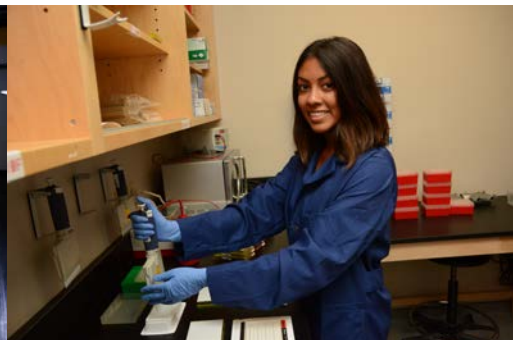
Bachelor of Science

Chemistry





ABOUT THE PROGRAM

Chemistry is the study of the structure and behaviour of molecules. This includes the construction of molecules with specific properties for use in areas such as pharmaceuticals and the nuclear industry. You will also focus on the determination of trace chemicals in the environment using techniques for separation and spectroscopic analysis and the design of new materials for the microelectronics industry. Your learning will be facilitated by Guelph's award winning faculty in chemistry, electro-chemistry, toxicology, biochemistry and spectroscopy.

WHY CO-OP?

As a co-op student, you'll gain relevant work experience, build professional networks, and develop essential interpersonal skills needed to succeed in the workplace, all while being paid and earning your university degree. Guelph's co-op program is unique due to the exceptional level of support provided, including an online preparatory course, a personal connection with Co-op Co-ordinators to assist you during the employment process, and access to senior student mentors.

COURSE SEQUENCING

In the Chemistry Co-op program, you will participate in four co-op terms in addition to eight academic semesters throughout your five years at the University of Guelph. This sequencing is viewable below:

YEAR	FALL	WINTER	SUMMER
ONE	Academic	Academic	Off
TWO	Academic	Work	Academic
THREE	Work	Academic	Work
FOUR	Academic	Academic	Work
FIVE	Academic		

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SAMPLE JOBS

There is a diverse selection of jobs made available to Chemistry Co-op students, in both the government and private sectors within the pharmaceutical, biomedical, agricultural, and various other industries. You may conduct research, work in public health in a clinical setting, and may work in a laboratory, a hospital, and/or in an office setting. Below are some examples of past positions held by Chemistry co-op students.

Production Assistant

The Production Assistant will be required to support the production schedule of paint products. Associated tasks include milling of paints, paint let- down work, and other related lab and production duties.

Quality Control Specialist

You will conduct chemical, physical, spectroscopic and chromatographic examination of raw materials and finished product; preparation of test solutions, reagents, standards and other common laboratory solutions; record keeping to current GMP standards. You will also maintain laboratory equipment.

Project Technologist

Students will take on the tasks of working with company's scientist to investigate customer complaints, assist with writing investigation reports, provide customer support over the phone, document customer complaints and corrective actions and participate in other product testing as required.

Additional Sample Jobs: Quality Assurance Specialist, Electrochemistry Researcher, Chemical Laboratories Analyst, Pharmaceutical product development work, and more.

SAMPLE EMPLOYERS*

- Environment Canada
- Bio Agri Mix LP
- GE Water and Process Technologies
- Canadian Nuclear Laboratories

*This shows a sample of recent co-op employers, and employers will vary depending on employer recruitment needs. During a job search, students are encouraged to be actively engaged and are also supported in establishing and maintaining their own personal contacts.

SALARY INFORMATION **Average Weekly Salary Range: $595 - $605***

*Salary ranges are shown as rates before deductions. Statistics are based on jobs held by co-op students in 2016. These ranges may fluctuate on an annual basis in response to economic conditions.

ABILITIES & KNOWLEDGE ACQUIRED

- Sound knowledge of the theoretical foundations of the chemical sub-disciplines of analytical, inorganic, organic and physical chemistry
- Practical laboratory experience in wet bench chemistry including inorganic and organic synthesis, quantitative analysis and analytical instrumentation
- Well-developed problem solving and computer literacy skills
- Strong communication and teamwork abilities