

Requisition Number:

## Job Description.

HORIBA MIRA is a global provider of pioneering engineering, research and test services to the automotive, defence, aerospace and rail sectors. We work in close collaboration with vehicle manufacturers and suppliers around the world, providing comprehensive support ranging from individual product tests to turnkey engineering design, development and build programmes.

With over 70 years' experience in developing some of the world's most iconic vehicles, our engineers utilise the latest test facilities and simulation tools to make vehicles and journeys safer, cleaner, more efficient and rewarding.

<b>Title of Job:</b>	Chassis Design Engineer		
<b>Department:</b>	431 Architectures and Structures		
<b>Grade:</b>	Various		
<b>Date Required:</b>	Mid – Late October 2022		
<b>Salary Range:</b>	£30-£50/ph		
<b>Number Required:</b>	5		
<b>Location:</b>	Nuneaton		
<b>Reason for Vacancy:</b>	Project Demand		
<b>Contract Type:</b>	<b>Permanent:</b>		<b>Contractor:</b> Yes
<b>Responsible To:</b>	Chief Engineer - Geometry		
<b>Subordinates:</b>	None		

Main Purpose of Job
Within Vehicle Engineering, this role has responsibility for the generation of CAD based Chassis Engineering Design solutions. It aims to develop our capability in the conception and delivery of whole vehicle and vehicle sub-system structural and packaging concepts, designs and manufacturing drawings, embracing design in the virtual domain, supporting build and attributes in the physical domain with a key focus on prototype vehicle integration for chassis systems, and powertrain. It will complement the expertise in the commodity teams and the vehicle packaging team. The role requires an experienced Design engineer with a good understanding of the creation of vehicle components in support of wider spanning projects, and their optimal integration with all other vehicle systems.

Key Responsibilities
<b>Role specific:</b> <ul style="list-style-type: none"> <li>• Creation of component and system detailed design data and packaging concept for a multi platform chassis system to deliver early concept through to prototype and potential production vehicles within a Catia V5 environment.</li> <li>• Mechanical packaging, including design for xEV.</li> <li>• Input to and implementation of the PLM processes.</li> </ul>

### General:

Working with the team to enable a successful delivery of various Chassis Design programmes:

- The candidate will be part of a flexible cross functional team
- Have experience of delivering to deadlines
- Be capable of leading work streams when required
- Focus on innovative designs to weight cost and performance targets
- Working hand in hand with CAE and Simulation teams to reach an optimal solution

### Key Functions

- Chassis system design
- Powertrain integration
- Bespoke rig and jig design
- Mechatronics design
- Sensor integration for Unmanned and Autonomous vehicles
- Support local housekeeping standards.
- Follow all Health, Safety & Environmental management standards (e.g. legislative, standards, audit compliance and culture)
- Be aware of and support Quality management (e.g. standards, audit compliance, KPI metrics, continuous improvement)
- Support MIRA's engineering activities working with counterparts in other areas of the business to ensure best practise
- Work to develop a professional and supportive culture that recognises success and help resolve issues as a team. A culture that is also fun and fair and work for the benefit of the whole of MIRA and the individual.
- Close engagement with key supporting/partner functions in CAE to match processes and efficient delivery of design solutions for complex problems.

Essential Qualifications	Preferred Qualifications
<ul style="list-style-type: none"> <li>• Degree in engineering related subject</li> </ul>	<ul style="list-style-type: none"> <li>• Degree in automotive engineering and product design</li> <li>• Formal Catia V5 training</li> <li>• Masters Degree – Automotive related subject</li> </ul>

Essential Experience	Preferred Experience
<ul style="list-style-type: none"> <li>• Catia V5</li> <li>• PDM systems</li> <li>• PLM systems</li> <li>• Chassis Design</li> </ul>	<ul style="list-style-type: none"> <li>• Catia V6 – 3Dx</li> <li>• Enovia</li> <li>• Kinematics</li> <li>• CAE – Through Catia or Altair</li> </ul>

### Skills

Working knowledge of the design process ideally including:

- Conceptual Design
- Generating 3D models & 2D detailed drawings in Catia V5
- Component and system design

- General vehicle packaging
- DFMEAs
- Writing engineering reports
- Engineering calculations
- Supplier Liaison
- Customer liaison
- Producing 8-Ds
- Good communicator whilst being comfortable working with several different teams
- Confident in making data driven decisions
- Happy to work in a flexible way to support the delivery of the overall objectives
- General design processes and protocols
- Working knowledge of Defence, OEM and / or automotive development requirements
- Good standard of education & learning relevant to the role ideally at degree level
- Bill of Materials management
- CAE or MBS is a bonus

#### **What is the candidate likely to be doing now?**

- Working within an OEM or similar with a focus on Chassis Engineering
- Working within a small Design Team with a focus on Structural Mechanisms

#### **Other information**

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