Frequently Asked Questions: Choosing Chemistry

Q: How do I get into Chemistry?
A: Entrance to all second-year science specializations is by application. The Faculty of Science (FoS) will send an email – likely in late May/early June – with information about the process. You can submit up to three choices of specialization. The FoS will then match students to their majors. This process is dependent on grades – the higher your grades, the better your chances of getting your specialization of choice.

Q: What average do I need to get into Chemistry?
A: Typically, an average above 72% will get you into Chemistry. Some years, all students with averages above 70% are accepted.

Q: What are the requirements for getting into a Chemistry specialization?
A: Two courses in Chemistry and two in Mathematics and promotion to second year. You can defer Physics and the Communication requirement (ENGL 1** or SCIE 113) although it is useful if they have been completed.

Q: What specializations are available in Chemistry?
A: Majors Chemistry, Honours Chemistry, Combined Honours Chemical Biology, Combined Honours Chemistry-Mathematics, Combined Honours Chemical Physics, and Combined Honours Biochemistry-Chemistry are all offered.

Details of the various possibilities may be found in the Calendar. An update will be made to the on-line Calendar in the near future and should be consulted for further information.

Q: What’s the difference between Biochemistry and Chemistry?
A: Biochemistry is a subset of Chemistry. You can do biochemical research in a Chemistry research group (and there are several in this department). Chemistry is often called the “central science,” because Chemistry interconnects all the disciplines of science.

A new Combined Honours Chemical Biology specialization will be offered by the Chemistry Department, starting in September 2011.

Q: What kinds of jobs can I get with a degree in Chemistry? How much do they pay? Do I need additional schooling?
A: You are limited only by your imagination and your willingness to try new things! Depending on your particular interests, you can work in industry, research and development, education or agriculture, to mention a few areas. What you do in your job depends largely on the level of your degree: Bachelors, Masters or Ph.D. In general, the higher the degree, the more likely that you will work in a management or leadership role. Salary also varies with the degree obtained and the where you work. The American Chemical Society (ACS) conducts and publishes annual salary surveys and also has good information about the career options (see “What Chemists Do?” under the careers menu) available to chemists. http://portal.acs.org.portal/acorg/content

Q: What research opportunities are available?
A: Co-op, volunteer, NSERC USRA, CHEM 448 (the latter is a directed studies course which can be done at any time of the year, including summer in third or fourth year), CHEM 445 (4th year laboratory), CHEM 449 (Honours thesis, but not just for Honours students), other programs that will be advertised. Look for posters and emails, and check the Chemistry Department website. Talk to your TAs and professors.

Q: How do I get into Honours Chemistry?
A: You apply directly to the various Combined Honours specializations though the FoS process. Students are not admitted directly to Honours Chemistry since it contains the same courses as the Majors specialization. If your average is high enough, the Chemistry Department Undergraduate Advisor will contact you over the summer regarding the possibility of moving from Majors to Honours. You need a minimum 68% average, no failures, and 30 winter session credits. Students with less than the 30 winter session credit requirement may be considered for Honours if by the end of second year they have completed 60 winter session credits.

Q: What’s the difference between taking the Majors and Honours specializations?
A: Honours has 12 additional credits and a few additional course requirements over the last three years of your degree. The Honours specialization can give you an advantage in applications for graduate school, professional schools (medicine, nursing, dentistry, law) and jobs.

Q: What’s the difference between CHEM 233-235 and CHEM 203/213-245?
A: CHEM 233-235 is the track for Life Sciences majors (Organic Chemistry for Biological Sciences). CHEM 203/213-245 (formerly CHEM 203/204) are the courses needed for Chemistry and Biochemistry specializations. The course content of CHEM 203/213-245 is both more comprehensive and detailed, and is presented at a higher level than in CHEM 233-235.

Q: I heard of someone who took CHEM 233 and then wanted to switch to Chemistry, but had to retake second-year organic chemistry (CHEM 203/204). Is this true?
A: This is no longer true. As of the 2011/2012 academic year CHEM 204 is being separated into a lecture course (CHEM 213) and a laboratory course (CHEM 245). The Chemistry Department is streamlining the two tracks to make it possible for students who obtain a mark of 76% or higher in CHEM 233 to move into CHEM 213 directly without having to take CHEM 203. Students admitted to Chemistry will be allowed to take CHEM 245 as well.