

# PhD in Chemistry

FACULTY OF ARTS AND SCIENCES | DEPARTMENT OF CHEMISTRY

## Overview and specifics


**NUMBER** 3-060-1-0

**LEVEL** Graduate

**TYPE** Philosophiae Doctor (Ph. D.)


**CREDITS** 90 credits


**PROGRAM TYPE** Dissertation or thesis track

 Admission in fall, winter and summer

 With international exchange option

 Day course

 Offered at the Montréal

 Offered at the Virtual

 Full-time

 Part-time

## Description



*The Department of Chemistry will be moving to the new Science*

*Complex in the fall of 2019. Discover your new surroundings in photos and video.*



**MORE INFORMATION**

This program provides students with a strong research training in a field of chemistry so that they can build upon their foundational knowledge and laboratory working skills and start working as research chemists as soon as they enter the job market. The wide range of career paths in this field requires students to have both solid foundational training and great flexibility. Students personalize their program based on their aspirations and chosen career.

## Objectives

The goal of this doctorate program is to train high-level scientific researchers. Students must carry out a project in a very specific area of chemistry and will develop their existing research skills. Students must also use their existing knowledge, gain new knowledge, and reflect a great deal on their chosen topic. Through their project, students will be able to develop their creativity and show their originality.

## Career prospects

The department offers solid research training in key sectors below, which hold a lot of job opportunities for chemists:

- Environment
- Pharmaceutical chemistry

- Biotechnology
- Nanoscience and nanotechnology
- Materials chemistry
- Computational chemistry

Chemists also work in highly varied fields in a number of industries:

- Agri-food
- Cosmetics
- Petrochemicals
- Pharmaceuticals
- Metallurgy
- Environment
- Plastics and rubber
- Pulp and paper

## Regulations

Studies in this program are governed by the educational regulations of the Faculty of Graduate and Postdoctoral Studies, and the following provisions:

### 1. Admission requirements

To be admitted as a regular student in the PhD (Chemistry) program, candidates must:

- Meet the general admission requirements (section XX) of the “Règlement pédagogique de la Faculté des études supérieures et postdoctorales” (educational regulations of the Faculty of Graduate and Postdoctoral Studies).
- Have an MSc in Chemistry (Thesis) from Université de Montréal or show proof of equivalent education
- Have obtained a grade-point average at the graduate level of at least 3.3 out of 4.3 or the equivalent.
- Have sufficient knowledge of English

## Application deadlines

Before submitting an application, check the application periods for the chosen session.

### Fall

- **Fall 2021:** From January 1st, 2020 to February 1st, 2021

### Winter

- **Winter 2021:** From May 1st, 2019 to November 1st, 2020

### Summer

- **Summer 2021:** From September 1st, 2019 to February 1st, 2021

## Programs of origin

Several Université de Montréal students in this program came from the following programs:

| PROGRAMS  | TYPE            | CREDITS    | NUMBER    | PERIOD | ENROLLMENT CAPACITY |
|-----------|-----------------|------------|-----------|--------|---------------------|
| Chemistry | Master's Degree | 45 credits | 2-060-1-0 | Jour   |                     |

## Program structure (3-060-1-0)

The doctorate program consists of 90 credits.

Legend: CR: Credit, SC: Schedule, D: Day, E: Evening

### SEGMENT 70

Number of credits: 87 mandatory credits, of which 84 are for research, a thesis, and a seminar. The 3 remaining credits are for one optional course.

**Block 70A**

Mandatory - 3 credits

| COURSE   | TITLE            | CRSC |
|----------|------------------|------|
| CHM 6601 | Section Seminars | 3    |

**Block 70B**

Optional - 3 credits

Chosen from the graduate courses offered by the department.

**Block 70C**

Mandatory - 84 credits

| COURSE   | TITLE                         | CRSC | COURSE   | TITLE    | CRSC |
|----------|-------------------------------|------|----------|----------|------|
| CHM 7000 | PhD Comprehensive Examination | 0    | CHM 7040 | Research | 10   |
| CHM 7010 | Research                      | 10   | CHM 7050 | Research | 10   |
| CHM 7030 | Research                      | 10   | CHM 7060 | Research | 10   |

## Programs to explore

Applicants interested in this program also applied to the following programs:

| PROGRAMS                | TYPE                         | CREDITS    | NUMBER    | PERIOD |
|-------------------------|------------------------------|------------|-----------|--------|
| Biochemistry            | Doctorate                    | 90 credits | 3-465-1-0 | Jour   |
| Biomedical Sciences     | Doctorate                    | 90 credits | 3-484-1-0 | Jour   |
| Chemistry               | Master's Degree              | 45 credits | 2-060-1-0 | Jour   |
| Drug Development        | Specialized Graduate Diploma | 30 credits | 2-670-1-0 | Jour   |
| Pharmaceutical Sciences | Doctorate                    | 90 credits | 3-700-1-0 | Jour   |

## Research expertise at a glance

Consult our list of research centers and chairs : <https://chimie.umontreal.ca/english/research/research-interests/>Find out more : <https://chimie.umontreal.ca/english/home/>

## Professors

Consult the list of the department's faculty members and their specializations : <https://chimie.umontreal.ca/english/department-directory/professors/>

## Directory of theses and dissertations

Visit Papyrus, Université de Montréal's institutional repository, to search for research projects by our faculty and researchers as well as theses and dissertations by our students : <https://papyrus.bib.umontreal.ca/xmlui/?locale-attribute=en>

## Research news

Read the latest research news from UdeM : <http://nouvelles.umontreal.ca/en/>