

Design Engineer (Structural)



Engineering Office
Indeterminate Full-Time position(s)

About Us

SNOLAB is an international facility for world-class underground physics research and has an expanding programme in astroparticle physics and underground science. Located in an air-conditioned clean room 2 km underground in the Vale Creighton Mine near Sudbury Ontario, with a suite of surface facilities and laboratories, SNOLAB is currently preparing for the next generation of experiments focusing on neutrino studies and the search for galactic dark matter.

The Position

The Design Engineer is responsible for the design and implementation of engineering projects such that they meet the needs of clients and stakeholders. Design Engineers actively make use of engineering tools and methods, applicable standards and legislation as well as collaboration with and input from cross-functional teams with diverse skill sets. The Engineering Office provides engineering services, including design, consulting and project management, to both the SNOLAB facility, and to the experimental collaborations for experiments hosted at SNOLAB. The position will report to the Manager of the Engineering Office. The position includes, but is not limited to the following responsibilities:

- Develop, configure and optimize mechanical and structural systems from inception through start up in accordance with engineering principles, regulation, best practices and client requirements;
- Design of mechanical and structural fabrications according to strength, regulatory and performance requirements;
- Specification / selection of mechanical process equipment and design of piping systems / routings according project requirements including standards and best practices;
- Evaluate structural designs against code and design standards including seismicity;
- Design simple lifting systems including specification of appropriate related equipment;
- Travel to and work within the SNOLAB underground facility as needed

Criteria

Education:

A degree in Mechanical, Civil or Structural Engineering (or related) with Ontario P.Eng.

Experience:

Experience in structural design including with the aid of 2D/3D CAD software;

Experience with assessing design strength and determining mechanical performance (eg. static & dynamic stresses, deflection, creep, fatigue), including through the use of FEA;

Experience designing according to seismic criteria, assessing / specifying structural seismic performance of a system;

Experience with mechanical equipment (eg. pumps, chillers, fans, motors);

Experience with various structural/mechanical design standards and regulation (eg. CSA S16, ASME B31.3, CSA W59);

Salary Range

Salary will be determined by qualifications and experience and includes an attractive benefits package. Relocation assistance will be determined in accordance with SNOLAB policies.

To Apply

All applications must be submitted to jobs@snolab.ca. **Please do not fax or mail your applications.** By applying to the e-mail address, your application becomes available to managers immediately. Interested candidates should include a cover letter and resume.

Closing Date

The posting will remain open until the position is filled, but review of applications will commence on May 21, 2019. SNOLAB thanks all applicants for their interest, however, only those candidates considered for an interview will be contacted.

SNOLAB is committed to equity in employment and encourage applications from all qualified applicants, including women, aboriginal peoples, members of visible minorities and persons with disabilities. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents.

SNOLAB will provide support in its recruitment processes to applicants with disabilities, including accommodation that takes into account an applicant's accessibility needs.

Further information about SNOLAB may be found at www.snolab.ca

Posting Date: May 6, 2019