructure.
10. Be responsible for Energy Performance Certificates (EPCs) and Display Energy Certificates (DECs), identifying any remedial works or investments required to achieve compliance.
11. To collaborate with the Environmental and Sustainability Manager in the promotion, development and implementation of sustainable and best practice energy and water management solutions to improve the energy and environmental performance standards, deliver on the carbon management plan and the wider sustainability strategy.
12. To provide accurate and timely management reports and information pertaining to the role for the Head of Estates and Facilities, the Senior Leadership Team, Governors and external auditors as required.

13. Be responsible for the timely preparation, collation and inputting of data for the HESA Estates Management Record or any similar external reporting requirements pertaining to the role.
14. Work with the wider Estates team to maintain up to date records of above ground and underground services as well as asset lists of maintainable equipment recording key asset information.
15. Be an experienced user of the Building Management System (BMS) to achieve the efficient functioning of all building services and engineering infrastructure systems. Respond to and action any alarms taking remedial action as required. Be responsible for scheduling of the operation of building services and engineering infrastructure including heating, ventilation, cooling whether through the BMS or directly on equipment. Ensure that these take account of expected calendar use as well as other events including short courses and conferencing, open days and the like.
16. Put in place and manage contracts for the maintenance of HV assets and the call out facility for a Senior Authorised Person (High Voltage) when required.
17. Be responsible for the operation, maintenance and management of the abstraction (both from private boreholes and watercourses), treatment and distribution of both potable water and water for farm use. Be responsible for quality of water quality including managing testing and reporting. Manage the water abstraction licences including measuring abstraction, reporting to the Environment Agency and ongoing applications to the Environment Agency to ensure the continued supply of adequate water supply.
18. Plan and organise own workload in collaboration with the Estates Maintenance Manager to ensure that any maintenance works or operational changes are coordinated.
19. Contribute to collaborative decision making within University on utilities, energy, carbon, building services and engineering infrastructure.
20. Provide technical guidance and advice to resolve problems and queries on building services and engineering infrastructure for a broad range of service users across the University.
21. Represent the University with external contacts and professional bodies and participate in networks and communities to build links, understand trends, changes in best practice and changes in legislation relating to building services and engineering infrastructure and pass on that information for the effective working of the University.
22. Undertake risk assessments on the robustness of key building services and services infrastructure (heat, power, water and sewerage) to develop suitable and robust service specific plans to mitigate such interruptions for key operations. Ensure that all necessary arrangements are communicated, and suitable equipment and training is in place and maintained.
23. Participate and support the University Emergency Planning Procedures and Business Continuity Planning.
24. Develop suitable and robust service specific emergency plans to manage pollution

incidents associated with fuels, water treatment chemical and slurry spills. Ensure that all necessary arrangements are communicated, and suitable equipment and training is in place and maintained.

25. Respond to emergency call outs pertaining to the operationally critical building services and engineering infrastructure problems. Where necessary, organise and management the call out arrangements with suitable specialist contractors.
26. Be responsible for the development, deployment and adherence of estates building services and engineering infrastructure safe systems of work. Ensure that robust health and safety procedures and safe working practices are adhered to whether works are undertaken by in-house staff or contractors. Prohibit unauthorised, unqualified or untrained people to work electrical systems.
27. Develop, review and maintain standard specifications and standard materials, equipment or components relating to building services and engineering infrastructure to assist maintenance and capital works
28. Liaise closely with statutory bodies and organisations responsible for licences and legislative compliance. Where necessary, make the necessary applications for statutory approvals and licences relevant to the role.
29. Provide professional/technical compliance expertise to colleagues throughout the University relevant to the scope of the role.
30. Maintain and wear appropriate Personal Protective Equipment (PPE) as required.
31. To work effectively and collaboratively with colleagues within the Estates and Facilities and the wider University community, always being mindful of the academic and agricultural environment of the University.
32. Keep abreast of technical developments, best practice, statutory, legal and legislative changes, health & safety legislation and Construction (Design Management) obligations in respect of building services and engineering infrastructure. Participate in continuous professional development, keeping a detailed log of all training courses undertaken and retaining certificates to be able to evidence development upon reasonable request.
33. Provide or arrange for the provision of suitable training to the Estates and Facilities team on issues pertaining to and skills required to work with building services and engineering infrastructure in line with statutory requirements, the expected day to day activities of the team and to develop the skillsets in line with the ongoing requirements of the University.
34. Persuade, influence and negotiate through regular relationship building with key client groups at an operational level to maintain a quality service.
35. Maintain constructive professional relationships with framework contractors connected with building services and engineering infrastructure, working collaboratively and undertaking regular performance reviews to ensure effective service delivery.
36. Make sure that procurement of any equipment, utilities, consultants, service contractors, fuels and surveys etc... are undertaken in accordance with the university



financial regulations.

37. All other duties and responsibilities commensurate with the post and the salary range of the grade.

**Key Requirements**

- Be legal to drive University vehicles transporting the required equipment to various sites across the University.
- Attend all training and development, as required.
- Be available for out-of-hours emergency response on campus as part of the University Business Continuity Plan.
- Have an up to date asbestos awareness certificate.

**Personal Specification**

	Essential	Desirable
<b>Qualifications</b>	<p>Educated to a degree level or recognized equivalent in an appropriate engineering discipline.</p> <p>Membership of relevant professional body (CIBSE, IEMA, etc...).</p>	<p>Holding current IOSH and/or NEBOSH certificates</p> <p>Asbestos Awareness Certificate</p> <p>Qualified DEC/EPC Assessor</p>
<b>Experience</b>	<p>Extensive experience of the operation, maintenance and management building services and engineering infrastructure in a complex estate using a variety of fuel types and technologies.</p> <p>Experience in the procurement and management of utilities as well as the setting and controlling of a significant utilities budget.</p> <p>Experience of preparing and implementation of strategic plans for operation of building services and engineering infrastructure</p>	<p>Experience in operation, maintenance and management of energy centres, CHP units, biomass boilers and district heating plus the integration of centralised and local systems.</p> <p>Experience of the operation and management of the abstraction, treatment plans and distribution of potable water including administration of licence agreements.</p>

	<p>Practical experience of risk management, the development and implementation of emergency plans for heat, power and water.</p> <p>Experience of operating and developing building services and engineering infrastructure to deliver reductions in carbon emissions.</p>	
<b>Knowledge/Skills</b>	<p>Excellent knowledge of Building Management Systems, ability to interrogate and rectify alarms, set operational schedules and analyse data.</p> <p>Excellent IT skills</p> <p>Skill in preparing business cases, able to strong analytical skills, able to review and interrogate data, provide accurate reporting.</p> <p>In depth knowledge of health and safety legislation and legal compliance relevant to building services and engineering infrastructure.</p> <p>Knowledge of current and likely future low carbon and carbon reduction technologies.</p>	
<b>Personal Qualities</b>	<p>Able to work flexibly, responsibly and effectively to deadlines with minimum of supervision. Have a flexible attitude to multi-skilled tasks to maximise operational effectiveness.</p> <p>Excellent communication skills and be able to effectively build and maintain both relationships and trust.</p>	

## Conditions of Service

The national recommendations which have arisen from the negotiations between UCEA and the unions recognised at national level, the Joint Negotiating Committee for Higher Education Staff (JNCHES), directly affect the terms and conditions insofar as they have been adopted by the Board of Governors.

Salary	The commencing salary will be within the range ££42,155 to £46,047 per annum. The point of entry will be dependent upon relevant qualifications and experience. Salaries are paid monthly, in arrears, by credit transfer on the 28 <sup>th</sup> day of the month.
Contract Term	This is a full time, permanent post. The employment may be terminated during the course of the contract by either party giving one months' notice in writing.
Hours of Work	The routine working week is 37 hours over Monday to Friday, inclusive. There may be a requirement for overtime working from time to time and time off in lieu may be allowed for agreed hours worked in excess of 37 per week.
Holidays	<p>The annual holiday entitlement is 25 working days, plus statutory bank holidays. In addition to this there are 8 University closure days during the full annual leave year. The holiday year runs from 1 August to 31 July and in the holiday year in which the employment commences or terminates the holiday entitlement will accrue on a pro-rata basis for each complete week of service. The timing of holidays is subject to the agreement of the Line Manager.</p> <p><b>All annual holiday entitlement (including bank holidays and University closure days) is pro-rata for part-time employees. Further details will be confirmed on appointment.</b></p>
Sick Leave	During periods of certified sickness, the post-holder will be eligible to receive sick pay in accordance with the University Sick Pay Policy. The payment of sick pay is subject to compliance with the University rules for the notification and verification of sickness absence, details of which will be provided to the successful applicant upon commencement of employment.
Pension	The post-holder will be entitled to join the Harper Adams Group Pension Scheme and details will be provided to the successful applicant upon commencement of employment.
Exclusivity of Service	You are required to devote your full-time attention and abilities to your duties during working hours and to act in the best interests of the University at all times. Accordingly, you must not, without written consent of the University, undertake employment or engagement

including external consultancy, which might interfere with the performance of your duties or conflict with the interests of the University.

It follows that, regardless of whether you are employed on a full-time or part-time contract, you are required to notify your line manager of any employment or engagement which you intend to undertake whilst in the employment of the University (including any such employment or engagement which commenced before your employment under this contract). Your line manager will then notify you within 10 working days whether such employment or engagement is prohibited.

#### Criminal Convictions

The post involves the opportunity for access to children and young persons under the age of 18. For this reason, the University is entitled to consider any criminal convictions, cautions or impending case(s) that it considers to be relevant to this post.

The post is exempt from the provisions of the Rehabilitation of Offenders Act 1974. This means that applicants are not entitled to withhold information about convictions which for other purposes are “spent” under the provisions of the Act.

Applicants must therefore complete the part of the application form declaring any criminal convictions and cautions from any court or police authority. The successful applicant will have to undergo a Disclosure and Barring Service Check before an appointment can be made.

#### References

Candidates should ensure that they provide full details of the name and postal address of their referees. Please include e-mail addresses and telephone numbers wherever possible. Referees should include your present, or most recent, employer.

#### **Application Procedure:**

All applications should be completed and submitted using the Harper Adams e-Recruitment programme at <http://jobs.harper-adams.ac.uk>

To be submitted no later than midnight on Sunday 2<sup>nd</sup> April 2023