Chemical Engineering Technology (Advanced Diploma)

Meet our students

Our students receive practical, hands-on learning in laboratory settings and industrial environments. During their studies, these students will work directly with state-of-the-art chemical engineering and laboratory equipment, providing them with advanced skills that are sought after in the industry. This program has a strong focus on careers that involve complex, industrial-scale processes which distinguish these students from their peers. Graduates from this program will have completed all the academic requirements for professional certification with OACETT.

Learn more about the classes these students take by visiting the program webpage.

Core competencies and skills

- Designing and operating chemical processes.
- Problem-solving and performing tasks by applying principles of mathematics (algebra, trigonometry, basic calculus), physics, chemistry (organic, inorganic, physical, analytical), and chemical engineering.
- Selecting and using current technologies in chemical engineering tasks and projects.
- Researching and preparing written formal reports.
- Designing and conducting experiments, analyzing and presenting the results.
- Implementing and evaluating quality control and quality assurance procedures.

Work term availability

- Winter (January – April)
- Summer (May – August)
- Fall (September – December)

Note: Effective Winter 2025, students will be available for 4, 8, or 12-month work terms.

Work term capabilities

- Preparing solutions and samples required for analysis and synthesis.
- Synthesizing, purifying, and characterizing organic and inorganic compounds.
- Wet analytic methods including volumetric, gravimetric, and qualitative analysis.
- Instrumental analytic methods using common types of instruments.
- Culturing, staining, and identifying micro-organisms.
- Separating and characterizing selected biochemical species.
- Analyzing simple industrial control systems.
- Conducting laboratory procedures for quantitative and qualitative tests.
- Problem-solving using selected topics of physical chemistry.
- Preparing written reports based on experimental data and research.

Employer resources

- Employer webpage
- Program information
- Program course schedule

Post a job

To post a job, log in to our online platform Sheridan Works.

Don't have an account? Create one today using our Employer Registration Guide.