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Request for Expressions of Interest

IMI's Workforce Development Program

Released on behalf of IMI's Minerals Industry and Government Funding Members

Prepared by: The International Minerals Innovation Institute

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Innovation is the ability to see change as an opportunity – not a threat.

- Steve Jobs



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Introduction & Purpose

The International Minerals Innovation Institute (IMII), on behalf of its funding members – BHP, Cameco, Fission Uranium, The Mosaic Company, Nutrien, Uranium Energy Corporation, and Innovation Saskatchewan – is pleased to invite Expressions of Interest (EOIs) for an upcoming Workforce Development Challenge Program. This initiative is being launched to support innovative, pilot-scale projects aimed at addressing critical talent and skills gaps in Saskatchewan’s minerals sector.

The program will focus on two priority areas:

- Creating new pathways for youth outside of traditional school systems to engage with the minerals industry.
- Accelerating entry into high-demand occupations, including approaches that shorten the time to competency and attract new talent into these roles.

This effort aligns with IMII’s strategic commitment to help build a more capable and representative workforce. Developed in collaboration with its members across industry, government, and academia, the Challenge Program offers a platform to prototype solutions that can expand Saskatchewan’s workforce in meaningful ways.

Through this Request for Expressions of Interest, IMII is seeking proposals that are:

- Innovative and new to Saskatchewan;
- Collaborative in approach; and
- Designed to run on a pilot basis over one to three years.

More information about proposal themes, timelines, and eligibility criteria is provided in the sections that follow. IMII anticipates issuing additional calls in the second half of 2025.

Background Information

The International Minerals Innovation Institute (IMII) is Saskatchewan’s industry-driven innovation network, supporting collaboration among minerals producers, government, academia, and solution providers. Together, these partners work to accelerate innovation in technology, workforce development, and thought leadership for the province’s minerals industry.

Since its establishment in 2012, IMII has supported 29 education, training, and inclusion projects with 13 different partners, alongside two scholarship programs – *iMpowered* and *Mining Futures*. Combined, these initiatives have represented nearly \$14 million in investment, with IMII contributing more than \$8 million on behalf of its members.

Saskatchewan is home to the world’s largest potash production and is the second-largest global producer of uranium. The province hosts more than a dozen world-class mining operations – with several more under development – offering thousands of rewarding, well-paying careers.

However, like many sectors, Saskatchewan’s minerals industry is facing increasing difficulty in recruiting and retaining the skilled workers it needs to grow. In response, IMII has worked with its industry members to better understand current challenges and explore emerging solutions. This work has guided the development of a refreshed workforce development focus, targeting two specific gaps:

- Engaging youth outside the traditional school system and guiding them into post-secondary education and careers in the minerals sector.
- Creating alternative pathways to completion for individuals pursuing high-demand occupations in the industry.

Objectives

This Request for Expressions of Interest (REOI) is intended to generate project proposals that directly respond to four industry-identified workforce development needs:

1. **FlexPath**
Develop **non-linear pathways** for entry-level employment and retraining opportunities within the minerals industry. These pathways will target youth outside of the traditional high school system.
2. **AI-Supported Remote Learning**
Leverage **artificial intelligence** to create accessible, remote learning opportunities for individuals in **rural, remote, and Indigenous communities**, enabling greater participation in post-secondary education and workforce training.
3. **Entry-Level Instrumentation Intern**
Attract more individuals into **high-demand instrumentation occupations** by supporting their successful completion of education and smooth transition into the minerals workforce.
4. **Mining-like Engineers**
Design an approach to develop **“mining-like” engineers** – individuals trained to meet mining-specific needs despite a shortage of formally trained mining engineers.

More details about each of these opportunity areas are provided in the following section.

Program Description

Saskatchewan’s mining and minerals industry, including key critical minerals like potash and uranium, is facing significant labour market challenges.

In a 2023 study, Deloitte characterized the industry as facing a “labour conundrum,” driven by growing demand for entirely new roles, an aging and rapidly retiring workforce, a limited and disengaged pool of younger workers, and shifting skill demands. The report also noted low participation by immigrants, underrepresentation of equity-deserving groups, and a mismatch between available skills and current job vacancies. In fact, Deloitte found that the number of skills vacancies exceeds the number of job vacancies, highlighting a critical talent shortage. Overall, the study projected the industry would need to train, recruit, and retain an additional 5,000 workers by 2030 (*Building Tomorrow’s Skills-Based Province*, Deloitte Canada).

Building on this, a 2024 report jointly published by the Mining Industry Human Resources Council (MiHR) and the Saskatchewan Mining Association (SMA) — [Saskatchewan Mining Labour Market Analysis](#) — explored whether Saskatchewan’s labour market can support the mining sector’s future growth. It concluded that, without external support or systemic changes, Saskatchewan’s labour force will struggle to meet demand, especially if the goal is to rely solely on Saskatchewan-based workers.

The report identified five key factors impeding labour market sustainability:

- A reliance on labour mobility to bring in talent from outside the province.
- A widening age gap among the existing workforce.
- Persistent underperformance in engaging underrepresented groups.
- Limited depth in occupational talent pools.
- Low levels of entry into relevant occupations and training programs.

Each of these factors presents a barrier to responding effectively to emerging opportunities in Saskatchewan’s growing minerals sector. Under MiHR’s baseline forecast, mining employment in the province is expected to grow by 35%, increasing from 11,043 jobs in 2023 to 14,892 in 2034. However, it’s projected that only 11,131 of these positions will be filled by Saskatchewan workers, leaving a labour gap of approximately 3,761.

IMI’s Priorities

In response to these trends, IMI and its industry members have identified two strategic workforce needs:

- More people — including youth, women, Indigenous peoples, and newcomers to Canada.
- Stronger collaboration — to co-create the pathways needed to build and sustain a future-ready workforce.

As a result, the IMII Workforce Development Program has prioritized two areas for innovation and investment:

- ***New engagement pathways for youth outside the K–12 system***, to address declining enrollment and increase awareness of mineral sector careers, including trades, technical, and university education.
- ***New pathways into high-needs occupations***, with targeted solutions to address reliance on labour mobility, lack of diversity, and unmet demand for skilled workers.

Expressions of interest (EOIs) should demonstrate an understanding of these core challenges and clearly articulate how their proposed solutions align with the program’s intent.

Scope

This REOI invites EOIs aligned with one or more of the following four opportunity areas. Each outline IMII’s understanding of the current challenge and the desired direction for project proposals.

FlexPath

For many young people, the conventional linear pathway — from Kindergarten through Grade 12, directly into post-secondary or the workforce, and then into a career — doesn’t reflect reality. Some young people don’t complete high school within four years, others delay post-secondary education, and some leave school entirely before finding their path to employment.

As a result, there are growing numbers of young people who are outside of both school and work and seeking purposeful career opportunities.

IMII and its member companies believe the minerals industry offers just such a career path and are willing to invest in creating new, non-linear pathways to connect young people with opportunities in the industry.

FlexMath (a working title) is envisioned as a program that provides flexible, responsive access points for young people to either enter the minerals industry directly or gain the skills they need to do so. As currently conceived, a successful FlexPath program should include:

- Strong partnerships with two or more IMII member companies to ensure direct industry relevance.
- Support from education and training providers willing to offer flexible delivery options (e.g., night classes, modular learning).
- A focus on competency-based progression — where skills matter more than credentials.

An example of how *FlexPath* could be developed and delivered follows:

- An engaging presentation or pitch for youth that provides them with the opportunity to learn more about the minerals industry
- Opportunities for youth to be paired with industry mentors to help support them in applications to gain an entry position in a company.
- Support those in entry-level positions (e.g., operators) for career planning and skill development (e.g., upskilling).
- Post-secondary institutions (e.g., a regional college, Saskatchewan Polytechnic, a university), with industry sponsorship, offer flexible times (e.g., night classes) and approaches (e.g., upgrading) for young people to gain additional skills without requiring a commitment to a multi-year academic program.
- Minerals companies and accreditation bodies collaborate on creating pathways that are focused on competencies rather than credentials.

EOIs must offer new ways to engage and support both minerals' companies and post-secondary institutions in delivering such a program. EOIs should detail how their approach will bring youth into the minerals industry — either directly or via new connections to education — with clearly defined and measurable outcomes.

AI Supported Remote Learning

While Saskatoon is a hub for the minerals industry, many potential and current workers live in rural, remote, or Indigenous communities. These communities often lack access to training opportunities without requiring relocation — a major barrier.

IMII and its members believe emerging technologies, including artificial intelligence (AI), can help remove this barrier by enabling remote access to education and training that's:

- Responsive to learner needs.
- Accessible through everyday technology (e.g., smartphones).
- Relevant to mining industry occupations.

Possible innovations could combine:

- AI tools for capability assessments and personalized learning.
- Mixed reality, 3D models/printing, and mobile-first learning delivery.
- Hands-on learning delivered “to the home” using models that borrow from successful online platforms (e.g., combining elements of YouTube’s visuals and Amazon’s personalization

In working up an EOI, IMII needs applicants to take note that for some rural, remote or reserve communities housing can be an issue (e.g., due to the number of people in a household), and there may be a need to bring the community in for a place to have the training.

Applicants should consider local realities — for example, in many communities, housing shortages or crowded homes may require centralized community training spaces.

Importantly, training content must be directly aligned with the needs of Saskatchewan’s mining sector. MiHR’s 2024 report identifies both the 10 most prevalent and 10 critical occupations for the sector (see Tables 1 and A1 of the report).

Entry Level Instrumentation Interns

Instrumentation, automation, and control technicians are among the highest demand occupations in Saskatchewan’s mining sector due to ongoing digital transformation. Yet creating this talent is challenging — requiring lengthy and centralized training at institutions like Saskatchewan Polytechnic.

IMII’s industry members have proposed a new approach: start with work, then build toward credentials.

This pathway would create a new **entry-level role**, such as an “Instrumentation Technician Intern,” which allows people to:

- Gain immediate, **on-the-job experience** with a minerals company.
- Receive **initial training onsite**, supplemented by tailored instruction.
- Transition into a formal post-secondary program with **academic credit** or advanced standing based on their work experience.

In this flipped model, interns are **employees**, not traditional students — which allows employers to provide more holistic support (e.g., academic tutoring, family assistance). Post-secondary partners are critical in ensuring the **training contributes directly to credential attainment**.

A strong EOI would:

- Include industry and education partners committed to co-developing the intern role and support model.
- Show how site-based training leads into a diploma or journeyperson path.
- Consider how to extend access to **rural, remote, or Indigenous learners** without requiring relocation.

Mining-Like Engineers

While Saskatchewan’s mining industry employs engineers from multiple disciplines, mining engineers make up half of the industry’s engineering hires. Unfortunately, enrolment in mining engineering

programs has declined across Canada, and Saskatchewan currently has no standalone mining engineering degree.

However, there are key building blocks:

- Mining Engineering Options (MEOs) in chemical, geological, and mechanical engineering at the University of Saskatchewan.
- The Mining Engineering Technology (MET) program at Saskatchewan Polytechnic, a two-year program with potential for laddering into further education.

IMI is seeking EOIs to develop new pathways to train and recognize “mining-like engineers” — individuals who may not hold a mining engineering degree but can develop equivalent knowledge and skills.

Options include:

- Offering core MEO courses to students in other engineering disciplines or practicing professionals (e.g., as part of a certificate program).
- Creating pathways for science graduates (e.g., geology, chemistry) to gain mining-focused credentials.
- Supporting work-based engineering degree models (e.g., UK-style degrees or degree apprenticeships, like York University’s program in electrical engineering).

EOIs may also support:

- Credential recognition for internationally trained engineers, including authentic assessments and streamlined approvals.
- The development of Saskatchewan-based solutions to help address national and global engineering talent shortages in mining.

Guidance for Expressions of Interest

To help IMII and its industry members assess the potential of your proposed workforce development pathway, we encourage you to address the following elements in your Expression of Interest. These elements are intended to help illustrate the **value, feasibility, and alignment** of your idea with the objectives of the Workforce Development Challenge Program.

While EOIs do not need to provide fully detailed plans, they should demonstrate **clear thinking, early stakeholder engagement**, and a compelling case for investment.

1. **Pathway Objectives:** Outline the goals and objectives of your pathway. This includes the skills and competencies the pathway aims to develop and, if applicable, the target population it will serve.
2. **Needs Assessment Match:** Provide an initial analysis of how the pathway matches the current workforce needs and gaps in Saskatchewan's minerals industry. This could include supplemental data on employment trends, skill shortages, and future workforce demands.
3. **Pathway Design:** Share your vision for the structure and components of the pathway, including curriculum, training methods, and delivery formats (e.g., in-person, online, hybrid). Highlight any innovative approaches or best practices that will be incorporated.
4. **Stakeholder Engagement:** Indicate how the pathway will involve key stakeholders, such as employers, educational institutions, and others. Include plans for partnerships and collaboration that could contribute to the pathway's success.
5. **Initial Implementation Plan:** Outline the timeline and roadmap for the pathway's implementation, including key milestones and activities. This should also address at a high level resource allocation, staffing, and logistics.
6. **Evaluation and Metrics:** Suggest methods for evaluating the pathway's effectiveness and measuring outcomes. Include metrics for tracking progress, such as participant completion rates, job placement rates, and skill acquisition.
7. **Sustainability Plan:** IMII supports pilot and demonstration projects. Please share your initial ideas on how the pathway could be sustained or scaled beyond the pilot stage, including how it might attract longer-term support.
8. **Budget and Financial Plan:** Present a budget that outlines the costs associated with creating, developing and/or deploying the pathway, and potential funding sources. Note that IMII expects project partners to contribute/raise 25% of overall project costs.

By including these key deliverables in your EOI, you can effectively communicate the value and feasibility of your workforce development pathway to IMII's funding members and potential stakeholders.

Timelines

IMI has established the following anticipated timelines for the REOI process and subsequent proposal process for selected applicants:

- Deadline for submission of EOIs – June 27, 2025
- Internal review by IMII funding members – August 1, 2025
- Meetings with shortlisted applicants to discuss proposal submissions – August and September 2025
- Deadline for submissions of proposals – October 31, 2025
- Internal review by IMII funding members – November 28, 2025
- Board project approvals – December 2025

Projects funded through this process are expected to demonstrate their feasibility or viability over a period of one to three years.

Phased projects spanning up to five years may also be considered, where a longer timeline is required to clearly demonstrate impact or value.

Submission Requirements

Thank you in advance for responding to this REOI.

EOIs should be no more than 5 pages in length and submitted as a Word document using the template provided by IMII. This length allows applicants to provide sufficient detail on the proposed pathway's objectives, design, implementation plan, and other key deliverables without overwhelming the reviewer.

The content and format should speak to the deliverables outlined above.

Outside of the EOI there are no required documents.

If you have any questions or require clarification, please contact IMII by email – admin@imii.ca.

Submissions are to be made by email at the above address.

The submission deadline is June 27, 2025.

Evaluation Criteria

Expressions of Interest (EOI) will be reviewed by a panel of representatives from IMII's funding members. Selected applicants will be invited to meet with IMII and interested funders to receive feedback on their submission and discuss the parameters and requirements for a formal project proposal.

The panel will review the pathway's key deliverables for fit against the needs of the minerals industry (as described in this REOI document) and the degree to which the pathway represents a new or innovative approach to the overall objectives of IMII's Workforce Development Challenge Program.

It is important to note that IMII does not invest in education and training institutions outside of the Province of Saskatchewan, and the pathways proposed for development must be deployed within Saskatchewan for the benefit of IMII's minerals industry members.

Terms and Conditions

While IMII does not have specific qualifications and/or experience requirements for this REOI, applicants should identify any specific qualifications or experience they have that is relevant to their EOI.

Organizations must not be bankrupt or involved in legal proceedings that could affect their ability to deliver a project if selected to submit a proposal.

EOIs must provide a clear indication of the budget range and subsequent financial proposals should not exceed this range without prior discussion with and agreement by IMII.

EOIs must be submitted by the deadline date. Late submissions are typically not accepted.

IMII retains the right to accept or reject any EOI application. Costs incurred for preparing the EOI are borne by the applicants.

Information provided in the EOI will be kept confidential and used only for the purpose of evaluating the application.

These terms ensure that the process is fair, transparent, and that the most qualified applicants are selected for the subsequent project development process.