

Reference: SPA012
Job Title: Electronics & Instrumentation Technician
Company: ESR Technology
Location: Birchwood Park, Warrington (near Manchester)
Employment Category: Full Time (37.5 hours per week)
Salary/Benefits: Competitive salary, with excellent benefits including 25 days annual leave plus statutory holidays, additional leave purchase, up to 8% matched pension contribution, health care, life assurance and more

- Are you an Electronics or Instrumentation Technician, or recently completed or completing an apprenticeship?
- Do you have a background in instrumentation or calibration?
- Do you understand motor controls, telemetry, or vacuum instrumentation – or have a willingness to learn?
- Are you enthusiastic and self-motivated and want to work in a research/development environment?
- Are you able to work to procedures and able to use your judgement and initiative in build or fault-diagnosis/repair tasks?
- If necessary, are you happy to be trained to applicable standards to work on electrical or Spacecraft wiring?
- Do you want a varied, challenging, and satisfying career working within an internationally renowned team?

The Company

ESR Technology is a leading Science & Engineering company providing independent specialist technical consultancy, products and services to the Space & Vacuum, Oil & Gas, Industrial, and Transport sectors.

We are seeking an enthusiastic Electronics & Instrumentation Technician to perform electrical, electronic and instrument installations and test activities.

You will be primarily operating within our Space & Vacuum team which focusses on the testing, research, and development, of products and mechanisms for the space and vacuum sector. You will also support and be flexible to support and maintain electrical, instrumentation or test activities for other parts of our business.

The Job

The suitable candidate may be time-served, having completed an electronics, instrumentation or similar apprenticeship, may have a HNC or Diploma in electronics, or has at least 2 years hands-on experience in a similar, relevant technical discipline such as Aerospace, Defence, or Military electronics engineering.

You will be trained, guided and supported by the Electronic / Instrumentation Engineer and technical team. The role requires the provision of electrical / electronic support for test equipment, prototyping & commissioning, calibration, installation, maintenance, and use of research and development instrumentation, in addition to electrical support for the maintenance of the facility infrastructure and specialist vacuum equipment bespoke to the space test environmental simulations.

You will self-manage and perform in-house calibrations of equipment, as well as arranging external calibrations. The role also requires the ability to read and create basic electronics designs and PCB layouts and to manufacture/maintain dedicated “special to type” laboratory equipment (for example simple motor drives/switch boxes/trip systems etc).

Previous experience of test/measurement within vacuum test systems would be helpful (but not essential), however, a sound understanding of control and instrumentation principles (e.g. servo motors, stepper motors and encoders), and the use of piezo-electric force/torque transducers, charge amplifiers, thermistors/thermocouples/RTD's, strain gauges etc would be highly beneficial. The successful candidate will be able to demonstrate good mechanical and electrical assembly methods and practices, including digital interfacing techniques. You will be required to work within the ISO Class 7 cleanroom, so the ability to wear face covers is essential.

You will be located at our modern facility in Warrington, with a mixture of desk-based and laboratory/cleanroom work. Some travel may occasionally be required to visit clients, suppliers and other project partners, primarily within the UK with potential travel overseas.

Requirements

The successful candidate must be enthusiastic, self-motivated, and passionate about the quality of their work. They must be able to prioritise work and learn quickly whilst working alongside experienced colleagues of various disciplines. It is essential that the candidate is:

- Focussed, pragmatic, flexible and technically strong with an enquiring mind, willing to learn, contribute effectively, and take full ownership of tasks and delivery deadlines.
- Good mobility, and willing to perform hands-on tasks in a laboratory/cleanroom environment working to appropriate ISO 9001 and Aerospace AS 9100 standards.
- Ability to read and create basic electronic designs and develop/test circuit layouts beneficial.
- Practical experience in electronic hardware, wiring and harness assembly.
- Experience working with a range of electronic and mechanical components.
- Electronics experience with circuit prototyping including appreciation of schematics & PCBs, wiring assemblies etc; good soldering and PCB rework skills; crimping and inter-connections; knowledge of basic electronics test equipment and measurement techniques.
- Experienced in the calibration and setup/commissioning of test hardware/facilities (e.g. drives and controllers, instrumentation/data acquisition and/or control software, calibration, and validation of data).
- An effective communicator (both written and verbal).
- Sociable and a team player, who can work well to support mechanical and system-oriented design staff.

Although not essential the following would be beneficial:

- Experience working within a cleanroom environment.
- Experience of vacuum test systems.
- Experience using LabVIEW or similar data control equipment.
- Fault finding experience on PCBs and hardware debugging using oscilloscopes, multimeter and other appropriate lab equipment.
- Knowledge and experience of analogue and digital electronics (transistors, diodes, ICs as well as amplifier, sensors and motor control circuits).
- Experience with instrumentation and metrology calibrations, and calibration control.
- PAT testing experience.

Qualifications

- HNC, NVQ or BTEC/Diploma or time-served equivalent in a relevant electrical / electronics, or instrumentation / control discipline (e.g. Aerospace, Space, Defence & Military, Automation Controls, etc)
- Electrically trained (18th edition) – or willing to undergo training.



Right To Work

Prospective candidates for this role should be aware that any offer of employment in connection with this vacancy is conditional upon, and subject to the candidate obtaining, and at all times continuing to have, the right to live and work in the United Kingdom.

Application

If you are passionate about delivering outstanding value to our clients and our business, then this could be the role for you.

Write with full CV, highlighting what you can contribute in this diverse and interesting role to careers@esrtechnology.com