

UNIVERSITY OF WATERLOO | FACULTY OF SCIENCE

# BIOTECHNOLOGY/ CHARTERED PROFESSIONAL ACCOUNTANCY

UNIVERSITY OF  
WATERLOO





Amelia and Isabel, both students within the Biotechnology/CPA program, consult on the purchase and in-house manufacturing of new 3D print materials for lab use. Custom lab equipment can be expensive for laboratories and 3D printing of specific tools can create cost efficiencies and a larger return on investment.

# BIOTECHNOLOGY/CPA

[uwaterloo.ca/future/programs/biotechnology-accounting](http://uwaterloo.ca/future/programs/biotechnology-accounting)

## *We account for everything.*

Understand how biological processes are used to develop new technologies, and, together with your knowledge and expertise in financial management, accounting, auditing, and taxation, become a game-changer in the global market.

The world is dependent on new technologies to solve many issues, from global warming to antibiotic resistance. The international scientific community is poised to uncover these solutions, but it alone cannot deploy the new biotechnologies required – it needs someone who understands the business processes behind product development, international marketing, and distribution. Someone who understands both the product and the business is key – because new technologies don't often follow traditional business models or trade routes.

Take your passion for both science and accounting and earn your globally recognized Chartered Professional Accountant designation after graduation. Join a fast growing global industry – biotechnology – and be ahead of the competition with your 16 months of paid co-op experience.

[uwaterloo.ca/science](http://uwaterloo.ca/science)

### SAMPLE CO-OP POSITIONS

- > Staff Accountant
- > Tax Consultant
- > Transfer Pricing Analyst
- > Assurance, External Auditor
- > Wealth Management Financial Reporting Analyst

### SAMPLE CO-OP POSITIONS

- > Deloitte
- > Scotiabank
- > KPMG LLP Canada
- > Sanofi Canada
- > PwC

### POSSIBLE CAREER FIELDS/PATHS

- > Accounting
- > Audit and tax
- > Research and development monitoring and assessment
- > Pharmaceutical and medical technology
- > Internal/operational risk management



Biotechnology is positioned to be a dominant global technology for the next

# 50 YEARS

Deloitte Global Life Science Report, 2016

# A SCIENTIST AMONGST THEM



Gurlin, a Biotechnology/CPA student, used her co-op terms to build her strengths in connecting scientific research with accounting and business practices. While working at Revenue Canada in the Scientific Research Development division, she met with companies applying for the *Canadian Scientific Research and Experimental Development Tax Incentive Program* – a federal tax credit open to innovative companies and scientific firms. She'd audit their submission and provide recommendations to her employer.

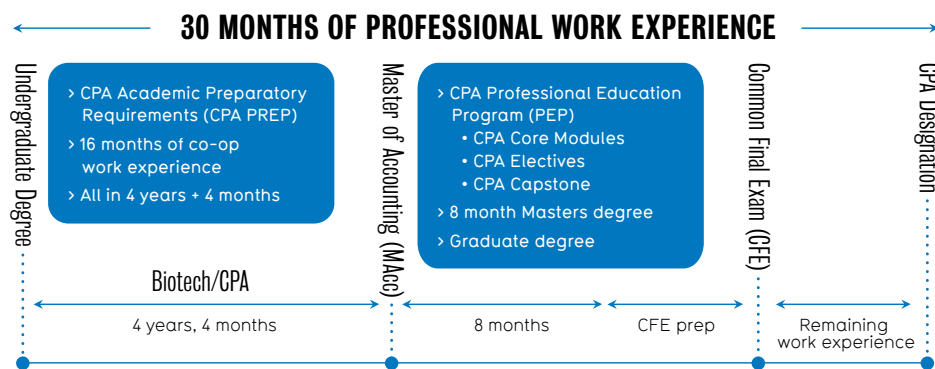
Graduates of this program have the unique ability to provide expertise and consultation in globally accepted business and accounting practices, while fully understanding the challenges that scientific industries can face. Well-rounded and ready for the world, they bridge the gap between these two disciplines.

Graduates of this program will have a unique ability to provide expertise and consultation in global business and accounting while fully understanding the challenges that scientific industries can face. They will bridge the gap between these two disciplines.

## SKILLS ATTAINED WITHIN THIS MAJOR

- > Financial analysis and audit
- > Project management
- > Critical thinking and analysis
- > Time management
- > Corporate analysis

# YOUR CPA DESIGNATION



## MASTER OF ACCOUNTING (MAcc) DEGREE

The School of Accounting and Finance at the University of Waterloo offers a Master of Accounting (MAcc) degree. Combine your Biotechnology/Chartered Professional Accountancy degree with MAcc, and move directly to the CPA Common Final Exam (CFE).

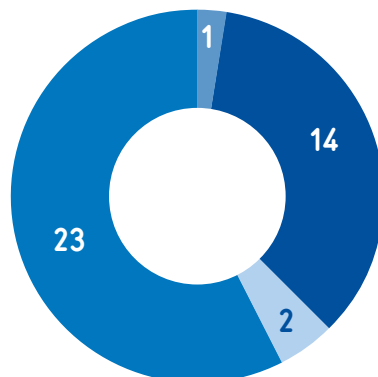
The education gained within these two degrees are designed to cover the required knowledge and skills within the CPA Professional Education Program (CPA PEP).

*Note: MAcc entry requires a separate application and admission process. All students who meet the entry requirement of a minimum, all-inclusive, cumulative average of 75% (including a 75% average in their last year of undergrad) are admitted.*

[uwaterloo.ca/saf/MAcc](http://uwaterloo.ca/saf/MAcc)

## GENERALIZED PROGRAM BREAKDOWN – COURSES

- Science
- SCBUS workshop
- Business
- Other



Available in the **CO-OP STREAM** of study only

Apply via the **BIOTECHNOLOGY/CHARTERED PROFESSIONAL ACCOUNTANCY** entry program on OUAC

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Make the most of first year in a Living-Learning Community

[uwaterloo.ca/housing/living-learning](http://uwaterloo.ca/housing/living-learning)

**100%** Co-op employment rate

# COURSE OUTLINE

## YEAR 1 (FALL)

**AFM 101** Introduction to Financial Accounting

**BIOL 130** Introductory Cell Biology

**CHEM 120/CHEM 120L** General Chemistry 1/Lab

**ENGL/SPCOM 193** Communication in the Sciences

**SCBUS 225** Organizational Behaviour in Scientific and Technical Workplaces

## YEAR 1 (WINTER)

**AFM 102** Introduction to Managerial Accounting

**BIOL 239** Genetics

**CHEM 123/123L** General Chemistry 2/Lab

**ECON 101** Introduction to Microeconomics

**SPCOM 111** Leadership, Communication, and Collaboration

## YEAR 2

**AFM 211** Connections to Business Context

**AFM 212** Financial Analysis and Planning

**AFM 231** Business Law

**AFM 273** Managerial Finance 1

**AFM 274** Managerial Finance 2

**AFM 291** Intermediate Financial Accounting 1

**BIOL 240/240L** Fundamentals in Microbiology/Lab

**BIOL 309** Analytical Methods in Molecular Biology

**CHEM 237** Introductory Biochemistry

**CHEM 266/266L** Basic Organic Chemistry 1/Lab

**ECON 102** Introduction to Macroeconomics

**ECON 221** Statistics for Economists

## YEAR 3

**2 of AFM 205, AFM 206, AFM 207, AFM 208**

**AFM 311** Connections to Ethical Context

**AFM 341** Accounting Information Systems

**AFM 351** Audit Strategy

**AFM 362** Taxation 1 – Foundations

**AFM 363** Taxation 2 – Integration

**AFM 373** Cases and Applications in Corporate Finance

**AFM 391** Intermediate Financial Accounting 2

**AFM 481** Cost Management Systems

**BIOL 241** Introduction to Applied Microbiology

**BIOL 342** Molecular Biotechnology 1

## YEAR 4

**AFM 401** Accounting Theory

**AFM 433** Business Strategy

**AFM 462** Taxation 3 – Tax Planning Topics

**AFM 479** Cases and Applications in Finance II

**AFM 482** Performance Measurement and Organizational Control

**AFM 491** Advanced Financial Accounting

**BIOL 331** Advanced Cell Biology

**BIOL 432** Molecular Biotechnology 2

**BIOL 443** Fermentation Biotechnology

**1** Biology or Chemistry Elective

## SAMPLE FIRST-TERM SCHEDULE

\* Labs

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Science Communication 1 hr	Cell Biology 1.5 hrs	Science Communication 1 hr	Cell Biology 1.5 hrs	Science Communication 1 hr
Accounting 1 hr		Accounting 1 hr		Accounting 1 hr
Chemistry 1 hr		Chemistry 1 hr	Chemistry 3 hrs *	Chemistry 1 hr
Math 1 hr	Science and Business Workshop 3 hrs	Math 1 hr		Math 1 hr

Course outline and schedule are subject to change at any time.  
Course sequence may vary due to co-op term requirements.

[ugradcalendar.uwaterloo.ca/group/uwaterloo-faculty-of-science](http://ugradcalendar.uwaterloo.ca/group/uwaterloo-faculty-of-science)

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