

Job Description

1. Main purpose of Position

The Senior Electrical Engineer will be responsible for producing design studies and manufacturing design studies for NIS projects.

The engineer will work within a multi-discipline design team and be responsible for undertaking the design of equipment as delegated by the Principal Engineers or the Engineering Manager.

Work will be undertaken individually or by managing a small team of designers reporting to the Principal EC&I Engineer.

2. Specific Areas of Responsibility

- ✓ Production of engineering drawings such as block cable diagrams, schematic diagrams, general assembly, cable routing, termination drawings etc.
- ✓ Production of engineering documents such as operation and maintenance manuals, test documentation, functional design specifications, device schedules etc.
- ✓ Produce engineering calculations such as cable calculations, panel heat dissipation calculations, safety instrumented system calculations etc.
- ✓ Conduct trials and tests in the factory following test documentation.
- ✓ Set budgets and delegate tasks, provide information for progress tracking on tasks to the project manager.
- ✓ Produce design concepts & Front End-Engineering studies.
- ✓ Carry out technical risk analysis on designs for EMC compliance and CE certification.
- ✓ Produce and maintain a technical file in accordance with NIS Quality Assurance.
- ✓ Produce designs that conform to the relevant British and European standards and client requirements.
- ✓ Ensure that the design addresses operability, maintainability and safety issues.
- ✓ Produce designs that meet with project programmes and budgets.

- ✓ Produce Design Justification Reports that demonstrate the design mitigates all technical risks identified.
- ✓ Produce a level of information (drawings, specifications, works instructions etc.) that enable manufacturing to take place.
- ✓ Check drawing details.

3. Additional Tasks

- ✓ Chair design reviews, risk assessment meetings, present designs etc.
- ✓ When required be part of the test and commissioning team which could require having to work away from home for short periods.

4. Reporting Relationships

Reports to: Principal Engineers
Reportees: EC&I Engineers & EC&I Designers

5. Standards

- ✓ Compliance with company procedures and policies.
- ✓ Display a professional, acceptable attitude and image for all work associated with and undertaken on behalf of NIS Ltd.
- ✓ Adhere to NIS core values: Respect, Protect, Commit, Inspire

Person Specification

Qualifications	Essential	Desirable
Relevant engineering degree		✓
Chartered Engineer or progressing towards		✓



Experience & Knowledge	Essential	Desirable
Minimum of 5 years of experience in engineering	✓	
Low voltage control gear	✓	
Control systems	✓	
Machinery safety directives	✓	
Instrumentation	✓	
BS7671 18 th edition & EN 60204	✓	
BS EN 60204-1 safety of machinery	✓	
CE marking process	✓	
PLC Systems	✓	
Drive Systems	✓	
Nuclear engineering experience		✓
Design of electrical systems for gloveboxes		✓
HAZOP/HAZID experience		✓
Testing and commissioning		✓
Software production		✓

Skills & Abilities	Essential	Desirable
Produce diagrams compliant with BS8888 & BS5070	✓	
IT proficient	✓	
Production of technical reports and documents	✓	
AutoCAD		✓
Risk assessment techniques		✓
Engineering substantiation		✓
Resource management and planning skills		✓
SIL rating and BS EN 61508		✓
Effective presentation skills		✓
Testing and Commissioning		✓

Other	Essential	Desirable
Self-motivated	✓	
Ability to work to tight deadlines and under pressure	✓	
Full driving licence	✓	
SC clearance or ability to achieve	✓	
To work in accordance with NIS policies	✓	
Able to work away from home for short periods	✓	

