



## CAREER PATHFINDERS

### BACHELOR OF SCIENCE DEGREE WITH A MAJOR IN

# CHEMISTRY

## Overview

Chemistry is the study of the property and composition of matter, the transformations that matter may undergo, and the energies associated with such transformations. There are five main areas of chemistry: analytical chemistry, inorganic chemistry, organic chemistry, physical chemistry, and biochemistry. Chemists are involved in many fields, including environmental protection, pharmaceutical science, forensic science, toxicology, agricultural science, food science, education, geochemistry, biochemistry, materials science, biotechnology, oceanography, computer modelling, and plant management.

*“The small size of the Chemistry department allowed me to gain access to the professors, get valuable hands-on experience in the labs as both a student and a lab teaching assistant, and participate in the organization of an undergraduate chemistry conference.”*

- Angele Maki (BSc Chemistry), who completed her PhD in Chemistry at Stanford University.

## Job Titles

- Chemical Technologist and Technician (NOC 22100)
- Chemist (NOC 21101)
- Post-secondary Teaching and Research Assistant (NOC 41201)
- Teacher (NOC 41220)
- Commissioned Officer of the Canadian Armed Forces (NOC40042)
- Medical Laboratory Technician and Pathologists' Assistant (NOC 32120)
- Technical Sales Specialist – Wholesale Trade (NOC 62100)
- Other Medical Technologists and Technicians (NOC 32129)
- Natural and Applied Science Policy Researcher, Consultant and Program Officer (NOC 41400)
- University Academic/Lecturer/Researcher (NOC 41200) <sup>1, 2</sup>

1 The numbers following each job title refer to [Canada's National Occupational Classification \(NOC\) code](#). Jobs may require additional education or training.

2 Government of Canada. “Chemistry, General (40.0501), Bachelor's degree”. Job Bank, 31 March 2020, <https://www.iobbank.gc.ca/studentdashboard/40.0501/LOS05>

## Work Settings

- Government laboratories
- Industrial laboratories
- Hospital laboratories
- Pharmaceutical or chemical companies
- Schools
- Colleges
- Universities
- Police laboratories
- Fisheries
- Agriculture
- Mines
- Research facilities
- Armed Forces base

## Skills and Characteristics

- Creativity skills
- Analysis skills
- Communication skills
- Organizational skills
- Documentation skills
- Problem solving
- Research skills
- Teamwork skills

## Professional Associations and Other Links

- Chemistry Industry Association of Canada <https://canadianchemistry.ca/>
- Chemical Institute of Canada <https://www.cheminst.ca/about/about-csc/>
- Bioscience Association of Manitoba <https://www.biomb.ca/>

This document is intended to provide a starting point for your career research. For more information about UWinnipeg's Chemistry program, visit the [Department of Chemistry website](#) and the [Chemistry Fact Sheet](#).

Students are encouraged to [schedule an appointment with an Academic and Career Advisor](#) for assistance with career planning.

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