

Federation Engineering

Job Title	<i>Lead Process Engineer</i>
Location	<i>Calgary or Sherwood Park, AB (Hybrid Work)</i>
Type	<i>Full-Time</i>

Job Purpose

Join our dynamic team as a Lead Process Engineer, where you'll play a key role in diverse projects across refinery, natural gas, conventional oil, SAGD, oil sands, energy generation, fertilizer, and other energy sectors.

In this role, you will lead and oversee FEED studies, process simulations, hydraulic analyses, equipment sizing and process engineering documentation development. You will ensure high-quality engineering work is delivered within project timelines and collaborate with multidisciplinary teams to optimize project outcomes. Reporting to the Process Engineering Manager, you will provide technical leadership across all project phases - from conceptual studies through detailed engineering. This is an excellent opportunity to leverage your technical expertise to shape energy projects.

Key Duties and Responsibilities

Process Design:

- Lead process development and solution evaluation for client applications
- Own process engineering input into technical and commercial proposal development
- Lead FEED development on project opportunities
- Ensure process engineering deliverables comply with the project design and operation philosophies established in the design basis and/or performance specifications
- Ensure that the interfaces between process systems and other systems are fully defined and implemented in accordance with project requirements
- Oversee equipment sizing and hydraulic calculations
- Review and approve design calculations and design briefs for equipment
- Lead development and approval of heat and material balances
- Guide preparation of and approve equipment specifications and datasheets
- Lead technical evaluations and vendor documentation review
- Act as the key technical interface between vendors, contractors and clients
- Oversee and approve process flow diagrams and piping & instrumentation diagram development
- Lead process safety engineering activities, including overpressure risk assessment, relief load quantification, relief system design, and relief valve sizing and selection
- Participate in HAZOPs and ensure timely close-out of action items
- Review and approve detailed engineering reports, studies, and briefs
- Lead coordination with other disciplines to ensure a timely and accurate flow of design information, while ensuring departmental and client standards are maintained
- Identify and mitigate technical risks
- Develop and recommend improvements in design standards to lower costs, improve work quality and facilitate plant maintenance

Client Relationships & Business Development:

- Engage current and potential clients in the Calgary marketplace
- Cross-sell engineering and/or construction services to clients
- Provide exceptional client service – dependable, responsive, sensible

Project Management:

- Act as the process engineering lead for assigned projects, owning scope, schedule, and quality
- Develop process engineering estimates, schedules, and resource plans

Office Leadership:

- Contribute to a dynamic workplace culture in Calgary and Sherwood Park
- Mentor, coach, and develop team members

Other duties and responsibilities as required.

Qualifications

Skills and Experience:

- Degree in Chemical or Mechanical Engineering with 12+ years of process engineering experience
- Registered as a P.Eng. with APEGA
- Extended experience in O&G/Chemical/Petrochemical industries is an asset
- Strong competency running and analysing outputs of process simulation software (HYSYS, Symmetry, Unisim, PROII, FlareNet etc.) is an asset
- Proven experience in leading Pre-FEED, FEED and Detailed Design phases of a project, including oversight of engineering teams
- Experience supervising engineers, allocating work, and managing deliverable schedules
- Expert in generating and reviewing process engineering calculations e.g. heat and material balances, hydraulic evaluations, equipment sizing and ratings, relief calculations, etc.
- Strong understanding of process system control design and development of control philosophies
- Deep knowledge of process safety methodologies (such as HAZOP) is an asset
- Demonstrated ability to lead multidisciplinary coordination and resolve technical conflicts
- Demonstrated ability to present technical work directly to clients and represent the company in formal and informal project discussions.
- Valid driver's licence required

Personal Characteristics:

- Technically broad-minded, generalist, not afraid of delving into technical issues across the engineering spectrum
- Self-starter, independent worker, dedicated, and dependable
- Decisive, willing to make well-reasoned decisions and accountable for decisions
- Excellent written and verbal communication skills
- Leadership skills required: high emotional intelligence, high integrity, decisiveness, lack of ego
- Believes in making long-term business relationships with team members and clients
- Interested in investing in a long-term career with a growing company

Work Environment

At Federation, we support flexible working arrangements for our team. Our hybrid work model includes three days in the office (Tuesday to Thursday) and two days of your choice, whether from home or the office (Monday and Friday). We also offer half-day Fridays to promote work-life balance.

From time to time, travel to client sites or other Federation offices may be required (up to 10%).

How to Apply

Please send your resume and cover letter to leo@ssrhr.ca. Indicate the position title in the subject line of your email.

We thank you for your interest, however, only those applicants selected for an interview will be contacted.