



# Job Description

<b>Job title:</b>	Electronic Engineer
<b>Type:</b>	Full-time
<b>Department:</b>	R&D
<b>Location:</b>	BeFC SAS 570 rue de la Chimie, 38610, Gières

## Job purpose

To provide technical expertise in the areas of design, development and realisation of experimental systems/prototypes relating to various BeFC projects and in-house needs. In particular, the post will bring in relevant skills in the areas of electronic circuit, PCB design and assembly, sensor selection and integration, power management, testing both at component and system levels. These skills have wide ranging applications on developing and ongoing projects at BeFC.

## Source and nature of management provided

The post holder will be line managed by the Technical Manager but will work closely with staff across different projects.

## Staff management responsibility

A limited supervision of students may be required, however there is no expectation from the post holder to perform staff managerial duties.

## Career and professional development activities

BeFC encourage and support the personal and professional development of our staff. Individual development needs will be identified through a regular review process.



**Special conditions**

Although based in the main BeFC R&D facilities, the job may at times involve working in any of the other BeFC facilities. Lifting and handling of heavy equipment may occasionally be required, lifting aids will be provided where appropriate. Contact with chemicals will be part of the job and personal protective equipment will be provided.

From time to time, the post holder may be asked to assist with Continuing Professional Development (CPD) activities. This will form part of a substantive role and no additional payment for these activities should be expected.

**Main duties and responsibilities**

Using a high degree of technical expertise, provide technical support for ongoing projects as well as assist with in-house experimental setup design, including:

<b>1</b>	Design, construction and testing of electronic systems and/or system part prototypes
<b>2</b>	Design and understanding of electronic circuit schematics
<b>3</b>	Printed Circuit Board (PCB) design, prototyping and testing
<b>4</b>	Component/sensor selection, review and testing
<b>5</b>	Analysis of electronic circuits
<b>6</b>	Embedded electronics development
<b>7</b>	Prepare accurate and detailed test reports
<b>8</b>	Compliance with statutory and company regulations/protocols



# Specification

Qualifications	Essential	Desirable
Graduate in Electronic and Electrical Engineering (Masters degree or equivalent)	X	

Experience/Knowledge/Skills	Essential	Desirable
Knowledge of PCB design and manufacture	X	
Knowledge and understanding of circuit schematic design (analog/digital)	X	
Knowledge of circuit simulation tools (e.g. PSpice, LTspice)		X
Knowledge of embedded electronics development (hardware/firmware)		X
Understanding of electronics principles and calculations	X	
Previous experience with commercial electronics design		X
Knowledge of the following protocols: I <sup>2</sup> C, SPI, RS232, TCP/IP		X
Design verification, prototyping and testing, validation and approvals against relevant international standards		X
Knowledge and experience of RF, BLE and NFC circuit design with onboard antenna		X
Ability to translate requirements from systems to circuits at the IC level	X	
Understanding of low power circuit design		X

Attributes	Essential	Desirable
Ability to work in a team and with partners when necessary	X	
Analytical mindset	X	
Organised, ability to work with efficiency and prioritise own workload	X	
Translate complex and innovative ideas into clear, logical and technically accurate documents/presentations	X	
Independent and self-motivated		X
Understanding of the English language, both written and oral		X