Industrial Automation Technician (SY-ABT-BTC-2025-46-GRAE)

Geneva, Switzerland

Full-time

Job Description

Your responsibilities

We are seeking a motivated and skilled Controls and Industrial Automation Technician to join our team, dedicated to the development and optimization of software and hardware solutions applied to the controls and safety systems in the domain of accelerator beam transfer.

In this role, you will contribute to the control, protection, and operation of the ABT Kicker and Septa Systems of the CERN accelerator complex. The ideal candidate will bring a background in PLC and SCADA automation applications, instrumentation interfacing and some understanding of low-voltage electrical power distribution systems. You should also have good problem-solving skills and a collaborative mindset to work effectively with multidisciplinary teams.

As a member of the team, you will:

- Design, implement, and test PLC based Control and Automation Systems
- Develop automation software
- Collaborate closely with the physicists, engineers, and technicians in the various teams of the ABT group to understand and address project requirements for Kicker and Septa control systems.
- Participate in the consolidation of legacy control systems, replacing with latest technologies
- Participate in the Commissioning and Maintenance of these systems
- Document designs and processes, producing comprehensive documentation of electrical and instrumentation designs, schematics for control crates, implementation details, and user instructions to facilitate effective knowledge sharing within the team and with the ABT group.

In this role, you will have the unique opportunity to work on innovative technology, playing a critical role in the engineering, testing, and commissioning of control systems for kicker and septa magnets and their associated power generator and motorisation infrastructures for one of the most advanced scientific machines in the world.

Your profile

Skills

- Some knowledge of electrical schematic design. Experience using See-Electrical and/or MS Visio an advantage
- Some knowledge in low voltage electrical power distribution design
- Some experience with PLC and SCADA systems and their programming. Knowledge of Siemens TIA Portal an advantage.
- Basic understanding of industrial actuator and sensor technologies
- Problem-solving skills and a passion for tackling complex technical challenges in collaboration with multidisciplinary teams.
- Good communication skills and the ability to effectively convey and discuss technical concepts and solutions
- Good knowledge of English or French (spoken and written)
- Fluent in English, the ability to work in French would be an advantage.

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 Industrial Controls 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: **3rd April 2025 at 29:59 PM (midnight) CET.**

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

Working hours: 40 hours per week

Target start date: 01-May-2025

This position involves:

- Work in Radiation Areas.
- Interventions in underground installations.
- Exposure to ionizing radiation and classified as category A.

- Operations on electrical installations or in their vicinity (over 1000 Volt AC or 1500 Volt DC) requiring a specific authorization.
- Exposure to electromagnetic fields under certain exposure conditions.

Given the occupational health risks associated with this position, the selected candidate must obtain medical clearance before a contract offer is confirmed.

Job reference: SY-ABT-BTC-2025-46-GRAE

Field of work: Electrical or Electronics Engineering

Application link: https://smrtr.io/q9s7L

What we offer

- A monthly stipend of **4624 Swiss Francs (net of tax)**.
- Coverage by CERN's comprehensive **health scheme** (for yourself, your spouse and children), and membership of the CERN **Pension Fund**.
- Depending on your individual circumstances: installation grant; family, child and infant allowances; payment of travel expenses at the beginning and end of contract.
- **30 days of paid leave per year**.
- On-the-job and formal training at CERN as well as in-house language courses for English and/or French.

About us

At CERN, the European Organization for Nuclear Research, physicists and engineers are probing the fundamental structure of the universe. Using the world's largest and most complex scientific instruments, they study the basic constituents of matter - fundamental particles that are made to collide together at close to the speed of light. The process gives physicists clues about how particles interact, and provides insights into the fundamental laws of nature. Find out more on http://home.cern.

Diversity has been an integral part of CERN's mission since its foundation and is an established value of the Organization. Employing a diverse workforce is central to our success.