



North Metropolitan Health Service
Job Description Form

HSS REGISTERED

Senior Biomedical Engineer
Health Salaried Officers Agreement: Level P2
Position Number: 000173
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:

Title	Classification	FTE
Senior Biomedical Engineer	P-2	3

Directly reporting to this position:			Other positions under control		
Title	Classification	FTE	Title	Classification	FTE
<ul style="list-style-type: none"> • Nil 					

Prime Function / Key Responsibilities:

Software engineering and development of medical equipment and business management systems for the SCGH and other supported institutions in NMHS. Design, maintain and administer hospitals-wide wired and wireless medical networks and associated systems. Design, construct or modify specialised equipment for medical, clinical or research use. Maintain electronic medical and scientific equipment, used in critical and general care areas, in an efficient and autonomous manner.

Brief Summary of Duties

1. Develop, manage, maintain and document web-based multi-user technical and business computer information systems and databases for use by the department, the hospital and other government institutions.
2. Design, maintain and administer hospitals-wide wired and wireless medical networks and associated systems.
3. Design, construct or modify specialised equipment for medical, clinical or research use.
4. 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. Maintain liaison with manufacturers and suppliers.
5. Optimise the Departmental Quality Management through the development of tools enabling analysis of equipment and work processes. Implement customer satisfaction monitoring, promoting awareness of customer needs and requirements.
6. 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.
7. Supervise technical trainees, students and biomedical technicians as required.
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. Ensure maintenance of an accessible, timely, and comprehensive computerised 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.
10. Use job prioritisation and time management skills to ensure delivery of services within the set time frame at an acceptable quality.
11. 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.
12. Provide professional advice and training to Hospital clinical and other staff in the operational and safety aspects of electronic medical and scientific equipment, as well as departmental database use.
13. Manage equipment documentation including operation and service manuals.
14. 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.
15. 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.

1. NMHS Governance, Safety and Quality Requirements

- 1.1 Participates in the maintenance of a safe work environment.
- 1.2 Participates in an annual performance development review.
- 1.3 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.
- 1.4 Completes mandatory training (including safety and quality training) as relevant to the role.
- 1.5 Performs duties in accordance with Government, WA Health, North Metropolitan Health Service and Departmental / Program specific policies and procedures.
- 1.6 Abides by the WA Health Code of Conduct, Occupational Safety and Health legislation, the Disability Services Act and the Equal Opportunity Act.

2. Undertakes other duties as directed

Work Related Requirements

Essential Selection Criteria

1. Tertiary qualifications in Science, Engineering or Biomedical Engineering and eligible for membership of the Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM) or Engineers Australia (EA).
2. Knowledge and experience of the theory, design and practical application of science and engineering principles.
3. Experience in the repair and maintenance of a wide range of contemporary electronic equipment.
4. Knowledge and experience of computing systems, including software programming, database design, database administration and web authoring.
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 of human physiology relevant to medical and clinical equipment operation and use.
3. Direct, practical participation in an International Quality Management System such as ISO9000.
4. 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: