

Requisition Number:

Job Description.

HORIBA MIRA is looking for a Functional Safety Consultant to join a unique and growing team. Based at the heart of the UK automotive industry, they will form part of the growth strategy within HORIBA MIRA. This role will include, but not be limited to, delivering and developing MIRA's trusted functional safety service, including:

- Delivery of functional safety engineering services through the whole-vehicle's development lifecycle
- Research and development of new functional safety services and products
- Supporting the wider multi-disciplinary team of Cybersecurity, Electromagnetic Resilience and Functional Safety experts in developing and delivering integrated Vehicle Resilience services.

This technical role requires a highly motivated individual with experience in risk-driven engineering methods, safety analysis and creative but structured problem resolution.

We are offering the chance to work in a world-class, independent engineering consultancy, operating in multiple locations around the world, to support vehicle manufacturers and their supply chain with cutting-edge engineering and testing expertise. We offer full-system design, test and integration expertise to automotive, defence, rail and transport industries and also specialise in developing low carbon and autonomous and co-operative driving technologies.

At our headquarters in the Midlands, we have access to one of the most comprehensive vehicle proving grounds which boasts 93km of test tracks and over 35 world-class test facilities and laboratories. Our facilities, combined with the engineering expertise of our 600 strong team makes MIRA Technology Park Europe's number one location for transport sector R&D.

Title of Job:	Functional Safety Consultant		
Department:	0441 Systems & Safety		
Grade:	5P		
Date Required:	ASAP		
Salary Range:	Up to £55 ph		
Number Required:	1		
Location:	MIRA Nuneaton		
Contract Type:	Permanent:	N	Contractor: Y
Responsible To:	Team leader / Manager (systems and safety function)		
Subordinates:	Typically 2-4 depending on assigned projects		

Main Purpose of Job
<ul style="list-style-type: none"> • Take a principal role in executing functional safety activities for internal or external customers • Provide expert level consultancy in ISO 26262 and safety analyses

Key Functions

- Functional safety engineering tasks (Hazard identification, analysis and risk assessment, developing safety concepts, requirements and architecture)
- Coordinating and/or executing safety analyses (FMEA, FTA, etc.)
- Technical project management / decision making to deliver on time, to cost and quality
- Developing process to support functional safety
- Delivering value-add functional safety consultancy/guidance

Essential Qualifications	Preferred Qualifications
<ul style="list-style-type: none"> • Good first degree (minimum 2:1) in electrical/electronic engineering, systems engineering or a relevant related discipline 	<ul style="list-style-type: none"> • Higher degree (relevant M.Sc, Eng D or Ph.D) • Corporate membership of an engineering institution including Chartered Engineer qualification

Essential Experience	Preferred Experience
<p>Expert (5+ years' experience in):</p> <ul style="list-style-type: none"> • Delivering ISO 26262 to vehicle manufacturers and tier 1 suppliers covering all aspects of the safety lifecycle • Safety analyses techniques, particularly FMEA/FTA with broad exposure to different processes, methodologies and stakeholder objectives <p>Experience in all of:</p> <ul style="list-style-type: none"> • Functional safety planning & management • Identifying hazards, performing risk assessment and classification • User and systems level requirements capture, management and technical review • Preparing safety cases (including safety arguments) • System level architectural design and technical review • Technical leadership of small project teams • Knowledge and experience in steering, braking or longitudinal motion control <p>The candidate must have a strong experience in systems engineering and requirements driven developments and be capable of advising clients on best-practice.</p>	<p>Some combination of:</p> <ul style="list-style-type: none"> • Knowledge and experience in: <ul style="list-style-type: none"> ○ Energy storage systems ○ Vehicle modes - state management ○ Vehicle power distribution - redundant HV and LV architectures, DCDC converters, etc ○ Vehicle interface - body control, security, restraints, off-board diagnostics, TPMS, etc. ○ Autonomous / Driver HMI interface • Controllability of vehicles, in particular vehicle dynamics, control system performance and human-machine interactions • Embedded hardware design and technical review for safety-related systems and ADAS • Embedded software design and technical review for safety-related systems • Engineering process development and practical implementation; including CMMI, ISO 15504 (SPICE) • Awareness of cyber-security principles and their commercial application (e.g. threat analysis, security requirements/techniques and penetration testing)

What is the candidate likely to be doing now?

- Functional safety specialist or consultant for an automotive VM, Tier 1 or Tier 2 supplier

Other information

The candidate should:

- Be capable of delivering a high standard of technical writing
- Be capable of presenting technical information confidently to customers
- Be a self-starter and able to execute designated tasks accurately and within timing and budget constraints
- Have well-developed analytical skills – rigorous but pragmatic, being able to justify decisions with solid rationale
- Have good interpersonal skills – a consensus-builder not confrontational
- Be capable of technically managing a small group of engineers
- Be willing to travel and work flexibly: The job is likely to involve periods of 1 week at a time spent overseas approximately 6 to 8 times per year. The job may also involve extended placements at customer facilities requiring travel within the UK or Europe for 1 to 4 days per week for a significant period.