



Electrical Engineer (Fire Detection and Protection Systems) (ref BE-ICS-AS-2016-153-LD)

Suisse, Europe

The main functions of Fire Detection and Protection systems at CERN are:

- *Detect the presence of a fire as early as possible and inform the CERN Fire Brigade, so that an immediate intervention is launched.*
- *Detect any internal fault and notify the Technical Infrastructure operators so that corrective action can be undertaken.*
- *Execute automatic safety actions for the protection of personnel and environment, such as emergency evacuation of personnel and smoke compartmentalisation.*

You will join:

- *The Beams (BE) Department, responsible for beam performance over the complete CERN accelerator chain, from the source to the Large Hadron Collider (LHC), and which carries out Research and Development (R&D) activities on the upgrade of the LHC, its injectors and on future accelerators.*
- *The Industrial Controls and Safety systems (ICS) Group which provides solutions and support for industrial control systems and which develops, installs and maintains CERN's safety systems including fire and gas detection, evacuation and access control.*
- *The Alarm Systems (AS) Section is a six-person team comprising four skilled technicians and two engineers. The section is responsible for the supply, installation, maintenance, operation, renovation and support of all safety alarm systems. In particular it is responsible for detection and protection systems (Fire, Flammable Gas, Oxygen Deficiency, Toxic Gases and Emergency telephones) and the safety alarm transmission systems to the relevant control rooms (CERN Fire Brigade and CERN Control Centre).*

You will benefit from:

- *The opportunity to broaden your knowledge and experience into new areas and discover a domain where excellence is the key driving factor.*
- *Specific training and support for professional development to foster your skills and develop your talents.*
- *Working in an international scientific environment, developing and installing safety systems in a unique and challenging environment.*

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Votre mission :

As Electrical Engineer (Fire Detection and Protection Systems), you will lead detection and protection systems projects and consolidation of existing ones and take responsibility for the results. You will be active participant in projects and work in close collaboration with all members of the section. You will deploy such systems according to applicable regulations. You will write Technical Specifications for Calls for Tender addressed to European manufacturers of safety systems and ensure an adequate contract follow up. You will integrate existing industrial detection components into robust systems that satisfy customers' needs and risk analysis.

The components used cover a wide variety of sensors, control panels, signalisations, infrastructure for Ethernet connectivity, remote management, and cabling to alert and maintain a safe state in case of alarm or fault. You will be expected to master the manufacturers' programming and configuration software, and will work in close collaboration with the maintenance team, installation team, CERN health and safety

Référence

16100414100

Date de publication

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Entreprise

Cern

Région

Europe

Ville

Suisse

Secteur

Transport Et Manutention

Type de contrat

- Temps plein
- CDI

inspectors, and maintain a good working relation with our different suppliers.

Your functions will include:

- Preparation of Calls for Tender addressed to European manufacturers of safety systems and ensure an adequate contract follow up.
- Project management. Ensure solid quality assurance and documentation, in particular for specific customer needs and risk analysis traceability (i.e. IEC 61508/61511). Ensure cost and time management.
- Active participation in projects: preparing cost estimates, defining system requirements, technical specifications, technical design documentation and test plans.
- Ensuring adequacy between protected risk & installation, as well as between installation & as-built drawings.
- Mastering CERN safety rules, safety standards and installation rules, and ensure their respect.
- Keeping up to date with applicable regulations related to section's activities.
- Identifying and proposing consolidation works to ensure a continuous improvement of installations.
- Troubleshooting of new and existing systems.
- Giving training on the technical use of new products.
- Taking active part in industrial collaborations with safety system manufacturers and direct the construction of prototypes whenever is required.
- Maintaining the section's awareness of detection and protection industry products and their evolution.

Votre Profil :

Qualification required

Master's degree in the field of electrical engineering, or equivalent.

Experience and competencies

The experience required for this post is:

- Several years of experience in Project Management in electrical installation projects.
- Several years of experience in writing Technical Specification in French or English.
- Several years of experience in Technical Supervision of industrial support contracts.
- Experience on fire/gas detection or on the application of standards such as IEC 61508/IEC61511 would be an advantage.
- Experience on the application of standards on projects would be an advantage.

The technical competencies required for this post are:

- Project management: in the field of electrical installations.
- Organisation, planning and control: of project activities.
- Purchasing and procurement: writing technical specifications in french or english.
- Technical supervision of contract.
- Design of electrical circuit layout: use of office software packages such as autocad or autocad electrical.

The behavioural competencies required for this post are:

- Managing self: working well autonomously; taking on activities and tasks without prompting; taking initiative beyond regular tasks and making things happen.
- Solving problems: finding the information needed to solve problems; making objective judgments based on all the facts available.
- Working in teams: building and maintaining constructive and effective work relationships.

- Communicating effectively: ensuring that information, procedures and decisions are appropriately documented.
- Demonstrating flexibility: readily accepting new tasks or work/projects; adapting quickly and resourcefully to shifting priorities and requirements.

The language competencies required are:

- Spoken and written English or French: ability to understand and speak the other language in professional contexts. Ability to draw-up technical specifications and/or scientific reports and to make oral presentations in at least one of the two languages.

Conditions d'emploi :

Eligibility conditions

Employing a diverse and international workforce is a CERN core value and central to our success. We welcome applications from all Member States(link is external) irrespective of gender, age, disability, sexual orientation, race, religion or personal situation.

This vacancy will be filled as soon as possible, and applications should normally reach us no later than 02.11.2016.

By applying here, you allow CERN to consider your application for any position it considers relevant with respect to your profile. Please ensure you update your profile regularly with any relevant information and that you inform the recruitment service if you wish your file to be removed from the database.

Note on Employment Conditions

We offer a limited-duration contract for a period of 5 years. Limited-duration contracts shall terminate by default on their date of expiry.

Subject to certain conditions, holders of limited-duration contracts may apply for an indefinite position.

These functions require:

- Participation in a regular stand-by duty, including nights, Sundays and public holidays.
- Work in Radiation Areas.
- Interventions in underground installations.
- Work during nights, Sundays and official holidays, when required by the needs of the Organization.