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| **Job Title** | **Power Electronics Intern** |
| **Grade** | **£25,552.80** |
| **Location** | **Newport** |
| **Employment Type** | **☐ Permanent**  **☑ Fixed Term**  **☐ Agency/Contract** |
| **Hiring Manager** | **Power Electronics Engineering Manager** |
| **Direct Reports** | **N/A** |

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| **Job Summary:**  As a Power Electronics engineering intern, you’ll be working within a team of talented Power Electronics engineers to deliver live projects. The Internship will last one year and throughout that year you will be expected to develop and learn whilst laying the foundations for a successful career in engineering.  The Intern is expected to have a good knowledge of engineering, science, and technology, with a particular interest in Power Electronics. They will be expected to work on design, implementation and test in the labs at Catapult’s Innovation Centre with opportunities to develop their skill. The Intern will also be expected to contribute to STEM activities throughout the year.  The Intern will report to and support the Power Electronics Engineering Manager and will exemplify the behaviours and values of the Catapult of collaboration, innovation, and trust. They should have excellent team working skills, working collaboratively and cooperatively with colleagues, and should be able to communicate to other team members in an encouraging and supportive way. |
| **Key Responsibilities:**   * Work on projects working closely with the Project Manager (PM) and Technical Lead (TL) to deliver tasks on time and to scope * Capture and document project requirements and specifications * Perform test and implementation activities in the labs at CSA Catapult’s Innovation Centre * Technical reporting to project team and wider audience to demonstrate regular progress * Adhere to the company’s design standards |
| **Accountability:**   * Ensure that technical deliverables are on time and to scope. This is achieved in close partnership with the Technical Lead and Project Manager. * Ensure technical deliverables on projects and research activities are of high quality by working closely with the Technical Lead. Deliverables should be evidenced, and progress reported regularly to a Senior Engineer. * Ensure appropriate risk assessments have been completed for the technical tasks and lab work that the Intern is working on, before passing on to a Senior Engineer. |
| **Experience**  ***Expected Experience***   * Understanding of Power Electronics principles * Knowledge of analogue and digital hardware design at PCB level. E.g. circuit design, schematic capture, simulation, PCB assembly design & debug. * Experience of prototyping designs using breadboards/veroboards * Practical knowledge of debugging and implementing designs in the lab using testing equipment (such as oscilloscopes, power supplies, waveform generators etc.) * A desire to learn and develop. * Enthusiasm, drive, commitment: manage your own workload and use your initiative.   ***Desirable Experience***   * Experience in multi-disciplinary engineering activities including design, test, manufacture, and instrumentation development * Understanding of Photonics and RF applications * History of translating research output into working prototypes * Proficient in Microsoft Office products |
| **Qualifications:**  Undergraduate studying a degree in electronics engineering or equivalent in related engineering or science field. |
| **Managerial & Supervisory:**  The intern will be offered mentorship throughout their internship.  The intern will work alongside other engineers and lab technicians as part of an integrated project team to deliver technical work packages. |
| **Autonomy:**  Perform technical activities whilst in close consultation with the Project Technical Lead |
| **Pressure and Working Environment**   * Work is of technical nature that requires high levels of effort and concentration * Project deadlines may mean extra time and effort is required at key moments * Work is split between the office and the lab with a higher effort expected in the lab. The Intern may work from home at times as agreed depending on workload and in line with company policy * The intern may be required to work on multiple projects at once maintaining progress and quality |
| **Authority and Risk:**   * Provide technical inputs on projects to the Project Technical lead and Head of Technology to ensure quick and accurate decision making * Ensure risk assessments have been completed for the technical tasks and lab work that the Engineer is overseeing before passing onto a Senior Engineer |
| **Behaviours**   * Demonstrate the Catapult behaviours by being inclusive, challenging, and supportive. * Exemplify the Catapult values of collaboration, innovation, and trust. |