Designer-Draughtsman

Take part in the design and integration of systems for high-energy physics accelerators and detectors, equipment for vacuum systems, beam monitoring instrumentation, and components for magnetic or radiofrequency systems.

You will join:

- The Department that provides engineering competences, infrastructure systems, and technical coordination for the world's largest particle accelerator complex and its experimental facilities.
- The Group that provides specific engineering solutions for CERN, combining mechanical design, production facilities, and material sciences support.
- The Design Office in charge of mechanical design activities required for CERN projects. Its main activities include:

- The study and development of new products based on structural, thermal, fluid-dynamic, shock, and vibration analyses.
- Analytical computations in compliance with relevant standards and code specifications.
- Detailed design, drafting, manufacturing support, and follow-up.
- Relations with external suppliers, including market surveys, and invitations to tender.

These activities are carried out relying on a large range of CAD and CAE tools, including Dassault Systèmes CATIA v5, SmarTeam, Ansys Multiphysics, and Workbench.

Functions

As a Designer-Draughtsman in the Design Office, your work will involve:

- Designing and integrating mechanical systems and components for high-energy physics accelerators and detectors using Catia V5 as your main computer-aided design tool.
- Preparing drawings for specifications and manufacturing folders in compliance with relevant drafting standards and current quality assurance plans.
- Following-up on the manufacturing and assembling of mechanical components at CERN.

Qualification required

Higher technical diploma in mechanics or equivalent.

Experience and competencies

The experience required for this post is:

- Three to five years of relevant experience in a mechanical design office.

The technical competencies required for this post are:

Good knowledge of:

- Design of mechanical systems.
- 3D and 2D technical drawing: Hands-on working experience with Dassault Systèmes Catia V5 CAD package.
- Mechanical properties of materials.
- Manufacturing, fabrication technology and processes: machining, forming, assembly techniques (e.g. welding, brazing).
- Ability to analyze and solve basic mechanical engineering problems using strength of materials and materials selection principles.
- Expertise in preparing 2D technical drawings in compliance with relevant standards for dimensioning and tolerancing, in particular ISO Geometrical Product Specifications (GPS).
- Ability to draft technical reports and documentation.

The behavioural competencies required for this post are:

- Managing self: working well autonomously; taking on activities and tasks without prompting.
- Achieving results: having a structured and organized approach towards work.
- Communicating effectively: expressing opinions, ideas and suggestions with conviction and in a logical/structured manner; keeping to the point.
- Working in teams: working well in groups and readily fitting into a team.
- Demonstrating flexibility: readily absorbing new techniques and working practices.

The language competencies expected are:

- Good knowledge of French or English; basic knowledge of the other language or an undertaking to acquire it rapidly.

APPLY ONLINE!