

Job Title:

Automotive Consulting Engineer

Reports To:

Global Services Manager

Location:

Italy (Perugia or Udine)

Job Status:

Full-time

Company Overview:

VI-grade is a leading provider of real-time simulation and professional driving simulator solutions that accelerate product development across the transportation industry. The company's driving simulators range from static desk-side solutions to full-scale driver-in-the-loop dynamic simulators, allowing OEMs, suppliers, research centers, motorsport teams and universities to reduce physical prototypes and accelerate innovation. With a worldwide network of trusted partners, VI-grade delivers turnkey simulator solutions including proprietary software, hardware, services, and an open framework for customization. With over 30 years' experience in simulation, VI-grade is headquartered in Darmstadt, Germany with technology centers in Italy, UK, Japan, China, and the USA.

VI-grade is part of **HBK's Virtual Test Division**, which focuses on providing real-time software, simulator, and hardware-in-the-loop solutions to virtually test products throughout the development cycle, helping companies accelerate innovation and reduce time-to-market, and improve their competitive advantage. With 250 highly skilled employees, HBK's Virtual Test Division has offices in Germany, Italy, France, UK, China, Japan, and the USA as well as a broad network of worldwide channel partners.

Since September 2018, VI-grade has been part of **Spectris plc**. The firm conducts business in four major segments - materials analysis, testing & measurement, in-line instrumentation and industrial controls - and serves a broad range of industries ranging from automotive and aerospace to electronics, energy, mining and pharmaceuticals

Job Overview:

The Automotive Consulting Engineer is responsible for executing technical projects around vehicle development with a particular emphasis on vehicle ride and handling dynamics, NVH and ADAS, using VI-grade solutions for software and driving simulators. In this role the Automotive Consulting Engineer will support VI-grade customers in the process of adoption of driving simulator technology.

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:

Job Position: Automotive Consulting Engineer

Page 1 of 2

- 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;
- Support off and on site activities for customers heading into driving simulator on-boarding program;
- 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, Services, 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 customer's technical requirements;
- Experience in team working to deliver engineering solutions, products and services to clients;
- Excellent presentation and written communication skills in Italian and English;
- 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.

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, CarMaker, CarSim)

Contact:

Please submit your CV to careers@vi-grade.com along with a cover letter.

Job Position: Automotive Consulting Engineer

Page 2 of 2