Do you strive to work in an innovative and dynamic environment? Yes? Then take a look at this unique opportunity at our Leamington Spa office in Warwickshire.

Drive System Design (DSD) is a growing engineering consultancy. What makes us different? Our people! As we expand, we need to ensure we have the right people in our team to continue to achieve our strategic vision.

OUR VALUES
How do you apply our values of Drive, Expertise, Collaboration, & Innovation? Our people live and breathe our core values in everything they do.

WE’LL OFFER YOU
★ An environment where you can be yourself and realise your full potential by having the support of the people you work with.
★ A people-oriented work culture, where we always follow through on our projects, no matter how big the challenge, and aim to build lasting relationships with our clients.
★ A competitive salary and benefits package which recognises your exceptional value to our business.

QUALIFICATIONS
Degree educated in mechanical, electrical or control engineering or related discipline OR equivalent demonstrable experience.

KEY SKILLS
- Innovative thinker and problem solver
- Mathematical aptitude coupled with strong practical skills
- Accuracy and attention to details
- Self-motivated and driven to achieve results
- Strong project management
- Commercially astute
- Ability to take innovative designs from design concept through to delivery to a diverse variety of global customers.

CAN YOU SAY YES TO THE FOLLOWING?
✓ You have engineering experience relevant to a technical consulting or engineering services environment
✓ You are a natural collaborator, able to build and manage effective working relationships with your direct team, colleagues and customers
✓ You have a good understanding of power electronics and electric motor fundamentals
✓ You effectively communicate complex ideas and information to a range of audiences and stakeholders
✓ You have a “can do” attitude with high levels of commitment, enthusiasm and motivation
✓ You are open and honest with high professional standards and ethics
✓ You are passionate about developing your own knowledge, experience and skills

HOW TO APPLY
Please send your CV and covering letter to hr@drivesystemdesign.com

The statements above are intended to describe the general nature and level of the role. They are not to be construed as an exhaustive list of responsibilities, duties and skills of the role holder. Furthermore, they do not establish a contract of employment and are subject to change at the discretion of the employer.
The statements above are intended to describe the general nature and level of the role. They are not to be construed as an exhaustive list of responsibilities, duties and skills of the role holder. Furthermore, they do not establish a contract of employment and are subject to change at the discretion of the employer.

**SPECIFICALLY:**
- Define and review electrified powertrain system requirements and architectures for customer and internal programs in automotive, aero and off highway applications for ASIL C/D applications.
- Define and review test plans and DVPRs for Electrified Powertrain systems and components (LV124 etc), from traction inverters to fully integrated electric drive units (EDUs).
- Work with EP mechanical engineers to develop integrated electronic / mechanical / thermal design concepts.
- Create detailed designs for high power (>150kW, 300-800V) traction inverters and associated digital and mixed signal control and interface circuits, actuators and sensors.
- Schematic capture and PCB layout using Altium Designer. Understanding of creepage and clearance requirements for HV circuit design (LV123, HV3 level). BOM generation and coordinating with contract PCBA manufacturers.
- Safe use of high power, high voltage development and test equipment such as high power battery emulators, PSUs, power analysers, loads, motor test dynos etc within a dedicated high voltage development lab and EDU test facility, up to ~1MW and 800Vdc.
- Familiar with digital motor control schemes for a variety of motor technologies (IPM, SPM, ASM, SR etc) – FOC, field weakened operation, overmodulation, harmonic current injection for NVH, fault and protection schemes etc.
- Microcontroller hardware implementation (ideally Infineon Aurix™ automotive family).
- Designing to meet EMC requirements for EDU components (ISO7637 etc) at subsystem level.
- Ability to generate subsystem DFMEA and HARA at program initiation.
- Provide project timing, resource and cost planning information to support Program Management and Business Development activities.
- Work with EP control software engineers to test and develop inverter and motor control software and test electronics hardware.

**MORE GENERALLY:**
- Where appropriate, undertake Project Lead role - leading a small/medium project team to deliver a successful project outcome from both a technical and commercial perspective
- Contribute to and deliver technical conference and white papers
- Be fully aware of and actively complying with Drive System Design’s policies and procedures
- Exhibit a passion for learning and facing new challenges
- Understand and follow DSD’s values and professional standards and technical best practices project management, quality, communication etc.
- Actively undertake continued professional and personal development
- Participate in activities to share technical knowledge and know-how across the business
- Potential for worldwide, short and long-haul travel