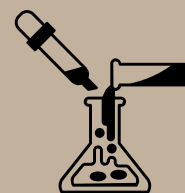


# Chemistry SPECIALIZATION

Courses for Students Enrolled Prior to Fall 2023



## FIRST YEAR

CHMI 1006E General Chemistry I\*  
CHMI 1007E General Chemistry II  
MATH 1036E Calculus I\*\*  
MATH 1037E Calculus II  
PHYS 1006E Introductory Physics I  
PHYS 1007E Introductory Physics II

### 12 elective credits#

\* Students lacking grade 12 4U Chemistry must first take CHMI 1041.

\*\*Students lacking grade 12 4U Advanced Functions or who have attained a grade of less than 60% must first take MATH 1912

## SECOND YEAR

CHMI 2117E Introductory Quantitative Analysis\*  
CHMI 2316E Inorganic Chemistry I  
CHMI 2426E Organic Chemistry I  
CHMI 2427E Organic Chemistry II  
CHMI 2516E Introductory Physical Chemistry I  
CHMI 2517E Introductory Physical Chemistry II  
MATH 1057E Linear Algebra I

### 9 elective credits#

§This program has a co-op option. Please contact the Department of Chemistry and Biochemistry for more information.

## THIRD YEAR

CHMI 2227E Biochemistry I  
CHMI 3116E Instrumental Techniques in Chemical, Biochemical and Environmental Sciences  
CHMI 3316E Inorganic Chemistry II  
CHMI 3317E Advanced Inorganic Chemistry  
CHMI 3416E Spectroscopic Techniques in Organic Chemistry  
CHMI 3537E Introduction to Quantum Chemistry  
STAT 2246E Statistics for Scientists

### 3 credits from:

PHYS 2006E Introduction to Electricity and Electronics  
PHYS 2016E Modern Physics (recommended)  
MATH 2066E Introduction to Differential Equations

### 6 elective credits#

§This program has a co-op option. Please contact the Department of Chemistry and Biochemistry for more information.

## FOURTH YEAR

CHMI 4615E Research and Seminar

24 elective credits#

# Elective credits

- students must include a minimum of 12 credits from the Arts  
- students must include a minimum of 3 credits in Biology, Geology, Engineering, or Environmental Science

- students must take a minimum of 15 elective CHMI credits at the third or fourth year level:

3 credits from CHMI 4100 series  
3 credits from CHMI 3300 series, or CHMI 4300 series  
3 credits of CHMI 3400 series or CHMI 4400 series  
3 credits of CHMI 3500 series or CHMI 4500 series  
3 additional CHMI credits at the third or fourth year level

**Note:** Many universities require a minimum of 18 CHMI credits at the fourth year level for admission to graduate programs.

**Note:** Students may not exceed 48 credits at the 1000 or 9100 level in their degree program.

Students enrolled in the Specialization in Chemistry may choose to add a stream to their degree program. Streams are available in Industrial Chemistry, Geochemistry, Material Chemistry, and Environmental Chemistry. This feature is designed to emphasize the various interfaces that exist between Chemistry and other disciplines in Science and Engineering, and allows students to tailor their program in accordance with their career objectives. Students choosing a stream will take the prescribed courses within their elective credits. They should consult with an academic advisor when planning their program of study and notify the Office of the Registrar of their intention to complete a stream.

