INTERNATIONAL MINERALS INNOVATION INSTITUTE

## STEM+ - Building STEM Career Capacity for Indigenous Students

The University of Saskatchewan's STEM+ initiative, aimed to enhance STEM career capacity among undergraduate Indigenous students. This two-year project integrated innovative programming, mentorship, and culturally responsive learning opportunities to support student success in STEM degree pathways, with a focus on career readiness in the Natural Resources and Mining sectors.

## **Key Findings & Program Outcomes**

- 1. Increased Participation & Retention:
  - NSERC Undergraduate Research applicants increased from 4 (2023) to 16 (2024).
  - 93% of students reported STEM+ helped clarify academic and career goals.
  - Higher retention in STEM degree programs, particularly for Indigenous women.
- 2. Enhanced Diversity & Inclusion:
  - Stronger participation of Indigenous women and student parents in STEM.
  - Record enrollment in ISAP STEM and STEM Prep Learning Communities in 2024.
  - STEM+ activities supported 75% of Indigenous students nominated for USask Indigenous Achievement Awards.
- 3. Career Readiness & Academic Success:
  - Increased research and internship placements with industry partners (e.g., Nutrien, SRC, HudBay Minerals, SSR Mining).
  - Expanded mentorship opportunities, including engagement with Elders and industry role models.
  - Students reported improved self-advocacy, professional confidence, and career awareness.
- 4. Program Evaluation & Development:
  - STEM+ Writing Lab improved student retention, reducing attrition rates to 11%.
  - New "Opportunities Coach" role secured to continue STEM+ mentorship beyond project funding.
  - ISAP's small cohort academic writing support and Geology 121 course funded for Winter 2025.

The International Minerals Innovation Institute (IMII) is the trusted hub for expertise and innovation in Saskatchewan's minerals industry, driving transformative change, inspiring actionable solutions, and building a sustainable and globally respected minerals sector in the province. As a member-based organization governed by industry, post-secondary education, and government, we unite to accelerate technological innovation, develop a representative workforce, and promote thought leadership. Together, we drive progress and shape the future of the minerals sector. www.imii.ca



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The STEM+ initiative significantly strengthened Indigenous student participation and success in STEM. By leveraging academic and industry partnerships, the program contributed to a robust applicant pool for professional STEM degrees and careers in Saskatchewan's vital economic sectors. The project's impact has led to institutional commitments ensuring the sustainability of key program elements, supporting Indigenous student achievement well beyond the pilot phase.

For more information, visit: STEM Pathways - University of Saskatchewan.

Proponent: University of Saskatchewan	
Project Duration: May 2022 - September 2024	
Project Cost:	\$335,990
IMII Contribution:	\$220,990
University of Sask:	\$ 93,000
SaskPower:	\$ 24,000

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