



North Metropolitan Health Service  
**Job Description Form**

**HSS REGISTERED**

**Senior Biomedical Engineer**

**Health Salaried Officers Agreement :P-2**

**Position Number: 000697**

**Department of Medical Technology and Physics / Medical Division  
Sir Charles Gairdner Hospital / North Metropolitan Health Service**

**Reporting Relationships**

Chief Biomedical Engineer Medical Technology  
and Physics SCGH  
HSO P-4  
000176



Senior Clinical Engineer Medical Technology &  
Physics SCGH  
HSO P-3  
000189



**This Position**



Also reporting to this supervisor:

| <b>Title</b>               | <b>Classification</b> | <b>FTE</b> |
|----------------------------|-----------------------|------------|
| Senior Biomedical Engineer | P-2                   | 2          |

Directly reporting to this position:

| <b>Title</b> | <b>Classification</b> | <b>FTE</b> |
|--------------|-----------------------|------------|
| • Nil        |                       |            |

Other positions under control

| <b>Title</b> | <b>Classification</b> | <b>FTE</b> |
|--------------|-----------------------|------------|
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**Prime Function / Key Responsibilities:**

Maintain electronic medical and scientific equipment, used in critical care areas and general clinical areas, in an efficient and autonomous manner. Design, maintain and administer wired and wireless medical networks and associated systems. Design, construct or modify specialised equipment for medical, clinical or research use.

## **Brief Summary of Duties**

1. Manage and execute maintenance, repair, quality assurance and performance testing on a wide range of specialised medical and scientific electronic equipment. Design and construct electronics hardware, as required. This may include involvement on a rotating basis in critical care areas.
2. Provide maintenance, repair, quality assurance and performance testing on specialised medical and scientific electronic equipment, to external customers.
3. Maintain and administer wired and wireless medical networks and associated systems.
4. Design, construct or modify specialised equipment for medical, clinical or research use.
5. Propose engineering solutions to solve technical problems and advise feasibility of proposed solutions. Consult, advise and provide technical support to customer departments for medical network design, usage, installation and modification. Liaise with manufacturers and suppliers.
6. Liaise with all relevant personnel within and outside the NMHS.
7. Supervise technical trainees and students.
8. Be available continuously on pager or mobile during working hours, and to participate in the Department's after-hours emergency maintenance service (including provision of service to critical care departments), as required on a roster basis.
9. Verify and sign off on Q.A. and other International standards organisation (ISO) documents created within the MT electronics division.
10. Ensure maintenance of the system for accessible, timely and comprehensive computerised data logging of quality assurance, maintenance and upgrade work on items of electronic medical and scientific equipment, accurately reflecting the expenditure of labour, parts and consumables.
11. Use job prioritisation and time management skills to ensure delivery of services within the set time frame at an acceptable quality.
12. Systematically ensure an efficient, effective, timely, and ongoing process of continuous quality improvement, consultation and feedback to customers, in order to guarantee their needs and concerns are met.
13. Provide professional advice and training to clinical and other hospital staff in the operational and safety aspects of electronic medical and scientific equipment.
14. Manage equipment documentation including operation and service manuals.

15. Manage personal work flow to ensure timely compliance with the requirements of the Department's ISO9001 Quality Management System; viz: **(i)** maintenance and updating of current, accurate, and complete ISO-compliant quality documentation reflecting the continuous improvement of work practices; **(ii)** facilitation of the conduct of internal and external Quality Audits, plus the timely implementation of their recommendations.
16. Maintain appropriate contemporary knowledge of relevant medical and scientific electronic equipment, including specialised wired or wirelessly networked electromedical equipment. Maintain proficiency with computers, including familiarity with databases, programming languages and best practices.
17. Proactively assist in the maintenance of the Electronics Division's dedicated and general stores.
18. Other duties as reasonably directed by the Team Leader, including acceptance testing of new equipment logged into the department management system.
19. **NMHS Governance, Safety and Quality Requirements**
  - 19.1 Participates in the maintenance of a safe work environment.
  - 19.2 Participates in an annual performance development review.
  - 19.3 Supports the delivery of safe patient care and the consumers' experience including participation in continuous quality improvement activities in accordance with the requirements of the National Safety and Quality Health Service Standards and other recognised health standards.
  - 19.4 Completes mandatory training (including safety and quality training) as relevant to the role.
  - 19.5 Performs duties in accordance with Government, WA Health, North Metropolitan Health Service and Departmental / Program specific policies and procedures.
  - 19.6 Abides by the WA Health Code of Conduct, Occupational Safety and Health legislation, the Disability Services Act and the Equal Opportunity Act.

### Work Related Requirements

#### Essential Selection Criteria

1. Tertiary qualifications in Engineering or Biomedical Engineering and eligible for membership of the College of Biomedical Engineers or Engineers Australia at the grade of Graduate or Member of associate membership of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM).
2. Knowledge and experience of the theory, design and practical application of engineering principles.
3. Extensive experience in the repair and maintenance of a wide range of contemporary electromedical equipment.
4. Knowledge and experience of computing systems.
5. Effective written and verbal communication skills.
6. Knowledge and understanding of the general principles of Continuous Quality Improvement and their practical application in systematically evaluating and meeting customers' needs.
7. Current knowledge of legislative obligations for Equal Opportunity, Disability Services and Occupational Safety and Health, and how these impact on employment and service delivery.

#### Desirable Selection Criteria

1. Knowledge of medical instrumentation, its design, operation and application in the clinical and laboratory environment.
2. Knowledge and experience in software programming, database design, database administration and web authoring.
3. Knowledge of human physiology relevant to medical and clinical equipment operation and use.
4. Direct, practical participation in an International Quality Management System such as ISO9000.
5. Knowledge and experience in the application of Australian Standards relevant to the design, testing, maintenance and use of medical and clinical equipment.

#### Appointment Prerequisites

Appointment is subject to:

- Evidence of eligibility for or current membership of the College of Biomedical Engineers or Engineers Australia at the grade of Graduate or Member or associate membership of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM) must be provided prior to commencement.
- Completion of 100 Point Identification Check.
- Successful Criminal Record Screening Clearance.
- Successful Pre-Employment Integrity Check.
- Successful Pre-Employment Health Assessment.

### Certification

The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

#### Manager/Supervisor

Name:  
Signature/HE:  
Date:

#### Dept./Division Head

Name:  
Signature/HE:  
Date:

#### Position Occupant

Name:  
Signature/HE:  
Date: