



Water and Wastewater Treatment Operations

The reuse of treated wastewater has become a sustainable option for minimizing water scarcity problems. Learn the skills needed for a rewarding career in municipal and industrial water/wastewater systems.

Graduates will develop a working knowledge and skills related to treatment technologies and water/wastewater systems operations including related laboratory analytics. Through in-class learning and recognized work experience they will be prepared to write industry-required certification exams including the 4th class power engineering and water/wastewater treatment.

Graduates of the program will possess the following proficiencies:

- perform water analysis tasks to support plant water quality targets
- analyze current and past data to support plant performance decisions
- apply knowledge of water/wastewater system processes including pressure vessels and power generating equipment to achieve performance requirements
- perform basic preventative maintenance tasks
- apply fundamental knowledge of chemistry and biology to maintain process performance
- operate according to all applicable regulatory guidelines
- collaborate with stakeholders to achieve optimum process performance
- control water/wastewater collection and distribution systems
- run high-pressure boiler and steam systems

Is this the right fit for me?

Students with higher grades usually experience more success in SAIT programs.

An interest in science and mathematics would be an asset. Specific interest in chemistry and biology is desirable.

Credentials

After successfully completing this program, graduates will receive a SAIT Water and Wastewater Treatment Operations certificate.

Admission requirements

Application dates

Applications are accepted until the program start date but are subject to change.

- **Fall 2022 start:** applications opened on Oct. 6, 2021.

Program requirements

Completion of the following courses or equivalents:

- at least 50% in English Language Arts 30-1 OR 50% in English Language Arts 30-2
- at least 50% in Math 30-1 OR 60% in Math 30-2

- at least 50% in Chemistry 30
- at least 50% in Biology 20

All applicants must demonstrate [English Language Proficiency](#) prior to admission, including students educated in Canada.

SAIT accepts [high school course equivalents](#) for admission. If you don't meet the requirements, consider [Academic Upgrading](#).

SAIT evaluates international documents for admissions. After you've applied, consider our [international document assessment service](#) if your education is from outside of Canada.

Direct entry: four-step process

Step 1: Read the program information to see the qualities needed for student success.

Step 2: Ensure that you meet all of the admission requirements listed above.

Step 3: [Apply](#) to Water and Wastewater Treatment Operations and [submit your transcripts and/or anticipated final grades](#).

Admission will be extended on a first-qualified, first-offered basis until the program is full.

Step 4: Find out how to monitor your application status [after you apply](#).

Communication during admission

Email is the primary source of communication during the selection process. Ensure your personal email account is managed appropriately to receive our emails, files and communications. We recommend you add the macphail.students@sait.ca domain to your safe senders' list or you risk missing critical email messages.

Costs 2022/23

Domestic tuition and fees

Cost per credit: \$572

| Year | Number of semesters | Tuition fees | SAIT fees | Saitsa fees* | Total |
|------|---------------------|--------------|-----------|--------------|-------------|
| 1 | 3 | \$18,876 | \$1,065 | \$698.50 | \$20,639.50 |

International tuition and fees

Cost per credit: \$754.18

| Year | Number of semesters | Tuition fees | SAIT fees | Saitsa fees* | Total |
|------|---------------------|--------------|-----------|--------------|-------------|
| 1 | 3 | \$24,887.94 | \$1,065 | \$698.50 | \$26,651.44 |

*Maximum fee. Actual fees may be less and are based on the number of credits a student takes per semester and whether they opt-out of health and dental benefits.

SAIT fees

- Campus athletic and recreation fee: \$245
- Universal transit pass (Upass): \$320

- Student support fee: \$250
- Student technology fee: \$250

Saitsa fees

Student Association fee

- Maximum: \$436.50

This is the maximum amount the student will pay. Actual fees may be less and are based on the number of credits the students take per semester.

Health and dental fees

- Health plan: \$127
- Dental plan: \$135

Students with existing health and/or dental plans can opt-out. Please refer to [Saitsa's website](#) for information.

For more information on health and dental benefits for international students, please contact the [International Centre](#).

Books and supplies*

For an estimate of the costs associated with purchasing a computer that meets the program's hardware and software requirements, see our [computers and laptops page](#).

Learn more about [tuition and financial aid](#).

*Tuition, fees, books and supply costs are subject to change.