



UNIVERSITY OF  
LINCOLN

## UNIVERSITY OF LINCOLN JOB DESCRIPTION

<b>JOB TITLE</b>	BMS Engineer				
<b>DEPARTMENT</b>	Estates				
<b>LOCATION</b>	Brayford Campus				
<b>JOB NUMBER</b>	EF5172	<b>GRADE</b>	7	<b>DATE</b>	December 2018
<b>REPORTS TO</b>	Environmental Manager				

### CONTEXT

The University's built environment and supporting services make an essential contribution to the success of the institution, in particular:

- Making a first and lasting impression on students, staff and visitors
- Attracting, converting and supporting the best students and staff
- Significantly influencing student and staff satisfaction and productivity
- Accounting for the largest share of University expenditure after staffing
- Making the largest direct contribution to the University's environmental impact

The Building Management System (BMS) is a key part of delivering a good environment to students, staff and visitors. The BMS is crucial in having a well-managed estate and plays a vital role in controlling energy use and therefore carbon emissions, particularly for buildings that operate out of hours. It can also be used to identify maintenance issues before they evolve into major problems.

In addition, our energy management platform is a valuable data analysis tool that can unlock energy savings in our buildings and processes.

### JOB PURPOSE

Working within the Estates Department, the post holder will manage the day to day operation of the Building Management System (BMS), which aids activities such as Building Maintenance, Energy Management and Client Control. The role will require using expert knowledge to identify and implement changes to ensure that buildings are functioning at optimum performance and efficiency. Using stakeholder management skills and implementing behaviour change, the role aids the reduction of energy and the improvement of environmental conditions within buildings across the campus. In addition, they will use our energy management system, eSight to analyse data consumption across our estate and will be able to convey complex technical information clearly to building users and Estates colleagues.

The BMS Engineer will play a crucial role in achieving the objectives of the Environmental Team and the wider Estates Department. The University has challenging carbon reduction targets in place to reduce greenhouse gas emissions by 43% by 2021, from a 2005 baseline. The post holder will be central to implementing an estate-wide building management strategy and identifying opportunities to improve BMS service provision. They will also use energy management data systems to identify energy saving opportunities and make the business case for investment in energy efficiency projects.

The post-holder will be expected to develop and manage a BMS asset register and to keep logs

of building performance. The post-holder will be the BMS specialist for the University and provide expert knowledge to support maintenance and Environment team colleagues; contributing and inputting into decisions which are long lasting with significant impact in terms of Estates operational management.

## KEY RESPONSIBILITIES

### Management of the BMS

The post-holder will lead on the management of the BMS within the Estates Department and will become the technical “go to” person for resolving outstanding BMS issues. The post holder will ensure the BMS operates and controls plant and equipment in line with the University’s environmental and energy policies and relevant mechanical and electrical strategy documents. This will involve implementing a systematic approach to the review of systems within buildings and effectively influencing and managing change in relation to how buildings are used.

The role will involve regular checks of set points, time schedules, alarm reports, etc – checking for deviations from the normal conditions. A key element of the job will be working with and identifying issues for the BMS maintenance contractors, as well as providing assurance for BMS reliability and performance to Estates SLT. This will require the ability to translate complex technical updates in a clear manner.

The post-holder will possess a technical knowledge of building services including but not restricted to boiler systems, air handling units, chillers, air conditioning systems, forced and passive ventilation, to be able to collaboratively develop operational strategies that improve sustainability and client comfort.

The post-holder should be focussed on identifying savings in energy consumption and maintenance costs and confidently build effective business cases for changes that will improve energy efficiency.

### Energy Saving Opportunities

The BMS is a key tool in reducing energy consumption at the University. The BMS Engineer will work alongside the Energy Manager to identify opportunities to save energy and deliver projects that will achieve these aims.

Building performance and daily energy use will be controlled and monitored by the post-holder through the BMS system. Key variables, which may impact on the energy use of a building (such as time schedules and set points) will be monitored and optimised. The Energy Management Platform will also be used to monitor energy consumption trends and used alongside the BMS to monitor the impact of any adjustments made. Expert advice will be given to Maintenance colleagues and Project Managers, to advise on potential energy saving measures.

The University has a funding stream from Salix Finance, which can be used to fund energy saving projects, including BMS works and further control measures. The post-holder, alongside the Energy Manager, will identify opportunities & projects to save energy and develop the BMS and energy management system.

### BMS System and Maintenance

The post-holder will be responsible for the implementation and management of the BMS system and will use systems to identify problems and trends, to reduce the potential reasons for breakdowns and system failures. The post-holder will develop a programme of regular checks and monitor the results. They will offer valuable expertise and findings to the Maintenance Team on how the various mechanical and electrical systems are working, including condition and failure. This will involve the use of strong problem solving skills and the use of initiative to identify problems and propose solutions.

The post-holder will work with the M&E Service Provider to monitor performance and identify areas of improvement with the BMS software and hardware. The role will involve management of contractors associated with the maintenance and installation of the BMS and associated

systems.

The role will provide advice and support to both Estates staff and contractors by effectively delivering technical information in an understandable format. They will also develop and deliver training on BMS management to other members of the Estates team.

#### **Systems Asset Register**

There is a need for a thorough review of the various BMS solutions that are currently installed at the University. The post-holder will be responsible for developing and implementing an audit system for the BMS to identify sensor and controller locations. This will form an asset register for the BMS, which will be expanded as the BMS develops. The asset register will identify systems that are not currently controlled by the BMS and potentially could be added to the system in the future. The asset register will be held on the University's CAFM system – currently Planon, and communicated to key stakeholders.

#### **Working with the Projects Team**

The post-holder will contribute to the design and development of new installations and refurbishments, leading on BMS-related specifications for projects and making recommendations to the Estates Projects team.

This work will involve developing a standard specification for BMS installations – in new builds and refurbishments and will require influencing change in relation to project specifications. The post-holder will therefore be an active and knowledgeable participant in project design teams in order to ensure successful outcomes relating to the BMS and the energy efficiency of new builds.

#### **BMS and Energy Management Strategy**

The role will involve working with colleagues from across the University to plan the longer term development of the BMS and energy management strategy, including the development of the ISO50001 Energy Management Standard. The role holder will create and lead a BMS Strategy Group with representation from relevant departments to develop a long term vision for the BMS at the University of Lincoln. This will include updating the BMS and utilising it in new areas.

The post-holder will lead on increasing the awareness of the BMS across the University and on identifying opportunities for data sharing and research with a range of stakeholders; including academic staff, professional services and external consultancies. This will involve building and maintaining internal and external networks and effectively manage resources required to deliver such a strategy.

**In addition to the above, undertake such duties as may reasonably be requested and that are commensurate with the nature and grade of the post.**

## ADDITIONAL INFORMATION

### Scope and dimensions of the role

The postholder will: Maintain confidentiality in respect of all areas of the job responsibilities and to be aware of current University policy on the Data Protection Act 1998.

- Comply with the health and safety and equality and diversity policies of the University in the undertaking of the job responsibilities, and to observe other University requirements relevant to the duties of the post.
- Undertake any staff development deemed necessary for the effective performance of duties assigned to the post.
- Undertake any other duties as directed by the relevant line manager, commensurate with the level of the post.

### Key working relationships/networks

Internal	External
<ul style="list-style-type: none"><li>• Environmental Manager</li><li>• Energy Manager</li><li>• Head of Maintenance</li><li>• Projects Team</li><li>• ICT Department</li><li>• Estates Support Desk</li></ul>	<ul style="list-style-type: none"><li>• Maintenance Contractors</li><li>• Facilities Managers</li><li>• Equipment suppliers</li><li>• Commercial Partners</li></ul>

# UNIVERSITY OF LINCOLN PERSON SPECIFICATION



<b>JOB TITLE</b>	BMS Engineer	<b>JOB NUMBER</b>	EF5172
------------------	--------------	-------------------	--------

Selection Criteria	Essential (E) or Desirable (D)	Where Evidenced Application (A) Interview (I) Presentation (P) References (R)
<b>Qualifications:</b>		
HNC minimum or equivalent in Electrical/Building Services	D	A
Degree or equivalent experience	E	A
Relevant trade qualification in Building Management Systems	D	A
<b>Experience:</b>		
Experience of using Building Management Systems to control a site or building	E	A/I
Experience of using a BMS to identify energy saving opportunities	E	A/I
Identifying maintenance issues using the BMS	D	A/I
Using an energy management data platform, such as eSight	D	A/I
<b>Skills and Knowledge:</b>		
Knowledge of building services and HVAC systems	E	A/I
Highly skilled in data analysis with ability to analyse trends on BMS and energy data systems	E	A/I
Knowledge of Schneider and Delta BMS systems	D	A/I
Ability to communicate effectively at all levels in a clear and concise manner	E	A/I
Effective problem solving skills	E	A/I
Working knowledge of current Health & Safety legislation	D	A/I
<b>Competencies and Personal Attributes:</b>		
Customer orientated approach to work	E	A/I
The ability to work independently within a team	E	A/I
Enthusiastic and flexible approach to work	E	A/I
Effective team member	E	A/I
<b>Business Requirements:</b>		
Flexibility to occasionally work outside normal working hours	D	I
Ability to travel between sites	E	I

**Essential Requirements** are those, without which, a candidate would not be able to do the job. **Desirable Requirements** are those which would be useful for the post holder to possess and will be considered when more than one applicant meets the essential requirements.

<b>Author</b>	Rebecca Forster	<b>HRBP</b>	
---------------	-----------------	-------------	--