

Three glowing blue globes with a wireframe grid, arranged horizontally across the middle of the page. The background is a dark blue gradient with a faint globe pattern.

Recruitment Programme

Company Profile

AVL Powertrain UK Ltd is part of the AVL Group and is proud to be a member of the largest privately owned powertrain consultancy in the world with more than 4000 employees.

Our company, which is based in Basildon, Essex, grew rapidly throughout 2008, followed by a period of consolidation in 2009-2010 and is now looking to grow once more. We currently employ 110 staff based in the Essex and Midlands areas.

We believe that the reason for the success of our company is ... YOU! It is our employees who have made this company an attractive, creative and innovative thinking organisation and their talents have created an automotive expertise recognized by the powertrain industry.

Our Work

We are continuously developing cutting-edge solutions for our automotive clients. We are pushing ahead to realise visions and set new standards.

We focus on powertrain research and development. We work on avant-garde technological projects and we work intensively together with our customers maintaining a dynamic and professional relationship. Our employees work as resident engineers at the customers facilities or are office based.

It is vitally important that we deliver innovative technical solutions for our clients and that we recognize our customers needs. This is an important focal point for the company and has contributed to our achievements.

A Component engineer requires the ability to organise, communicate, liaise, coordinate and demonstrate a good technical understanding of Powertrain assemblies and sub-systems. Engineers need to be able to work with the customer quality system. To quickly learn and adapt to the customer processes. Engineers need to work quickly but responsibly on multiple tasks using knowledge and experience gained to further designs and develop ideas.



Component engineers are responsible for:

- component design, system architecture in liaison with CAD engineers and suppliers considering packaging constraints, manufacturing and technical specifications
- defining technical requirements and creating engineering specifications
- meet component and system quality aims, functional and durability targets creating and executing exhausting design validation through bench, engine and vehicle testing

Component engineers need to work with focus and purpose towards releasing development parts into main-stream series production and to deliver a quality and reliable product within strict cost constraints.



Calibration



AVL

Calibration Engineers take responsibility for the performance, drivability, validation and emissions of an engine. From the initial engine development to the final mass production release, the calibration engineer is responsible to meet the increasingly demanding emissions targets, performance curves and also climatic validation.

Your day to day duties will involve calibration of functionalities for Diesel/Gasoline engines for passenger and commercial vehicles.

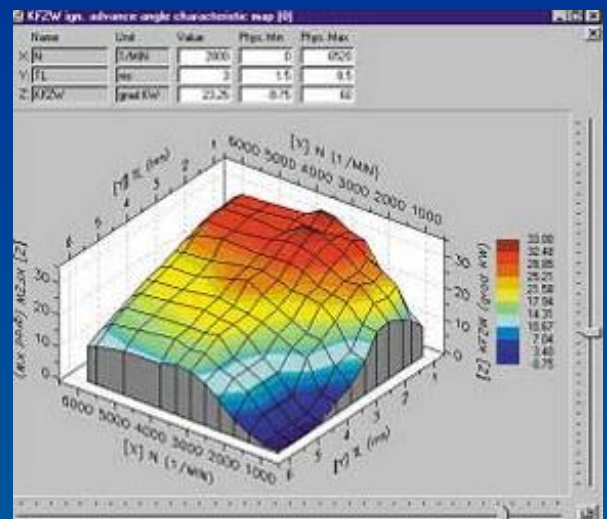


You will also be required to calibrate Diesel/Gasoline engines to achieve EU Stage 4, 5 and 6 emissions and fuel consumption targets (Part Load and Full Load Optimisation).

To achieve this you will be directly responsible for the supervision and programming of engine and vehicle test cells (Steady State, Transient and Test Cycle Simulation).

You will have the opportunity to become an integrated part of a calibration team. As part of this team you will liaise with upper management, technicians and suppliers as well as your fellow engineers.

You will be given the chance to pursue many of your own ideas from concept through development to in territory validation.



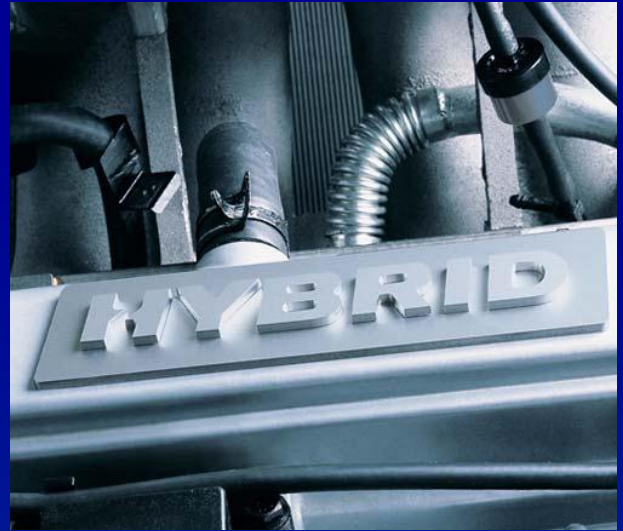
Electronics systems engineers are becoming more and more in-demand in the automotive industry as the complexity, i.e. number of sensors, actuators and network connections increases in modern powertrains to satisfy conflicting demands of better fuel economy, performance and less emissions. Furthermore ever tighter requirements for cleaner transportation make hybrid electric vehicles (HEV) an attractive solution. HEV requires even more electronics and optimal integration of the conventional powertrain with the electrical subsystem. AVL responds to this complexity by developing its electronics systems engineers in three main areas:

Control Systems Engineer

Control Systems Engineers develop and analyse the electronic systems from the first principles. This usually requires a modelling of the system in a simulation environment like Matlab/SIMULINK. The controls engineer makes sure that the system properties like stability, noise rejection and robustness are satisfied on every level. This requires simulation of the system, rapid-prototyping with dSPACE tool chain, validation in the test bed, hardware-in-the-loop type testing and a fine tuning of the system in a vehicle. System identification, model-based control system design and automated calibration-optimisation are the state-of-the-art tools used by AVL control systems engineers.

Systems Engineer

A systems engineer has a good overview of the overall powertrain and is responsible for the integration of the different sub-systems



This requires a broad understanding of sensors, actuators, engines, ECUs, electronics, communications networks and their interactions within modern automotive powertrains. Day-to-day responsibilities vary from systems requirements capture to detailed testing and validation of the functionalities on environments like a test rig, a hardware-in-the-loop simulator or a prototype-build vehicle.

Hybrid Systems Engineer

Hybrid powertrains both include internal combustion engines and electric motors. The right electrical subsystem and regenerative braking are essential to get the best results. HEV engineers combine their powertrain knowledge with electrical/electronics skills to find out the systems requirements, component sizing and energy management strategies. The right approach to these problems require strong use of computer simulations, rig testing, rapid-prototyping and validation of the sub-systems and system at every level.

Recruitment Package



AVL

AVL Powertrain UK Ltd is looking for people who have the drive for excellence and the ambition to become part of an advanced team of professionals. For those who join us the opportunities are endless. We offer a highly competitive employment package:

- You'll have the opportunity to become part of a diverse and international team in a flexible company with many career possibilities
- Competitive salary and possible bonus incentives
- Flexi time
- Possible relocation assistance
- 22 days annual holiday, increasing by 1 day per complete and continuous year of employment to a maximum of 28 days, plus UK statutory public holidays
- Contributory Pension Scheme
- Private Health Care, plus the opportunity to cover spouse or partner and dependants at competitive rates
- Possible study assistance to further or continue education
- Training possibilities in-house and externally
- Social events, team building events, fun days

You will be:

- Educated to a minimum 2:1 degree level in Automotive, Mechanical, Control Systems Engineering or an equivalent subject.
- Have good organisational and communication skills with the ability to work as part of an international team.
- Ambitious, highly motivated and committed.

If you would like to be a part of our team, and think you could make an effective contribution to it, please send your CV along with a covering letter to:

Mrs Barbara Harris, HR Manager

barbara.harris@avl.com

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