

Position Description



Position Title	Principal Software & Systems Engineer
Position No	00004141
Delegation Level	006
Job Designation	Senior Software and Systems Engineer
Organisational Unit	Train Control Systems Engineering SEQ Assets
Work Centre	Brisbane
Position Type	Permanent
Rail Safety Worker	Yes
Medical Fitness Standard	NHS Cat 4 Other (No Medical Required)
Performance Plan Type	Tech Professional Expert
Shiftworker	No
Classification (Range)	PT5 .1 - PT5 .4
Pay Scale Type	ASPT
Reports to Position	Mgr Train Control Systems Engineering

QUEENSLAND RAIL VALUES:

- 1 Queensland Rail - We do better together
- Treat others with respect - We appreciate everyone's contributions and differences
- Empower our people - We have confidence in our people
- Act Safely - We work safe, to go home safe
- Make a positive difference - We learn from today, to improve tomorrow

Position Purpose

Manage the technical aspects and provide professional leadership and expertise in the area of operational systems engineering across software database, configuration and hardware aspects of a diverse range of mission critical computer based systems as used by Operational Systems Engineering customers, such as remote control, real time management and passenger information systems.

Position Responsibilities

1. Ensure that a high level of efficiency, effectiveness, responsibility and initiative in the application of established work practices and procedures is maintained by the staff in Operational Systems Engineering.
2. Monitor staff activities by conducting audits on and mentoring in, the development, implementation and maintenance of the software, hardware and database aspects of Operational Systems Engineering delivered computer based operational systems.
3. Supervise the formulation and implementation of software engineering standards and procedures for the design, coding, documentation, testing and maintenance of such software and systems.
4. Ensure the design, development, planning, estimating, maintenance testing and installation works associated with the hardware, software and database elements of Operational Systems Engineering developed operational systems comply with customer and Operational Systems Engineering quality procedures requirements. The hardware elements include computer systems, interfaces, telemetry and LAN equipment.
5. Identify and recommend skill improvements required of Operational Systems Engineering staff. Plan, develop and implement training courses for professional, technical and user staff in the support



- and operation of Operational Systems Engineering developed computer based operational systems (hardware, databases and software).
6. Keep abreast of developments in quality systems, software engineering software languages, standards, testing procedures and computer systems and apply these where appropriate to Operational Systems Engineering developed operational systems and contribute to the development of new methodologies. Provide strategic technical direction to existing systems and the Operational Systems Engineering development environment.
 7. Provide second line assistance and support to technical/maintenance and operational staff who use Operational Systems Engineering delivered operational systems (hardware, databases and software).
 8. Maintain a working knowledge of the functions of Operational Systems Engineering customers including other Groups and Divisions in Queensland Rail, especially in the maintenance, information technology and traffic operations areas, translate this knowledge into business opportunities and communicate this with the Line Manager.

Additional Factors

The appointee will be required to :-

- Comply with Queensland Rail's Code of Conduct;
- Observe all legal and safety obligations of the organisation;
- Travel overseas, intrastate and interstate as necessary;
- Work outside normal office hours in order to achieve committed; deadlines, commissioning works and urgent support assistance.

What is the key selection criteria

1. High level of skill in the development of real time multi-tasking systems, remote control and supervisory systems.
2. High level of skill in developing and implementing software testing, simulation and documentation standards and procedures.
3. High level of skill with computer languages, development utilities, operating systems and computer systems hardware for real time, control and/or supervisory information systems.
4. High level of skill in undertaking professional work without direct supervision and to exercise initiative in the application of professional practices in taking responsibility for the quality of software and systems development provided by junior staff.
5. Substantial knowledge of emerging new technologies applicable to operational systems to support the attainment of client business goals and the creation of competitive advantage.
6. High level of skill in communicating effectively with clients, contractors and suppliers.
7. Knowledge of and willingness to commit to and work within Queensland Rail's Values and Behaviours.

Pre-employment Checks:

Not Applicable

Pre-employment Qualifications:

What qualifications do I need to hold prior to applying for the position?:

40010406 G_Bach Eng (Electrical/Computer Science)

Position Description



Mandatory Qualifications (If not already held, I will gain these when in position)

- 40007588 Wunya Induction
- 30000908 Safely Access the Rail Corridor (QNRP)
- 40001627 Building Emergency Procedures
- 40003802 Provide CPR 12 Mths
- 40010410 Safety Comes First Always Workshop
- 40009729 Delivering a Pre-Start Briefing Network
- 40008876 Working in the Electrified Territory
- 40008658 NHS Cat 4 Other (No Medical Required)

Enterprise Qualifications (If not already held, I will gain these when in position)

- 40009601 Code of Conduct Refresher
- 40013480 Fraud Awareness Induction
- 09910159 TLIF2010A Apply fatigue management strat

Health, Safety and Environment Responsibilities

Comply with the overarching document called Health, Safety and Environment Responsibilities MD-11-6843 located in the Safety and Environment Management System.

Personal Protective Equipment needs:

Refer to relevant business instructions.

Safety Publications

Refer to relevant business instructions.

Please Note:

Queensland Rail has a random alcohol and other drug testing program.
Testing can occur anywhere, at any time, on any day.