

# BACHELOR OF ENGINEERING IN RESOURCE ENGINEERING

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Engineering. Two options are available: B.Sc. (General) with Diploma in Engineering; and B.Sc. with Major and Diploma in Engineering.

## Bachelor of Engineering in Resource Engineering:

The Bachelor of Engineering in Resource Engineering provides a rigorous four-year (9-semester) education grounded in mathematics, science, engineering science, engineering design, and complementary studies. Students select from two technical specializations:

- Mining Engineering
- Renewable Energy Engineering

The mining option covers subjects such as rock mechanics, mine design, ventilation, mineral processing, and mine safety, while the renewable energy option focuses on the design and integration of solar, wind, and emerging renewable systems along with energy storage. Both streams emphasize a holistic approach to resource engineering, including sustainability, indigenous engagement, management and financial fundamentals, alongside the use of modern engineering tools and software.

The program includes a 16-month paid co-operative education component, typically completed between the third and fourth years. These placements are arranged with local and national industry partners in generally two, eight-month placements, enabling students to gain practical experience in project design, operations, and analysis, often working on multidisciplinary teams. These co-op terms allow students to participate in engineering projects—from planning through implementation—and to apply technical concepts learned in the classroom to real-world challenges.

Studies are developed in collaboration with industry partners to reflect current tools, methods, and standards. Industry professionals regularly contribute guest lectures, site visits, and mentorship of the final-year capstone design project.

## Diploma in Engineering:

Students who wish to pursue a different engineering discipline may exit the program after two years with a Diploma in Engineering, providing a solid foundation for transfer into other institutions, such as Dalhousie University, in the fields of:

- Mechanical, Civil, Electrical, Chemical, Industrial, Environmental, or Computer Engineering.

Students wishing pursue a Diploma in Engineering in these disciplines should contact a Science Advisor to ensure they take the correct discipline-specific courses which may differ. The two-year Diploma in Engineering constitutes the first two years of an Engineering degree program accredited by the Association of Professional Engineers of the Provinces through the Canadian Accreditation Board.

## Bachelor of Science with Diploma in Engineering:

Diploma in Engineering students may also choose to continue their studies at Saint Mary's to obtain a Bachelor of Science with Diploma in