BOARD OF REGENTS  
STATE OF IOWA  
REGENT MERIT SYSTEM

**Class Title:** Biomedical Equipment Technician, Senior  
**Class Code:** 3404  
**Pay Grade:** 415

**GENERAL CLASS DESCRIPTION:**

Under minimal supervision performs a variety of routine tasks associated with the installation, maintenance, calibration and repair of biomedical and laboratory equipment and systems. The equipment and systems are varied and frequently non-related as well as being located in multiple and diverse departments of the institution. Types of equipment include life support, resuscitation, diagnostic and therapeutic equipment/systems used in a patient care or medical/biological environment. Provides functional supervision as required.

**CHARACTERISTIC DUTIES AND RESPONSIBILITIES:**

1. Tests the performance and operating characteristics of medical electronic/electro-mechanical equipment/systems to ensure compliance with established performance and safety standards.

2. Documents the results of equipment safety/performance evaluations.

3. Diagnoses problems and performs corrective repair work and/or calibration as required on complex medical electronic/electro-mechanical equipment/systems. Work is routinely performed both in a shop environment and inside patient care areas and rooms where patients may be present.

4. Documents completed preventive and corrective maintenance actions to meet regulatory requirements/standards.

5. Uses schematic diagrams to troubleshoot electronic equipment as required.

6. Orders parts and supplies as required for the maintenance of complex medical electronic/electro-mechanical equipment/systems and advises on the selection of repair parts for inventory.

7. Attends workshops, conferences, and specialized training courses to keep up to date with changing equipment or service needs/requirements to remain compliant with manufacturer recommendations and regulatory requirements/guidelines.

8. Provides guidance on regulatory requirements to other staff as needed.

The tasks listed under the heading of Characteristic Duties and Responsibilities are examples of the variety and general nature of duties performed by employees in positions allocated in the class. The list is descriptive only and should be used for no other purpose. It is not intended that any position include every duty listed nor is it intended that related duties cannot be required.
9. Completes recall remediation modifications as directed by manufacturer’s instructions.

10. Routinely advises equipment operators on the proper use of equipment.

11. Routinely assists in the training of staff and co-workers as required.

12. Responds to afterhours emergency calls regarding equipment failures to triage or repair as needed.

KNOWLEDGE, SKILLS, AND ABILITIES:

1. Comprehensive understanding and skills related to general electro-mechanical systems and devices.

2. Comprehensive understanding of common clinical terminology as well as that of life sciences such as anatomy and physiology.

3. Comprehensive understanding of both local and national public safety and regulatory requirements that pertain to healthcare technology management.

4. Basic knowledge of chemistry, physics and human physiology.

5. Ability to apply troubleshooting logic in diagnosing and repairing circuit board level malfunctions of complex electronic equipment/systems used in a medical and/or research environment.

6. Ability to use general and specialized test equipment, hand and shop tools.

7. Ability to read and interpret electronic schematics, technical documents.

8. Ability to communicate clearly with the professional medical staff both orally and in writing.

9. Ability to work in a medical/research environment under adverse conditions.

10. Ability to solder sensitive and small components.

11. Ability to use independent judgment to ensure quality patient care.

12. Skill in repairing equipment without “reworks”.

13. Ability to assemble, fabricate and test electronic circuits and/or modifications to electronic equipment.

14. Ability to lift in excess of fifty pounds.

15. Ability to work in confined spaces for prolonged periods of time.
16. Ability to provide effective functional management of other employees or coworkers.

MINIMUM ELIGIBILITY REQUIREMENTS:

1. A.S. degree in Biomedical or Electronics Technology; and

2. Two years BMET post graduate experience troubleshooting, repairing, and testing multiple categories of patient care devices.

REVISION EFFECTIVE: January 1, 2022