



Job Title:

**Automotive Consulting Engineer** 

### **Location:**

Perugia, Italy

VI-grade is part of HBK's Virtual Test Division, which provides real-time software, simulator, and hardware-in-the-loop solutions to virtually test products throughout the development cycle, helping companies accelerate innovation, reduce physical prototypes and time-to-market, and improve their competitive advantage.

Our real-time simulation and professional driving simulator solutions include static deskside solutions, through to full-scale driver-in-the-loop dynamic simulators. We deliver turnkey solutions to enable transportation industry OEMs, suppliers, research centers, motorsport teams and universities to accelerate product development. This includes supplying proprietary software, hardware, services, and an open framework for customization.

Virtual Test employs 250 highly skilled colleagues worldwide, and has offices in Germany, Italy, France, UK, China, Japan, and the USA, as well as a broad network of worldwide channel partners.

# **Primary Responsibilities:**

The Automotive Consulting Engineer is responsible for executing technical projects around automotive industry with a particular emphasis on vehicle ride and handling dynamics, NVH and ADAS, using VI-grade solutions for software and driving simulators.

The Automotive Consulting Engineer will also assist the pre-sales process to help secure consulting projects.

## **Core Functions:**

- The Automotive Consulting Engineer primarily executes engineering services for customers.
- The Automotive Consulting Engineer understands clients technical and engineering needs, translating these into VI-grade's solution portfolio when applicable.
- The Automotive Consulting Engineer cooperates with other VI-grade technical consultants and, if needed, Product Development Team members to deliver valuable project results to customers.

#### **Details of Function:**

- Support service projects around VI-grade solutions and areas of expertise;
- Identify and analyze customer's technical needs, current solutions and processes and simulation requirements;
- Develop component, system and vehicle virtual models and rapidly iterate designs through simulation to meet project targets;





- Develop and implement simulation methodologies capable of enhancing workflow efficiency taking advantage of VI-grade tools and solutions;
- Collect and analyze data from numerical analysis and physical testing, establishing feedback loops to correlate and validate models when required;
- Execute calculations and create CAE models simulations in a variety of application scenarios (Handling, Performance, Ride&Comfort, NVH, ADAS);
- Present results of activities to customer;
- Develop relationship between VI-grade and customer teams, using creativity and teamwork to solve problems in the most efficient way possible;
- Articulate the technical value proposition of VI-grade across all products and services;
- Collaborate with all levels of technical users and management;
- Interact with VI-grade's Technical Support, Product Development, Sales and Marketing teams as required.

# **Basic Qualifications:**

- Master of Science degree in Engineering (PhD degree is a plus);
- Strong background in vehicle dynamics;
- Expertise in computational analysis and programming;
- Assessment capability of customers technical requirements;
- Experience in team working to deliver engineering solutions, products and services to clients;
- Good presentation and written communication skills;
- Ability to work in dynamic environments involving multitasking, under pressure, to a deadline projects;
- Responsiveness to customer requests, coordinating solution development by leveraging pre-tested solutions and designs and by researching customized solutions.
- Availability to travel
- Good in English

### **Preferred Qualifications:**

- Knowledge of VI-grade automotive simulation tools (VI-CarRealTime);
- MATLAB Simulink expertise;
- Programming skills (Python, MATLAB, C, C++, Java).
- Expertise in multibody dynamics (Adams, Dymola)

# To Apply:

Go to <a href="https://spectris.wd3.myworkdayjobs.com/HBK\_Careers/job/Perugia-IT/Automotive-Consulting-Engineer\_13480-1">https://spectris.wd3.myworkdayjobs.com/HBK\_Careers/job/Perugia-IT/Automotive-Consulting-Engineer\_13480-1</a>