LIFE SCIENCES MAJOR MAP Visit careers.queensu.ca/majormaps.html for the online version with links!



BACHELOR OF SCIENCE HONOURS (SPECIALIZATION, MAJOR, MINOR) | BACHELOR OF SCIENCE (GENERAL) | BACHELOR OF ARTS (MINOR)

	1ST YEAR	2ND YEAR	3RD OR FINAL YEAR	4TH OR FINAL YEAR	
GET THE COURSES YOU NEED	For the Major or Specialization, take BIOL 102 and BIOL 103, CHEM 112, MATH 121, PHYS 117. For plan requirements or thresholds, see the Arts and Science website. Speak to an academic counselor at the Arts and Science Office or a program assistant at the Life Sciences and Biochemistry Program Office for help.	For the Major, in the Fall take BIOL 205, CHEM 281, PHGY 214. In the Winter, take CHEM 282, MICR 221. For the Specialization, in the Fall take ANAT 215, BIOL 205, CHEM 281, PHGY 214. In the Winter, take ANAT 216, BCHM 218, CHEM 282, MICR 221.	Majors: take 30 option units in 3rd and 4th year. Specializations: See course requirements and stream options at the Arts and Science online calendar for the Life Sciences plan requirements. Contact the Program Assistant for help. Begin researching and securing a 499 Project for your fourth year.	Apply to graduate on SOLUS. Use the Academic Advisement Report to ensure you have the courses you need to graduate. Students in specialization streams: ensure that you have declared your plan and have the right courses for the plan!	Where could I go after graduation? Anesthesiology Animal research Audiology Biochemistry Biotechnology and pharmaceutical industry Business Dentistry Drug development Environmental management Epidemiology Ergonomics Ethics Food science and technology Forensics Genetics Health administration Kinesiology Law Medical and clinical research Medicine Microbiology Neuroscience Nursing Nutrition and dietetics Occupational health and safety Optometry Pharmaceutical industry Pharmacy Physical therapy
GET RELEVANT EXPERIENCE	Join teams or clubs on campus such as Queen's Synthetic Biology Organization, Queen's First Aid or Universities Allied for Essential Medicine, Queen's (UAEM). Look in the Co-Curricular Opportunities Directory or AMS Clubs Directory for more ideas.	Look into summer jobs by talking to the department or Career Services about work through SWEP or NSERC. Take more responsibility within different clubs or extracurriculars. Consider volunteering at Health, Counselling and Disability Services or other health centres. Think about applying to positions in student services or the Alma Mater Society.	Stay during the summer as an assistant to a faculty member or apply for an external summer research opportunity. If interested, look for entrepreneurial opportunities through programs like Queen's Summer Innovation Initiative (QSII) and the Summer Company Program.	Investigate full-time jobs or other opportunities related to careers of interest. Assess what experience you're lacking and fill in gaps with volunteering, clubs, or internships.	
GET CONNECTED WITH THE COMMUNITY	Volunteer on or off-campus with different community organizations, such as Let's Talk Science, Queen's Union on Tropical Access to Health, or local charities.	Consider getting involved with the Departmental Student Council (DSC). Start or continue volunteering with organizations such as the Canadian Undergraduate Conference on Healthcare (CUCOH).	Do targeted networking with people working in careers of interest (with alumni, using LinkedIn, or other ways). Connect with professors at events or workshops hosted by the DSC.	Consider joining professional associations like Society of United Life Sciences and the Analytical and Life Science Systems Association.	
GET THINKING GLOBALLY	Queen's University International Centre will be your first stop to internationalizing your degree. Speak to a QUIC advisor or get involved in their many programs, events and training opportunities.	Is an international exchange in your future? Start thinking about where you would like to <u>study abroad</u> . Apply before the first week of January for a 3rd year exchange through the International Programs Office.	Build your intercultural competence by getting involved with other cultures or by practicing or improving your <u>language skills</u> . Stop by QUIC for ideas to go abroad, <u>volunteer</u> at QUIC or attend one of their events.	Prepare yourself to work in a multi-cultural environment by taking QUIC's Intercultural Competency Certificate, and start thinking about work or further studies abroad.	
GET READY FOR LIFE AFTER GRADUATION	Grappling with program decisions? Go to different Major Nights by the departments or various Career Fairs in the year. Get some help deciding by visiting Career Services.	Explore different careers of interest by reading books in the Career Services <u>Career Advising and Resource Area</u> , such as <i>Academia to Biotechnology</i> , talking to people whose jobs interest you, or connecting with alumni on <u>LinkedIn</u> .	Start focusing on areas of interest. Learn about the requirements for careers of interest– do they need additional schooling? If so, prepare to take the required tests (like the LSAT or GMAT). Attend Grad School workshops at Career Services if applicable.	Apply to jobs or future education, or make plans for other adventures. Prepare reference letters if you're applying to graduate school. Make an appointment with Career Services for help with future plans.	Physical therapy Psychiatry Public and private research Public health Teaching Toxicology *some careers may require additional training



LIFE SCIENCES

MAJOR MAP FOR UNDERGRADUATES 2014 - 2015

LIFE SCIENCES MAJOR MAP

How to use this map

- Got questions about careers and classes?
- Feeling a little lost or overwhelmed by choices?
- Wondering what you are "supposed" to be doing?

Use this map to plan for success in five overlapping areas of career and academic life. Each map helps you explore possibilities, set goals and track your accomplishments. To make your own custom map, use the My Major Map tool.

Don't stress if you haven't done all of the suggested activities. The map is not a prescription – it's a tool for finding your own way at Queen's.



See queensu.ca/studentaffairs for details

LIFE SCIENCES AT QUEEN'S

WHY STUDY LIFE SCIENCES AT QUEEN'S?

With courses from two Oueen's Faculties – the Faculty of Health Sciences and the Faculty of Arts and Science - Life Sciences is one of the most requested programs at Queen's. The strength of our program lies in the integration of basic health sciences founded on a core of natural and physical science courses. In the final two years of the program you can choose one of the streams devoted to research: Cancer Research, Drug Development and Human Toxicology, Cardiorespiratory Science, Neuroscience, or you can select another focus of Biomedical Discovery or Biomedical Sciences.



Botterell Hall, Room 813 18 Stuart Street 613-533-2900 www.Healthsci.queensu.ca/liscbchm/biochemistry www.dbms.queensu.ca/undergraduate/biochemistry

WHAT PROGRAM OPTIONS ARE THERE?

- Specialization Bachelor of Science (Honours) in Environmental Life Sciences
- Specialization Bachelor of Science (Honours) in Life Sciences
- Major (Science) Bachelor of Science (Honours) in Life Sciences
- General in Life Sciences Bachelor of Science
- Minor in Life Sciences with Bachelor of Arts or Science

See the department website for course requirements:

healthsci.gueensu.ca/liscbchm/life sciences

Getting what you need to succeed in the workplace

In a recent survey from the Canadian Council of Chief Executives the top 6 skills sought by employers were:

EMPLOYERS WANT?

1 People skills

WHAT DO

- **2** Communication skills
- **3** Problem-solving skills
- **4** Analytical abilities
- **5** Leadership skills
- **6** Industry-specific knowledge

HOW DO I GET THE SKILLS I NEED?

It is important to develop a balanced skill set - many of which you will develop during your studies. To stand out from the crowd, gain experience outside the classroom through the multitude of clubs and activities in and around Queen's. Check out ideas in the Get Relevant Experience section of this map.

WHAT CAN I LEARN STUDYING LIFE SCIENCES AT QUEEN'S?

- Knowledge of cellular structures, organic systems, organic chemistry, and the functions of the human body
- Understanding of statistical research methods, the scientific method and experimental design
- Research skills ability to draw relevant information out of a large amount of data
- · Experience working in a laboratory setting and operating equipment
- · Attention to detail analyze and interpret scientific data
- Problem solving adopt a systematic approach to problems
- Oral and written communication produce laboratory reports and present a report to a
- · Resource and time management

WHAT MAKES ME SPECIAL?

You have a unique set of skills and experiences. Take the time to think about the skills you have personally developed at Queen's. Explaining your strengths with compelling examples will be important for future applications to employers and further education. For help with this, check out the Career Services skills workshop.