SEA-KIT
Redefining the way we work offshore

JOIN OUR TEAM!

ELECTRICAL DESIGN ENGINEER

The role

As Electrical Design Engineer you will be responsible for the design & development of electrical systems for SEA-KIT's uncrewed surface vessels (USVs), including power distribution, communication systems, sensors and control systems.

The role requires collaboration with mechanical, software and control systems engineers to ensure seamless integration of electrical systems into the USV platform to meet project specification requirements.

You ensure compliance with relevant industry standards, regulations and safety guidelines throughout the design and development process.

SEA-KIT's head office and manufacturing yard is based in Tollesbury, Essex. The role may involve some travel within the UK and potentially to international locations.

Responsibilities

- Design & develop electrical systems for USVs, including power distribution, communication systems, sensors, actuators and control systems.
- Conduct electrical system architecture design, component selection and integration based on project requirements.
- Collaborate with mechanical, software and control systems engineers to ensure seamless integration of electrical systems into the USV platform.
- Perform electrical design calculations, simulations and analysis to verify system performance and compliance with specifications.
- Ensure compliance with relevant industry standards, regulations and safety guidelines throughout the design and development process.
- Develop and document electrical schematics, wiring diagrams and other technical documentation.
- Participate in the selection and procurement of electrical components and subsystems, considering factors such as performance, cost, reliability and availability.
- Conduct testing, troubleshooting and debugging of electrical systems and components, both in wokshop/laboratory and field environments.
- Collaborate with cross-functional teams to identify and resolve technical challenges, ensuring timely project completion.
- Stay updated on the latest advancements in USV technology, electrical engineering principles and related fields to enhance innovation and contribute to continuous improvement.

Who we're looking for
You hold a bachelor's or master's degree in electrical engineering or a related field.

You have proven experience in designing, developing and integrating electrical systems for marine or autonomous systems, preferably USVs.

You have a solid knowledge of electrical engineering principles, circuit design, power distribution, signal processing and control systems.

You have a knowledge of relevant industry standards and regulations, such as IEEE, IEC and maritime safety requirements. You are proficient in the use of electrical design tools such as CAD software, circuit simulation software and PCB layout tools. Experience with 3D CAD systems is preferred.

You have experience with embedded systems, microcontrollers and digital signal processing, and are familiar with maritime navigation systems, communication protocols and sensors used in maritime environments.

With strong problem-solving skills you are confident and able to troubleshoot complex electrical systems. You have excellent written and verbal communication skills to effectively collaborate with cross-functional teams, present technical information and write technical documentation. You use your strong organisational skills to manage multiple projects and prioritise tasks effectively.

What we offer
SEA-KIT provides a positive and dynamic work environment. You will gain immersive experience, where you will be at the forefront of cutting-edge technology, with opportunities to stretch and develop yourself whilst contributing to the emerging market of carbon-reducing uncrewed surface vessels.

How to apply
For more information, visit our Careers page at: www.sea-kit.com/careers

To apply, please send a full CV to: careers@sea-kit.com.