

POSITION DESCRIPTION

Position Title	Research Intern - Industrial Applications, Mechanical / Process Engineering (STAC)
Department/School	Selkirk Innovates
Reports to	Jason Taylor, Department Head and Research Lead
Employee Group	N/A
Pay Grade	\$21.97/hr + 4% in lieu (currently enrolled students) \$23.97/hr + 4% in lieu (recent graduates)
Total Hours	Approximately 400
Work Term	3-6 months with possibility of 400-hour extension, based on performance and funding availability.
Start Date	Anticipated start in April 2026, pending identification of qualified candidate
Location	Selkirk Technology Access Centre (STAC), Trail BC
How to Apply	Submit resume and cover letter as attachments to jtaylor@selkirk.ca by February 20, 2026

POSITION SUMMARY

This internship is specifically designed for students (or recent graduates) enrolled in 3rd or 4th year Mechanical Engineering or Chemical Engineering, Mechanical Engineering Technologist/Technician, Process Engineering, or Chemical Technologist/Technician to:

- Develop professional competencies related to their course of studies
- Transfer their classroom understanding of academic concepts to engineering research.

The intern will work with Selkirk Innovates, the Applied Research and Innovation division of Selkirk College, specifically the advanced manufacturing researchers at the Selkirk Technology Access Centre (STAC).

This is a Mitacs Accelerate Internship supporting the STAC. This internship is in partnership with KC Recycling, the largest lead acid battery recycler in Western Canada and the Pacific Northwest of the US. This internship will contribute to the optimization of KC Recycling's lead battery recycling operation. The successful applicant will be required to enroll in Selkirk Innovates' Applied Research and Innovation Internship training program, which currently does not have a fee.

Potential internship deliverables include assisting in the installation and commissioning of a new wastewater treatment and acid reclamation plant; integrating into the existing plant; development of P&IDs and other engineering documentation; supporting equipment selection and automation integration; supporting regulatory compliance review and environmental and permitting; load studies, and strategic energy management focused projects; preliminary process design for neutralization, filtration, pH control, and material separation; development of process-flow models; supporting integration of system monitoring; process optimization for polypropylene and battery-materials recovery; plant data analysis and hands-on support for R&D and continuous-improvement projects across plastics, lead, and battery recycling.

COMMITMENT TO INCLUSIVE EXCELLENCE

The diversity of our workforce is at the core of our innovation and creativity and strengthens our research and teaching excellence. In keeping with our strategic commitment to Diversity and Inclusion, Selkirk College strives to embody the values of respect, collaboration and diversity, and has a strong commitment to employment equity.

Selkirk Innovates seeks qualified candidates who share our commitment to equity, diversity and inclusion, who will contribute to the diversification of ideas and perspectives, and especially welcomes applications from First Nations, Métis and Inuit peoples, members of racialized communities (“visible minorities”), persons with disabilities, women, and persons who identify as 2SLGBTQ+.

MAIN DUTIES AND RESPONSIBILITIES

- Equipment/mechanical layout design.
- Support for mechanical modifications, equipment installations, and reliability improvement.
- Assistance with conveying, drying, extrusion, and material-handling system upgrades.
- Drafting and modelling (SolidWorks, AutoCAD, Inventor, etc.).
- Sampling, materials characterization, and process-data analysis.
- Evaluation of additives, new technologies, and process improvements.
- Support for R&D, lab testing, and chemical separation.
- Optimization of separation, washing, extrusion, and purification processes for plastics and battery materials.
- Support for automation upgrades associated with new process installations.
- Contribute to reports, articles and presentations as required.
- Work both independently and with the research team.
- Complete Mitacs Accelerate Internship paperwork and reports.

QUALIFICATIONS

- Studies underway in (or recent graduate of) a Mechanical Engineering, Mechanical Engineering Technologist/Technician, Process Engineering, Chemical Engineering, Chemical Technologist/Technician, or other relevant training program.
- A strong candidate will have experience with drafting and modelling software.
- Experience with mechanical design for industrial plants, including pumps, piping, and material-handling and separation systems, is a strong asset, but not a requirement
- Strong technical and numeracy skills.
- Excellent attention to detail.
- Strong written communication skills.
- Excellent interpersonal, time management, and organizational skills.
- Demonstrated experience working independently and as part of a team.
- Proven ability to complete tasks under pressure and be flexible.
- Ability to prioritize work and meet deadlines.
- Candidates from all program areas are welcome to apply, including recent graduates.

RESUME AND COVER LETTER INSTRUCTIONS

Applicants are required to submit a resume and cover letter as attachments. The cover letter should include the following:

- Summary of why the applicant is interested in the position.
- Explanation of how the applicant’s skills and experience are relevant to the position.
- Explanation of how the applicant meets the required qualifications.
- Cover letters can be up to one page in length.

OPTIONAL: See complementary posting **“Research Intern - Industrial Applications, Electrical & Automation (STAC)”** for cross-disciplinary skill sets sought. Please discuss those skills or areas of interest in your cover letter if applicable.