



CNH Industrial CNH Industrial is a global leader in the capital goods sector that, through its various businesses, designs, produces and sells agricultural and construction equipment, trucks, commercial vehicles, buses and specialty vehicles, in addition to a broad portfolio of powertrain applications. Across its 12 brands, 64 manufacturing plants, 49 research and development centers and a workforce of more than 70'000 people, CNH Industrial is present in 180 countries giving it a unique competitive position.

FPT Motorenforschung AG in Arbon has around 250 highly qualified employees working with commitment and acknowledged success. Our activities: all aspects of engine research and development, particularly diesel engines with direct injection and aftertreatment systems for road vehicles and off-road applications. Investing in the future and providing new jobs, we are looking for a

System Integration Engineer (f/m)

As a member of the System Development Team in the Electrified Powertrain Engineering division of FPT Industrial, you will be part of a highly skilled team driven to design and engineer best-in-class electrical systems and architectures for FPT Industrial electrified powertrain product portfolio. Starting from customer and application requirements, you will support functional and performance specification definition at system and components level, taking care of effective integration of subsystems into hybrid and full electric powertrains both at test bench and on vehicle. You will work in a collaborative team environment. You will be contributing to the development of advanced concepts as well as their implementation for application to on-road vehicles and non-road applications.

Your tasks

- Working in a multidisciplinary team, develop and deliver best-in-class electric system architectures for FPT Industrial electrified powertrain product portfolio for hybrid and full electric powertrains
- Perform requirements analysis
- Verify matching of component technical requirements (State of Requirements) with system requirements and evaluate supplier technical proposals (Analysis and review of technical documentation, design of test plan,)
- Define bill of material for electrified powertrain and verify component compatibility among the system with electrical, mechanical, functional and qualification requirements.
- Identify required hardware/software and communication signal interfaces among the system and with the external components.
- Define, manage and supervise supplier and internal system development and validation activities: drawings and technical documentation release, virtual simulation, design and installation FMEA, test plans (DVP), plan and supervise test series on rig (components), bench and vehicle (total system)
- Support problem solving and troubleshooting activities
- Communicate results and make presentations that describe analysis and solutions
- Collaborate closely with various internal departments / laboratories and universities



Your profile

Basic Qualifications:

- You have a university degree in electrical, electronic or mechatronic engineering, few years of experience in a similar role
- Background on applied mechanics for road vehicles
- Background on electronics: circuit, devices (transistors, operational amplifiers, digital and logic circuits)
- A good understanding of system and component interactions
- Proven experience with CAN network interface (message map definition, data acquisition and post-processing, interactive CAN analysis tools)
- 2+ years of experience on;
 - Testing of electrical/electronic automotive components at test bench
 - Prototyping of electrical/electronic systems with both off-the-shelf and custom components
- You have good German and English skills (spoken and written), Italian skills would be an asset – Arbon
- You are a highly motivated self-starter and team-player with very good communication skills

Preferred Qualifications:

- Strong technical understanding of components for electrified powertrain: rotating machines, DCDC, ACDC, DCAC converters, battery systems.
- Sound knowledge on electrical engineering: electrical circuit analysis and design, components (insulation, cables, fuses, contactors, relays, sources, power and signal circuit boards, measuring instrumentation)
- Experience with safety critical electronic product development for automotive/commercial vehicle electrified applications
- Experience with FMEA, DVP, ISO 26262, relevant automotive/industrial vehicle standards
- C-code programming of embedded systems would be an asset
- Good understanding of manufacturing
- Self-motivated with the ability to manage multiple tasks
- Good technical communication skills

Interested?

For further information please contact Mrs. S.Tur – Tel. +41 (0) 71 447 71 82. Please send your application to Human Resources: recruitment.arbon@cnhind.com

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