



Job Description

This form summarises the purpose of the job and lists its key tasks. It is not a definitive list of all the tasks to be undertaken as those can be varied from time to time at the discretion of the School, in consultation with the postholder.

Job title: Controls Engineer / Electrician

Department/Division: Estates - Maintenance

Accountable to: Head of Maintenance

Job Summary

The post holder will be responsible for carrying out BMS Control / electrical maintenance work as requested. This will include interrogating the BMS computerised system that controls our heating, cooling and ventilation systems on Campus and Halls. This will include carrying out adjustments to temperature set points, minor alterations to software, checking alarms and rectifying faults and emergencies. There will also be an element of installation work, planned preventative maintenance and liaising with customers. Carry out shift work at a frequency of 1 in 7-week intervals – currently 3:30 pm to 10:30 pm, Monday to Friday.

Duties and Responsibilities

Communication:

Communicate with Estates operations staff and school customers about job or service requests. Follow up customer feedback to ensure that jobs are completed to our required service levels. The results of our performance are given to senior management and are published for all to see.

Interrogate the schools conference booking web pages/ emails, communicate any issue with the BMS programmed settings and ensure the system is setup as required.

Clearly and accurately transmit and receive technical information over the dedicated maintenance sections short wave radio system or on Planon (Computer Aided Facilities System) via an iPad mini.

Regularly carryout written and oral communication to the customer, including the requirement to email or phone the requestor for further information on the job or for access to the premises.

Completion of technical logbooks, including professional certification related to compliance with the H&S and Fire Risk Assessment requirements; and service maintenance work reports, ensuring all documents are submitted to supervisors on time. The information must be entered accurately and correctly representing the statutory task that has been carried out.

Participate in fortnightly meetings with the maintenance team and the senior management and report on service delivery and make recommendations of required changes.

Ensuring that up-to-date notices for non-functioning items of plant are put in place and users are informed



about progress of repair in order to ensure customers satisfaction.

On receipt of a technical job request via Planon on iPad the technician needs to survey and diagnose the work and come up with a technical solution to the request. The person will need to research the ways of completing the job including any spare parts required and update request on Planon via iPad.

Correctly understood verbal discussions and subsequently use this information to carry out a repair within unfamiliar disciplines.

To communicate with the Store Manager, the stock requirements including quantities and qualities of goods as well as type and suitability. Regular review of discontinued components.

Service Delivery

Be prepared to undertake preventative and reactive maintenance duties, new works, fault diagnosis and refurbishment, examples listed below:

BMS – Building Management System:

1. Every morning at 0800 am check all building, including Hall of Residences, main plant via head end.
2. Monitor and address any alarms on the system.
3. Check daily classroom schedules and set the BMS time clocks accordingly.
4. Monitor head end throughout the day for areas that are over/under heated.
5. Monitor head end throughout the day for areas that are over/under cooled.
6. Setup trends to show energy savings from modifications made to programming.
7. BMS control wiring installation.
8. Checking and rectifying faults on the 3 BMS systems -Tridium, Trend, Johnsons.
9. Working closely with sensor controls engineer.
10. Analyse and diagnosis of the host (head-end) computer.
11. Test and change actuators etc.
12. Re-programming all energy efficiency upgrades to BMS system.
13. Edit existing BMS software programme.
14. Working with the Energy Manager to implement changes to reduce waste and save energy.
15. Responsible for obtaining budget costs to replace defect BEMS components.
16. Responsible for all contractors working on Mechanical Plant BEMS controlled.
17. Carry out in house training for existing staff on basic BEMS control.
18. Make sure DHW systems are at the required temperature and ensure there are no risks of legionella or disruption to catering areas and showers.

Reactive HVAC Maintenance Duties:

1. Repair Heating and ventilation failures to provide pleasant working environment for the students and staff. Examples include reporting issues with radiators and pumps, boiler faults, belts and pulleys.
2. Carry out repairs and fault diagnostics on fan coil units, air handling units, and air conditioning plant to ensure that customers and students receive the best working conditions in terms of air quality as legislation dictates.
3. Be able to respond to high bacterial counts in the domestic water systems, including completing remedial action sheets.
4. Investigating electrical faults on mechanical plant which would include replacing contactors and other various parts in control panels, replacing actuators, inverters and pump controllers.



Preventative and Reactive Maintenance Duties:

1. Room temperatures
2. Plant room checks
3. Testing fire alarm systems
4. Testing emergency lights
5. Replacement of electronic ballasts and other lighting components
6. Altering time clocks
7. Replacing lamps.
8. Cleaning and replacing diffusers.
9. Carrying out electrical testing.
10. Cleaning lift tracks
11. Carrying out safety checks on MCCP, DB boards and main switch panel's 240v to 415v.

Electrical Installation Work:

1. Installation of cable containment, which includes steel conduit, tray, metal & plastic trunking
2. Wiring lighting & power circuits
3. Installation of light fittings, LCM's, sensors and dimmers.
4. Wiring BMS sensors.

Fault Diagnosis: (examples listed)

1. Investigating blown circuits and loss of electricity
2. Tracing out cables
3. Investigating fire alarm activations and faults on the system
4. Lift passenger release and manual hand winding.
5. Lighting and power faults.

Multi Skilled Tasks:

1. Assist maintenance team during emergencies e.g. floods.
2. Carry out duties for other disciplines within the Estates Division Maintenance staff work force.

Provide a swift and complete service to all work undertaken.

Demonstrate an awareness of customer services to students, staff and external visitors.

Good understanding of approved code of practice when carrying out hazardous maintenance activities and Permits to Works are applied for and in place.

Implement planned maintenance and repairs to comply with current statutory requirements and maintains appropriate records. To ensure all work is carried out in accordance with the Health & Safety at Work Act and all statutory regulations in force at the time

To assist in providing an efficient and cost-effective service to the School in all Maintenance matters.

Ensure all work is carried out in accordance with the Health & Safety at work act and all statutory regulations in force at the time. Ensure to the best of their ability that the safety and welfare of themselves and others is paramount during the execution of his/her work.



Understanding of electrical regulation and should be trained on the current / relevant safety procedures and requirements.

Provide risk assessments and method statements when carrying out work of a hazardous nature to ensure that H&S risks and hazards are reduced and where possible eliminated.

Decision Making:

Respond to complaints and enquiries, from the supervisors or Help Desk Team to resolve the problem efficiently as possible.

Make decisions on his/her own based on relevant information and facts including technical knowledge.

Dealing with emergencies as and when they arise, decide appropriate course of action and priority. Investigate, analyse and decide on appropriate course of action and priority based on the information provided and within the allowed limits of authority.

Planning and Organising Resources:

Assess workload and plan on basis of urgency and priority levels to ensure that H&S jobs or jobs of any other urgent nature are attend to first and that the workload is managed satisfactory. Any workload of a lower priority should be attended to timely and any delays must be addressed with the supervisor.

Organise work in an efficient manner to ensure that jobs of the same nature of in the same area are attended to at the same time in order to avoid any non-productive waste of time or materials.

Organise work in order to ensure that the correct materials in terms of quality and quantity are ordered and used and minimise waste.

Analyse information to determine efficiency of service and provide recommendations to the supervisors.

Working to service delivery deadlines, requesting material from stores and informing relevant persons of any issues, making alternative arrangements or compromises if necessary.

The technician shall always be responsible to the maintenance supervisors in the first instance.

Be able to carry out his/her duties in a satisfactory manner with minimum supervision

All necessary protective measures must be put in place to protect the furniture, fabric and contents in the working environment.

When planning work, he/she must ensure to the best of their ability that the safety and welfare of themselves and others is observed during the execution of his/her work.

Out of hours working will be necessary as and when required.

Carry out a shift work at a frequency of 1 in 7-week intervals. Primarily this is to carry out Planned Preventative Maintenance and Emergency Work.

Initiative and Problem Solving:

Able to recognise when services request should be directed to another member of the Division, for example, when a customer requires information of a more technical nature this would be directed to a



Maintenance Supervisor.

Solving unforeseen problems as they arise, for example, addressing heating and cooling install issues or electrical problems to ensure we provide an uninterrupted service to staff and students.

Obtain up to date technical information using all different resources from internet, operations manuals and data sheets, which can be utilised to carry out a repair. Accurately analyse the information over the dedicated maintenance sections short wave radio system in order to ensure that correct action is taken.

Investigate and rectify complex electrical and mechanical faults in any of the current and new LSE buildings especially in sophisticated BMS controlled Dali lighting systems, central emergency lighting, CHP, propane chillers etc.

Jobs must be completed to ensure that sustainable and environmentally friendly solutions and alternatives are utilised, for instance replace light fittings with energy efficient ones, modification of BMS software. Recommend improvements to existing practices.

Training and Development:

To keep up to date with current relevant regulations and changes in legislation in order to ensure that the work is completed to most current British Standards.

Keep up with latest BMS systems and software.

Attend required professional training to keep up with ever changing practices and technology innovations, re-new certification and upgrade qualifications in order to keep them valid, e.g. Latest Edition Electrical Regulations, further City & Guilds training, regular H&S training etc.

Attend any other relevant training, including environmental impact and sustainability so as to ensure that we can service any new technology as well as be able to advise on best alternatives when replacement of technology is required to ensure that LSE at least sustain and aim to reduce its carbon footprint.



Work Environment:

Ensure that the plant rooms, workshop floors and other work places are safe and clear of obstructing materials and equipment. Ensure that equipment is stored safely and that any health and safety issues are reported to relevant people in order to be rectified as a matter of urgency.

To report all occasions where the presence of Asbestos is suspected. Be asbestos aware and act as instructed to ensure the safety of others and reduce / eliminate exposure.

Follow all relevant safety procedures when working in locations both indoors and outdoors. Thus ensuring that students and staff are not endangered during any works or transfer of equipment and materials.

Liaising and Networking:

Liaising and network with various departments within the school, for example, liaising with Staff to carryout planned and reactive maintenance to ensure that the work is carried out during the most convenient time and it is causing the least disruption.

Liaise with other members of the team with regard to efficiently solving problems raised from customers, for example, in relation to pending Maintenance jobs or complaints of unacceptable work done.

Liaising with supervisors and the Help Desk to ensure up-to-date progress reports issued services requests or complaints and ensuring that information is passed on to customers.

Sensory and physical demands:

Repetitive Manual handling of both light and heavy goods from collection from the stores to installing them on site.

Carrying access equipment including ladders, scaffolds, aqua vac hoovers and ensuring their safe use.

Erecting mobile scaffolds according to H&S standards and working from heights safely.

Working with power tools and precision handling.

Manual winding of passenger lifts to release stuck passengers as and when required.

Pastoral care and welfare:

Ensure that Personal Protective Equipment is used at all times and inspect that it is complying with current standards and it is suitable for the job it is being used for.

Inspect, monitor and correct the use of any tools and equipment thus contributing to the safety of colleagues and clients.

Flexibility

To deliver services effectively, a degree of flexibility may be required in the duties performed in order to meet the demands of service. Job roles may also naturally develop over time and ongoing substantial changes to a role will be discussed between line managers and their staff, with job descriptions updated as and when appropriate.

**Equity, Diversity and Inclusion (EDI)**

LSE is committed to building a diverse, equitable and truly inclusive university. All posts (and post holders) will seek to ensure diversity and inclusion, while opposing all forms of unlawful and unfair discrimination on the grounds of age, disability, gender identity, marriage and civil partnership, pregnancy and maternity, race, nationality, ethnic or national origin, religion or belief, sex and sexual orientation, or social and economic background.

Ethics Code

Posts (and post holders) are assumed to have a responsibility to act in accordance with the School's Ethics Code and to promote the principles and values that the Code enshrines. The Ethics Code clearly states that the whole LSE community, including all staff, students, and governors of LSE, are expected to act in accordance with the principles which are set out in the Code. As such you are required to read and familiarise yourself with it. The School's Effective Behaviours Framework is designed to support this Code. It sets out examples for the six behaviours that all staff are expected to demonstrate, these can be found on the following link: [click here](#)

Environmental Sustainability

The post holder is required to minimise environmental impact in the performance of the role, and actively contribute to the delivery of the LSE Environmental Policy.