



## **CMS ECAL Electronics Technician (EP-CMX-DD-2025-110-GRAE)**

Geneva, Switzerland



### **Job Description**

#### **Your responsibilities**

In the framework of the LHC High-Luminosity upgrade, the CMS experiment will undergo a major upgrade with the replacement of the electronics of the electromagnetic calorimeter (ECAL). This requires the testing and preparation of 12,240 readout electronics (VFE) cards and 2,448 power conversion (LVR) cards. Furthermore, optical fibres, low voltage cables, and low voltage power supplies need to be procured and tested. The area for the ECAL electronics replacement needs to be equipped and prepared, enabling parallel work on 10 ECAL detector modules simultaneously. Eventually, the electronics cards, optical fibers, and power cabling will be replaced in all 36 ECAL detector modules.

The successful candidate will integrate into the team of technicians, engineers, and applied physicists responsible for preparing and performing the above-mentioned activities. He/she will support these activities, and in particular:

- Perform reception testing, environmental stress screening, and assembly of VFE and LVR cards.
- Perform reception testing of low voltage power supplies.
- Define cable assemblies and follow up their procurement and production.
- Participate in cable fabrication, testing, and installation activities.
- Participate in the preparation of the area for the ECAL electronics replacement.
- Participate in replacing the ECAL electronics.
- Participate in detector installation and testing activities.

#### **Your profile**

##### Skills:

The skills required for this post are:

- Vocational training as electronics technician or in a closely related field comprising a significant fraction (at least 33%) of practical hands-on experience and training;
- Vocational training and experience in developing, assembling, testing and documenting of electronic components and circuits;
- Vocational training in cable assembly and testing;

- Experience in preparing mechanical assemblies;
- Driving license category B;
- Teamwork: communicating well with others, listening;
- Repetitive tasks: patience, and willingness to perform repetitive tasks;
- Attention to detail: ensuring precision in testing and assembling components;
- Problem-solving skills: ability to troubleshoot and resolve technical issues efficiently;
- Learning skills: curiosity and interest in learning new skills.

Skills considered an advantage:

- Experience in programming, like scripting in Python;
- Vocational training in PCB layout using Altium Designer;
- Spoken and written English or French, with a commitment to learn the basics of the other language.

Eligibility criteria:

- You are a national of a [CERN Member or Associate Member State](#).
- **By the application deadline, you have a maximum of two years of professional experience since graduation** in Electronics Engineering (or a related field) **and your highest educational qualification is a general secondary education diploma.**
- You have never had a CERN fellow or graduate contract before.
- Applicants with a Bachelor's, Master's or PhD degree are not eligible.

### **Additional information**

Job closing date: **09.07.2025 at 23:59 CEST.**

Contract duration: 24 months, with a possible extension up to 36 months maximum.

Working hours: 40 hours per week

Target start date: 01-October-2025