

### **POWER ELECTRONICS DESIGN ENGINEER**

#### Education:

A minimum of a master's degree in a field relevant to the design and operation of power conversion systems, preferable Ingeniero Superior Industrial, ICAI, Telecomunicaciones, especialidad Electrónica y Automática

#### Main tasks:

- Requirements and architecture analysis at electronic function and electronics board level.
- Detailed electronics design and analog and/or digital simulation at function level.
- Analysis of design (parts stress analysis, worst case analysis, failure modes and criticality analysis, radiation analysis, etc.).
- Design documentation.
- Laboratory & prototype testing.

#### Required skills:

- Power Electronics: DC/DC, AC/DC, AC/AC power converters, solid state current limiters, motor and actuator drivers, solar panel regulators, battery charge/discharge controllers, etc.
- Good knowledge of design methodologies for Space applications (design documentation, design analysis, etc.) and tools (e.g. PSPICE, MathCad, Matlab, etc.). Knowledge in CAE Veribest, MENTOR will be appreciated. Sound mathematical basis for its application to the electronic design analysis (Worst Case Analysis, etc.).
- Experience in technical management of electronic equipments and systems in Space Programs. Avionics for defence and aeronautics will be also welcome.
- Experience in industrial projects (in Defence or Space fields) will be highly valued.