March 15, 2018



The University of British Columbia Standard Job Description: BMS Engineer

## **JOB SUMMARY**

Building Management System (BMS) Engineers are responsible for utilizing a centrally located, computerbased, remote control monitoring and optimization system to monitor the operation of mechanical equipment, identify and investigate malfunctions detected by the BMS, analyze, assess and recommend solutions, and take corrective action where appropriate. In addition, BMS Engineers stop, start, and adjust remote equipment until a malfunction is rectified and initiate trouble calls to resolve problems.

## **ORGANIZATIONAL STATUS**

Reports to Head Operating Engineer - Automation.

## WORK PERFORMED

Monitors the operation of building mechanical equipment and responds to malfunctions and acknowledges alarms using the BMS, a computer-based, remote control monitoring and optimization system.

Investigates, analyzes and assesses the cause of malfunctions detected by the BMS by identifying whether the problem is software, hardware or an electrical/mechanical problem, reviewing historical information, generating reports to identify trends, conducting onsite investigations, using appropriate electronic equipment, and working with related trades.

Provides support to other staff members servicing and or troubleshooting BMS controlled equipment in the field. This may include providing verbal directions and stopping and starting remote equipment. In the event that the BMS Engineer is conducting an onsite investigation, the BMS Engineer may be required to provide verbal directions in order to guide another staff member through the BMS to rectify malfunctions.

Takes corrective action to rectify equipment malfunctions detected by the BMS. This may, when operationally required, include responding to space temperature control issues and system and equipment alarms. In addition, the BMS Engineer may make temporary alterations in the field to BMS parameters to compensate for the malfunctions until rectified. Documents all changes and their reasons and notifies the Head Operating Engineer - Automation.

Initiates trouble calls to resolve problems and describes what action has been taken following the initial assessment of repairs required and requests the appropriate services to resolve the remaining problems. This includes informing the Head Operating Engineer – Automation and if required the Facility Manager and keeping him/her apprised of the progress of resolving the situation.

Makes temporary adjustments to automatic start and stop time of day edits.

Provides detailed reports to communicate work done and highlights urgent follow up action items required.

Maintains records of equipment and machinery malfunctions, repairs and adjustments in the BMS logbook and in the BMS data base. This may also include providing incident reports for non-routine events and providing resolutions to problems.

Carries out any other related duties as required in keeping with the qualifications and requirements of positions in this classification.

# **CONSEQUENCE OF ERROR**

Close attention is required to identify and correct mechanical problems in systems and equipment that could result in serious safety and financial concerns and/or loss of service to the University.

#### SUPERVISION RECIVED

Works under the direction of the Head Operating Engineer-Automation.

## **SUPERVISION GIVEN**

None.

# QUALIFICATIONS

- BC 4th Class Power Engineer Certificate of Competency.
- 3-5 years of building mechanical systems experience.
- Valid BC Class 5 driver's license.
- Knowledge of windows based software.
- Demonstrated knowledge of UBC building HVAC systems an asset.
- Ability to communicate effectively with building mechanical systems staff and any other trades as required.
- Ability to support the work of building mechanical systems staff and any other trades as required.
- Ability to maintain records and write reports.
- Ability to troubleshoot problems in HVAC using Building Management System software.
- Proficiency in the operation of Building Management Systems.
- Strong verbal and written communication skills.
- Ability to analyze problems and recommend solutions.
- Good understanding of mechanical maintenance equipment and their functions