Life Sciences/BCHM Information Session

- Dr. Robert Campbell, Director of Life Sciences
- Dr. Laura van Staalduinen, Director of Biochemistry

  Department of Biomedical and Molecular Sciences

- Rowan Hernandez, First Year Rep Direct Entry Life Sciences and Biochemistry

Wednesday March 19, 2025

Queen's UNIVERSITY

Office of Life Sciences and Biochemistry

Location

- Rm. 815 Botterell Hall
- LISC lifesci@queensu.ca
- BCHM biochem@queensu.ca

Use your Queen's email and provide your student #

Information for 1st year Direct Entry students going into 2nd year

- Need to decide between Biochemistry and Life Sciences
- Major versus Specialization
- Plan selection May 21- June 9, 2025

Biochemistry

Discipline-focused degree plan offered through the Faculty of Arts and Sciences

Students receive in depth training in a wide range of essential topics related to fundamental cellular processes including:

- Cellular metabolism
- Movement
- Replication
- Repair
- Communication
- Molecular and chemical basis of infection and disease

Life Sciences

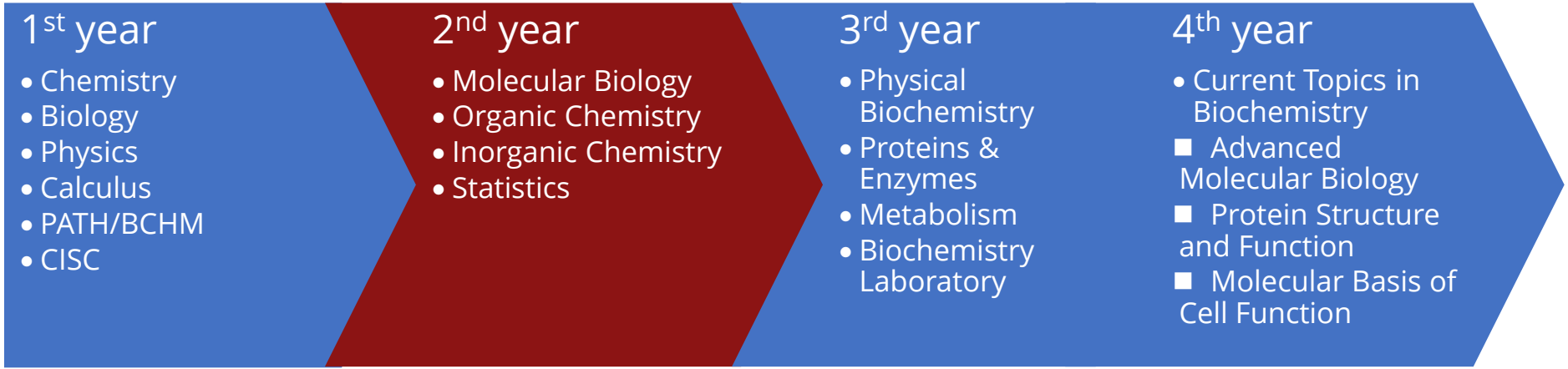
Interdisciplinary degree plan offered through the Faculty of Arts and Sciences

Learn about the following fields in the biomedical sciences:

- Biochemistry
- Cellular and Tissue Physiology
- Anatomy and Reproduction
- Drug Discovery and Human Toxicology
- Microbiology and Immunology
- Cancer Biology and Pathology
- Neurosciences

WHAT ARE THE DEGREE PLAN CHOICES?

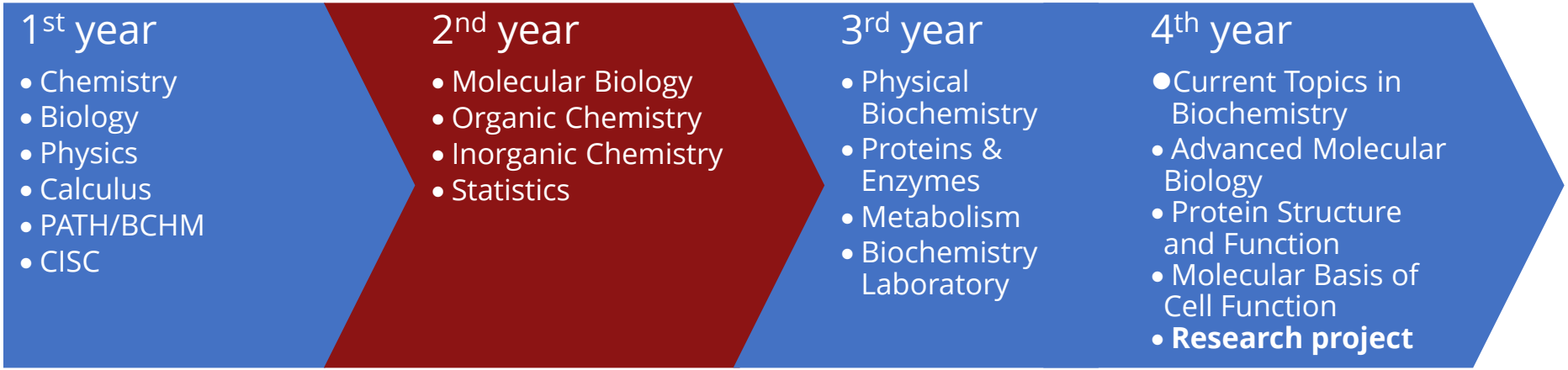
Biochemistry Major



BCHM 218
CHEM 211, 212, 222, 223
BIOL 243 or STAM 200
12 U electives

WHAT ARE THE DEGREE PLAN CHOICES?

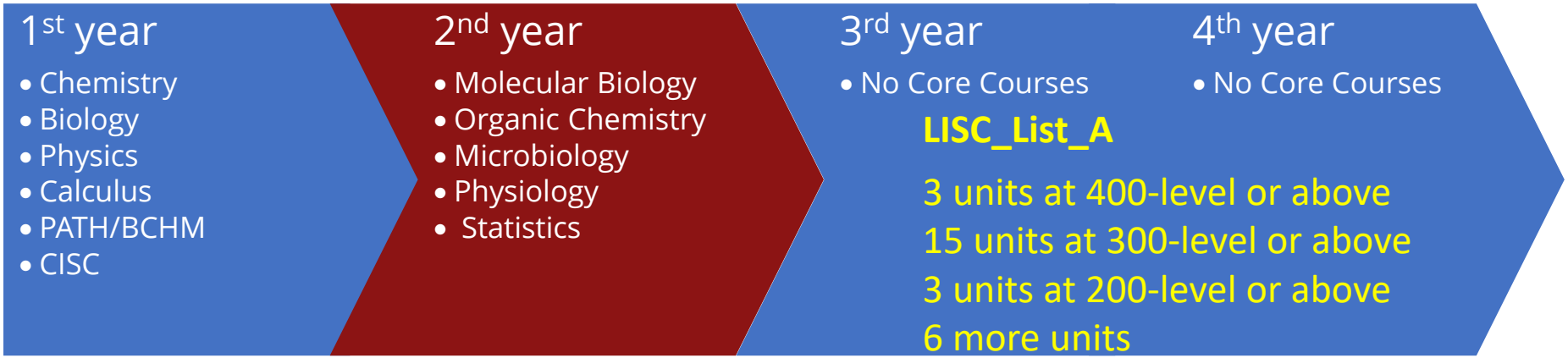
Biochemistry Specialization



BCHM 218
CHEM 211, 212, 222, 223
BIOL 243 or STAM 200
12 U electives

WHAT ARE THE DEGREE PLAN CHOICES?

Life Sciences Major



BCHM 218
CHEM 281, 282
MICR 271 or 221
PHGY 215, 216
STATS (BIOL 243/STAT 263/STAM 200)
9 U electives

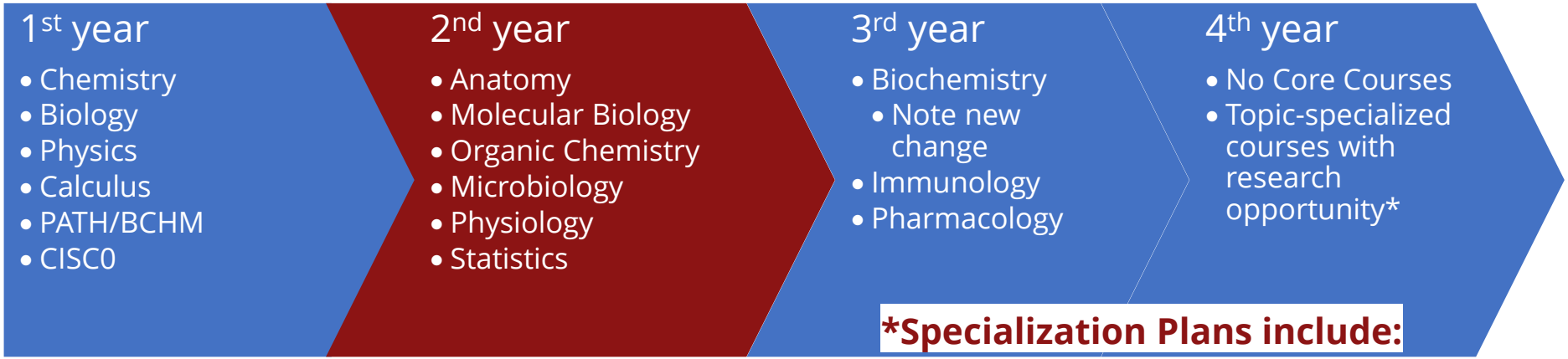
made available during the Open Enrolment period, and then only if space permits.

LISC_List_A

Code	Title	Units
Options in the Life Science Major Plan		
ANAT		
BCHM		
CANC		
CRSS		
DDHT		
EPID		
LISC		
MICR		
NSCI		
PATH		
PHAR		
PHGY		
REPD		
BIOL 205	Mendelian and Molecular Genetics	3.00
BIOL 243	Introduction to Statistics	3.00
BIOL 321	Animal Behaviour	3.00
BIOL 322	Environmental Physiology of Animals	3.00
BIOL 330	Cell Biology	3.00
BIOL 331	Analytical Genomics	3.00
BIOL 334	Comparative Biochemistry	3.00
BIOL 339	Animal Physiology	3.00
BIOL 350	Evolution and Human Affairs	3.00
BIOL 369	Sex and Evolution	3.00
BIOL 401	Experimental Approaches to Animal Physiology	3.00
BIOL 403	Experimental Techniques in Biology	3.00
BIOL 404	Techniques in Molecular Biology	3.00
BIOL 430	Molecular Genetics of Development	3.00
BIOL 441	Molecular Genetics	3.00
BIOM 300	Modeling Techniques in Biology	3.00
BMED 270		3.00
BMED 370		
BMED 380		
BMED 381	Clinical Biochemistry	3.00
BMED 383		
BMED 384	Integrative Laboratory Course	3.00
BMED 480	Clinical Applications of Human Anatomy	3.00
BMED 482		
BMED 483	Advanced Topics In Infectious Diseases	3.00
CHEM 213	Introduction to Chemical Analysis	3.00
CHEM 221	Material, Solutions, Interfaces	3.00
CHEM 222	Methods of Structure Determination	3.00
CISC 271	Linear Data Analysis	3.00
HLTH 323	Epidemiology	3.00
MATH 221	Vector Calculus	3.00
MATH 225	Ordinary Differential Equations	3.00
MATH 228	Complex Analysis	3.00
MATH 272	Applications of Numerical Methods	3.00
PHYS 206	Dynamics	3.00
PHYS 216	Introduction to Astrophysics	3.00
PHYS 242	Relativity and Quanta	3.00
PSYC 100	Principles of Psychology	6.00
PSYC 235	Abnormal Psychology	6.00
PSYC 236	Introdution to Clinical Psychology	3.00
PSYC 251	Developmental Psychology	3.00
PSYC 271	Brain and Behaviour I	3.00
PSYC 305	Introduction to Comparative Cognition	3.00
PSYC 323	Laboratory in Attention	3.00
PSYC 333	Human Sexuality	3.00
PSYC 353	Atypical Development	3.00
PSYC 355	Comparative Cognition: Cognitive Origins Laboratory	3.00
PSYC 360	The Neurobiology and Psychology of Sleep	3.00
PSYC 370	Brain and Behaviour II	3.00
PSYC 398	Selected Topics in Psychology I	3.00
PSYC 420	Advanced Topics in Cognitive Psychology	3.00
PSYC 422	Advanced Topics in Attention	3.00
PSYC 435	Advanced Topics in Clinical Psychology	3.00
PSYC 470	Advanced Topics in Behavioural Neuroscience	3.00
PSYC 471	Behavioural Pharmacology	3.00
PSYC 473	Neurobiology of Psychiatric Disorders	3.00
STAM 200	Introduction to Statistics	3.00
STAT 263	Introduction to Statistics	3.00
Excluding the following courses and any course numbered 499:		
ANAT 270	Human Anatomy and Morphology	3.00
BCHM 270	Biochemical Basis of Health and Disease	3.00
CANC 497	Current Topics in Cancer Biology and Genetics	3.00
MICR 270	Infection, Immunity and Inflammation	3.00
PHGY 170	Human Cell Physiology	3.00
Any courses numbered 499		

WHAT ARE THE DEGREE PLAN CHOICES?

Life Sciences Specialization



ANAT 215, 216
BCHM 218
CHEM 281, 281
MICR 221
PHGY 215, 216
BIOL243/STAT263/STAM200

***Specialization Plans include:**

Cancer Biology, Cardiorespiratory, Drug Development
and Human Toxicology, Neurosciences, Biomedical Discovery/Sciences

Familiarize yourself with the Academic Calendar

queensu.ca/academic-calendar/

Queen's University

Search calendar | Search...

Academic Calendar 2023-2024

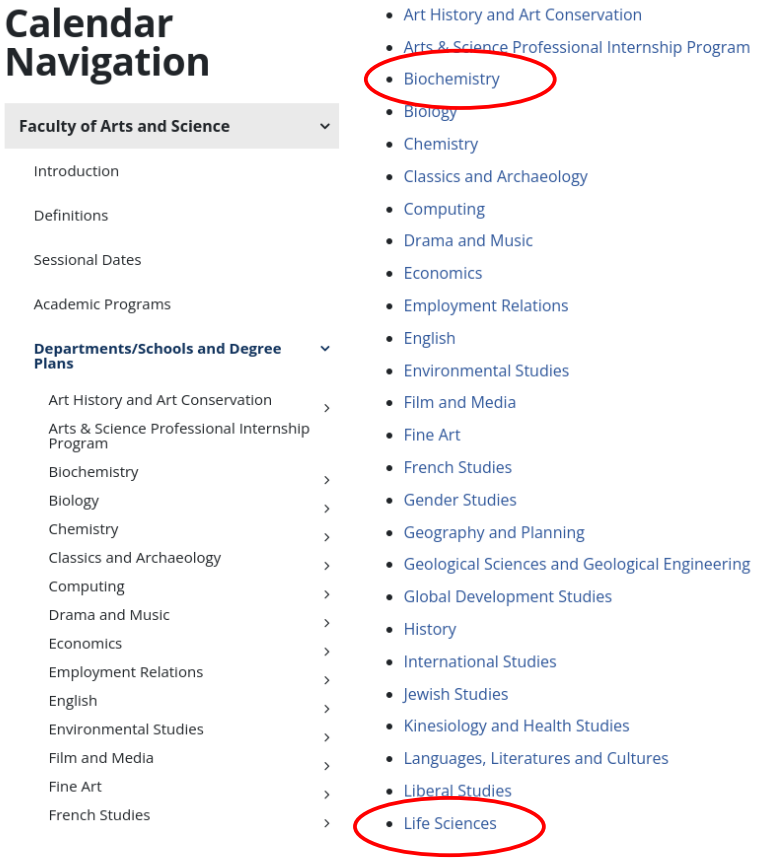
Home | Calendar Contents | A-Z Index | Print Options

Queen's University Academic Calendar

Calendar Navigation

- Faculty of Arts and Science
- Faculty of Education
- Faculty of Health Sciences
- Faculty of Law
- School of Graduate Studies and Postdoctoral Affairs
- MD Program
- School of Nursing
- Smith Engineering

Familiarize yourself with the Academic Calendar



Familiarize yourself with the Academic Calendar

Life Sciences

Calendar Navigation

- Faculty of Arts and Science
  - Introduction
  - Definitions
  - Sessional Dates
  - Academic Programs
  - Departments/Schools and Degree Plans
    - Art History and Art Conservation
    - Arts & Science Professional Internship Program
    - Biochemistry
    - Biology
    - Chemistry
    - Classics and Archaeology

Overview | Faculty | Programs and Plans | Courses

Program Notes

Subject Code for Anatomy: **ANAT**
Subject Code for Biochemistry: **BCHM**
Subject Code for Cancer Research: **CANC**
Subject Code for Cardiorespiratory Science: **CRSS**
Subject Code for Drug Discovery and Human Toxicology: **DDHT**
Subject Code for Life Sciences: **LISC**
Subject Code for Microbiology and Immunology: **MICR**
Subject Code for Neuroscience: **NSCI**
Subject Code for Pathology and Molecular Medicine: **PATH**
Subject Code for Pharmacology and Toxicology: **PHAR**
Subject Code for Physiology: **PHGY**
Subject Code for Community Health and Epidemiology: **EPID**
Subject Code for Reproduction and Development: **REPD**
World Wide Web Address: www.healthsci.queensu.ca/liscbchm/life_sciences

Associate Dean of Life Sciences, Biochemistry, and Health Sciences: Michael A. Adams
Director of Life Sciences: Robert Campbell

WHAT WILL I CHOOSE AS A PLAN?

SSP:

Recommended (but not necessary) if your career plans include research (i.e., graduate school) as there is a heavy emphasis on hands-on laboratory/research experience. **Also meets the needs of most professional schools.

MAJ:

Recommended if your career plans are more inclined towards an emphasis on using your biomedical training to pursue a non-research career involving other professional training (medical, dental, business, law or other postgraduate school). The course requirements for the MAJ are designed for the needs of the non-research life sciences or biochemistry student; less core credits and more electives allows for the pursuit of additional electives which can thus be tailored to specific career need. **Also meets the needs of most professional schools.

MINOR:

Can only add a Minor with Major Plans

WHAT WILL MY CORE DEGREE PLAN BE?

LISC Sub-Plans:

- **Biomedical Discovery** – recommended if you want laboratory experience
- **Biomedical Sciences** – provides more flexibility, can take more advanced courses
- **CANC** – those wishing to proceed with research in the field of cancer
- **CRSS** - those wishing to proceed with research in the field of cardiovascular and respiratory sciences
- **DDHT** - those wishing to proceed with research in the field of drug discovery and development as well as toxicology
- **NSCI** - those wishing to proceed with research in the field of neurosciences

Non-Arts and Sciences courses

- Only 6 units of non-Arts and Sciences courses can be used towards your degree
  - Ie LAW, Commerce courses

- Exception – can take courses offered by the Faculty of Health Sciences (courses have to have been approved by FAS)

Combined BSc/MSc

- Life Sciences and Biochemistry offer a combined program
- “Accelerated” path to graduate school
- Apply in the 2nd term of 3rd year
- Take up to 6 units of graduate courses during 4th year
- Continue 4th year research project

Exit Strategy

If you get an acceptance to medical school in your 3rd year…

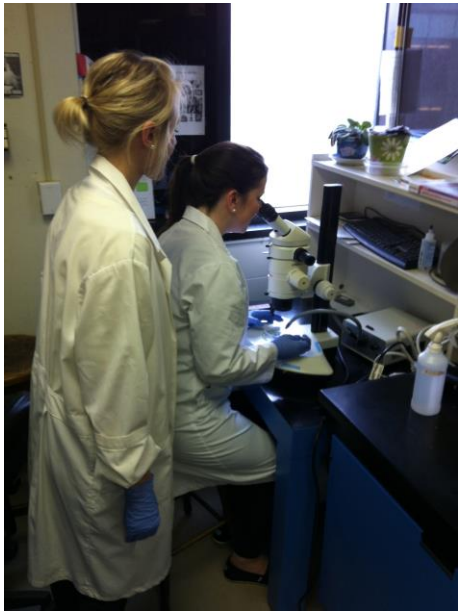
Life Sciences & Biochemistry – General Bachelor of Science

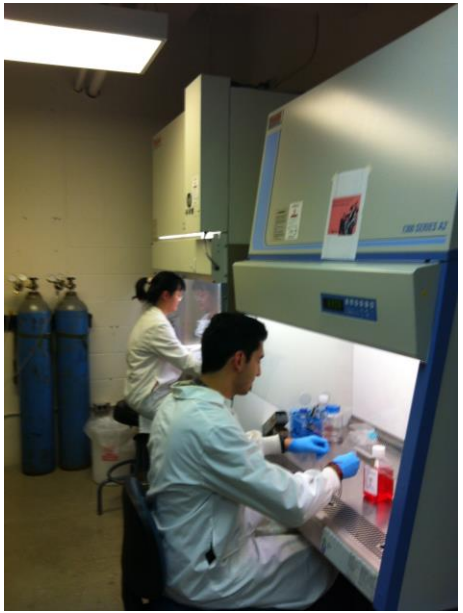
Honours routes: Major or Specialization

Health Sciences– General Bachelor of Health Sciences

Honours route: Major

Research In Action





Career Services

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Home » Students » Services for Students » Employment Programs » Queen's Undergraduate Internship Program (QUIP)

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    - M.Eng. Industrial Internship Program
    - QUIP
    - SWEP
    - Work Study Program
  - Drop-in Career Advising
  - Events, Fairs, & Information Sessions
  - Career Advising & Resource Area
  - Workshops
  - Appointments
- It All Adds Up
- Linkedin at Queen's

Queen's Undergraduate Internship Program (QUIP)

The Queen's Undergraduate Internship Program (QUIP) provides students with a 12-16 month work experience. QUIP internships are paid, professionally supervised, career-related positions designed to offer second or third year students the opportunity to learn about current advances, practices and technologies in business and industry. The program is open to students in the Faculty of Engineering and Applied Science (domestic and international), Faculty of Arts and Science (domestic and international), School of Computing (domestic and international) and the School of Business (domestic only; not for credit). Due to the longer work term (compared to a 4-month co-op), employers are highly motivated to maximize their time and investment. This means that Internship students are offered the opportunity to manage more extensive and significant projects.

Search QUIP job postings Contact QUIP coordinator

Got Questions? Come and see the QUIP Coordinator during QUIP Drop-in Advising Hour – no appointment necessary!

QUIP Drop-in Advising: Every Tuesday and Thursday from 11-12 in the Career Advising and Resources Area (Sept-April)

– Eligibility

The program is open to students in the Faculty of Engineering and Applied Science (domestic and international), Faculty of Arts and Science (domestic and international), School of Computing (domestic and international) and the School of Business (domestic only - please see an academic advisor in the School of Business before registering).

- Queen's students can participate in QUIP after their 2nd or 3rd year of studies and must be returning to complete their final academic term after the internship.
- Students must have a minimum GPA of 1.9 and the permission of your undergraduate chair to register in QUIP.

http://careers.queensu.ca/students/services-students/employment-programs/queens-undergraduate-internship-program-quip

Career Opportunities

Medicine

Biomedical Research

Law

Healthcare Policy and/or Administration

Industry

Pharmacy

Veterinary Medicine

Education

Physiotherapy and Occupational Therapy

Dentistry

PLAN SELECTION

- Students MUST select their plan
- May 21 – June 9, 2025

DSC Representatives

LISC DSC Instagram Office Hours

LISC DSC Events: Check Social Media (@queensulifesci)

BCHM DSC Events: Check Social Media (@bchmqueensu) and a Facebook (Queen’s University Biochemistry)

Speaker Emails

- Steven (LISC MAJ): 20stm5@queensu.ca
- Alex (LISC SPEC): 21ab188@queensu.ca
- Holly (LISC SPEC): 20hgm4@queensu.ca
- Olivia (BCHM SPEC): 20okr1@queensu.ca
- Alex (BCHM MAJ): Alexandra.parnaby@queensu.ca
- Rowan (First Year Rep): 23ddl4@queensu.ca