

Electrical-Embedded Engineer

<https://www.ehgroup.ch>

We are challenging the energy sector with our innovative fuel cell technology to disrupt conventional sources of power - are you the right person to join our dynamic and growing team?

About EH Group Engineering

EHG is developing cutting-edge fuel cell technology for heavy duty mobility and large-scale stationary power applications. Our uniquely redesigned product is a significantly more compact fuel cell with high power density, greater efficiencies and lower costs of production. Faced with the challenges of climate change and the transition to a decentralized energy system, EHG seeks to provide high performance and cost-effective fuel cell solutions to our clients and partners.

To help achieve our vision of a decarbonised future we are seeking a highly talented and motivated electrical-embedded engineer with strong background in fuel cells.

Key Responsibilities:

- In-depth knowledge on Embedded Systems (HW-ECU, CAN, SW - Toolchains for developing, debugging & flashing).
- Design & testing Interfacing of Sensors & Actuators to digital control systems implemented via PLC (ex. Beckhoff) & Embedded systems (Ex ECU, Matlab, Simulink, CanApe).
- Design & Develop Base level Software to read/write sensor/actuator information from/to real world for digital control system implemented via PLC (ex. Beckhoff) & embedded systems.
- Low Voltage domain to interface Sensors & Actuators via signal conditioning/amplification circuits to ECU
- High Voltage domain to interface DC/AC power sources & sinks (ex. Batteries, DC/DC Convertors, Motor Drives) to systems
- Conceptual idea of the Model Based System V Curve Workflow to go from design to realisation (Ex MIL, RCP)
- Data Logging, Parameter Calibration & GUI/HMI using industry standard tools
- Collaborate with other team members regarding system design, interfaces and functionalities.
- Liaise with suppliers and procurement of new components and solutions as required.
- Prepare reports, test plans and presentations for internal and external stakeholders.

Skills and Experience Required:

- MSc/BSc level or equivalent in Electronics, Control or related disciplines.
- Fuel cell Experience – in-depth understanding of fundamentals.
- Practical hands-on experience of troubleshooting electronics, actuators and instrumentation.

- Minimum 2-4 years industrial experience in design, testing of digital control systems using PLC or Embedded Systems.
- Good knowledge/skills on using MATLAB/Simulink for Embedded software development.
- Strong communication skills with internal and external customers.
- Team player with the ability to function autonomously.
- Excellent spoken and written knowledge in English is mandatory.
- Good written and spoken knowledge in French, German or any other language is a plus.

Example of tools to be used:

- Embedded : Matlab, Simulink, C++ (Atmel), CanApe
- GUI/HMI : Python (Qt, Pyside2...), App Designer
- PCB Design : KiCad, Autodesk Eagle
- ECAD : Solidworks Electrical, QElectrotech
- Versioning : Ex. Git
- PLC : Beckhoff

Start date: as soon as possible

Please send your CV with a short cover letter to info@ehgroup.ch;

Only candidates selected for interview will be contacted.