



## Technician, Research – Job Description

(Job Code and Level: ERES002)

### **Definition:**

Research is defined as: Blue sky thinking and research into new technology (10 years before development phase). Systems and methodologies that will improve the vehicle either for the customer and meet future legislation, recognising as well future needs and developments in other areas. For example, integration of new technology which has been developed outside of the automotive industry such as I-Phone technology or looking into future hybridisation strategies, lowering emissions, etc.

### **Overall Purpose of the Role:**

In conjunction with Research Engineers, build, assemble and develop bespoke test rigs and prototypes supporting product process, technology and research projects. Fully participate with new development to explore future cost effective producibility. Undertake testing programmes on future and updating current materials and components, assessing production conformity and product functional performance. Provide assistance/support to research engineers throughout the process of designing, testing and developing components/products/processes etc. Work on many phases or sub-tasks of projects or entire projects of moderate complexity, with results impacting on project completion. Work under general supervision, reviewed at project milestones and/or on completion by Senior Management.

### **Key Responsibilities:**

#### **General and Task Management**

- Carryout product trials in laboratories, on test rigs or with simulated vehicle mock-ups
- Set up and supervise testing on assigned test rigs as per the testing schedule
- Build, assemble and develop bespoke machines/prototypes to support product process technology and development projects
- Assess functional performance of new and novel automotive products – vital to research and development process
- Assess production conformity

- Ensure development builds are on-going and meet customer expectations
- Fault finding to rectify mechanical, electrical and hydraulic systems with the rigs and associated equipment as required
- Set up and supervise testing on assigned test rigs as per the testing schedule
- Prepare and load test samples
- Carry out rig maintenance activities
- Support creation of key documentation within an Advanced Product Quality Planning (APQP) framework to ensure all issues and lessons are captured during the product development cycle inclusive of build specifications, control plans, part identification, test specifications etc.
- Support design and manufacturing activities such as Design Failure Mode and Effect Analysis (DFMEA) and Process Failure Mode and Effect Analysis (PFMEA)
- Ensure smooth transfer of product through all test stages and introduction processes, from low volume to large scale production
- Undertake special projects as required
- Contribute to continuous improvement activities
- Quality control of work by appropriate reviews
- Support and participate in process improvement activities
- Write simple reports and provide information to management
- Achieve goals within budget
- Plan projects or subtasks so they may be tracked and presented
- Be aware and work to achieve the Key Performance Indicators (KPIs)
- Support the engineers
- Attend various meetings and action/communicate instructions
- Undertake continuous training and development
- Participate in root cause analysis and resolving problems
- Agree the approach to be taken to assigned tasks

### **Relationship Management**

- Liaise and communicate with other departments
- Support the engineers

### **Self Management**

- Comply with the Health, Safety and Environmental Policies
- Balanced and confident
- Applies experience and logic
- Achievement Focussed
- Makes productive contributions
- Team player with a positive effect on the mood
- Consistently manages the task
- Is self aware
- Is resilient, optimistic, open to change and has a collaborative approach when dealing with others
- Shows moral courage, openness and honesty in all dealings

### **Skills and Attributes:**

- Computer literate – Good knowledge of Excel and Word
- Ability to analyse and interpret complex technical data
- Ability to demonstrate a practical mechanical aptitude
- Able to work as a strong team player as well as able to work independently
- Proactive approach to achieving excellent quality standards
- Excellent attention to detail
- Ability to build close working relationships internally and with customers
- Excellent interpersonal skills
- Good hands-on skills with assembly or fitting type experience
- Good organisational skills
- Has a keen interest in future technologies and advanced engineering and looks for ways to incorporate these to support product enhancement
- Good understanding of customer expectations and deliverables with an awareness of the impact of failure/cost of poor quality

### **Qualifications and Experience Levels:**

- GCSE Level A-C, IVQ Technician certificate, BTec first certificate or equivalent NVQ level 2 qualification
- Recognised apprenticeship in mechanical, electromechanical, electrical or automotive
- Commitment to work towards professional accreditation with an industry related body
- Experience of working in a Test environment
- Experience of product development manufacture and assembly techniques
- Experience of building equipment
- Knowledge of hydraulics, pneumatics or mechanical systems
- Experience in milling and lathe work

### **Example roles this job description may cover:**

- Development Technician
- Development Build Technician
- Test Technician
- Engine Technician