



**THE CHEMISTRY MAJOR AND**  
**THE MEDICAL PROFESSIONS**



*The truth about chemistry,  
medical school, and you.*

## Choosing your major

As a pre-professional student, the world is your oyster. As long as you take the required courses to support your application, you can major in any subject you choose. If you have always loved music, or are fascinated by psychology, then take on those majors. You will never again have the freedom to pursue those interests the way you can now.

But before you make your choice, make sure you have all the facts. Application to medical and other professional schools is a complex process, and too often students are confused by rumor and misinformation. Frequently, this information comes in the form of "Somebody said," or "Everyone knows..." statements. "Everyone" is not going to medical school, and if you want to get there, you need to check your facts.

**Fiction #1:** Medical schools do not accept science majors because they want to see "well-rounded" applicants. Besides, being a science major will lower my GPA so no medical school will want me.

**Fact:** Students majoring in mathematics and the physical sciences (including chemistry) have the highest medical school acceptance rate of any major. Being a science major works for you, not against you!

Primary Undergraduate Major	Acceptance Rate
Mathematics and Physical Sciences	47%
Biology and Health Sciences	41%
Humanities and Social Sciences	44%
Other	42%

Based 2013 entering class data, reported by the American Association of Medical Colleges  
Table compiled from data available at <https://www.aamc.org/data/facts/applicantmatriculant/>

**Fiction #2:** Chemistry majors have to take a lot of hard courses so they don't have time to do volunteer work, research, and other activities that help with medical school applications.

**Fact:** A student who has completed his or her required coursework for medical school can obtain a chemistry degree with as few as five additional courses. See course information on the facing page.

**Fiction #3:** I'm not going to need chemistry when I get to med school.

**Fact:** Coursework in medical school makes extensive use of chemistry, and you can do yourself a favor by learning more of it in advance.

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## Planning Your Studies

Chemistry majors interested in the medical professions are generally advised to pursue a Bachelor of Arts (BA) degree unless they are considering an MD/PhD program. The BA program involves fewer courses and has a less demanding prerequisite structure than the Bachelor of Science (BS), leaving students more flexibility to pursue research and volunteer work. While the BA is less rigorous than the BS, it provides a strong science background and is excellent preparation for professional examinations (MCAT, DAT, *etc.*).

Below is a table comparing the requirements for medical school and a chemistry degree. Other professional schools (dentistry, optometry, pharmacy, veterinary, *etc.*) have similar requirements.

### Course Requirements for Medical School and a BA in Chemistry

<u>Courses required for both medical school and a Chemistry major:</u> Chem 1100 (or 1050/2050), 2100, 3511/12, 3521/22; Math 1011; English 1010,1012; Phys 1100, 2100
<u>Additional courses required for medical school:</u> Bio 1001,1002; Chem 4571; Psych 1000; Sociology 1101; Statistics
<u>Additional courses required for a Chemistry degree:*</u> Math 1201, 1206; Chem 3415W, 4600; one additional elective in Chemistry

A student who completes both the required and recommended courses for medical school applications has fulfilled the elective requirement for Chemistry, and needs only four additional courses to receive an undergraduate degree.

**Don't stop here! See the campus pre-professional advisor and the undergraduate advisor for the Department of Chemistry to help plan your studies. Contact information on back page.**

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What you learn in your coursework matters. Knowledge will open doors for you, and your major should open the doors you want. Choose a major that interests you, but try to find one that advances your career as well.

### *Chemistry: Your Tactical Edge*

- Reinforce your knowledge of science.** As a chemistry major, you will continue to take science classes even after you have completed the requirements for medical school. You will walk into your examinations with the knowledge fresh in your mind.
- Distinguish yourself.** The more science you know, the more you can offer a research mentor. A strong background in chemistry will help you get good research projects and improve your chances for publications and other distinguishing achievements. And those interested in getting involved in biomedical research after professional school will find their chemistry knowledge an invaluable asset.
- Get insurance on your career goals.** Life is unpredictable, and those with ambition should prepare for the unexpected. Anything from a fender bender on your examination day to serious health problems for yourself or a family member can cost you your first chance at professional school. If you find yourself “taking a year off,” a degree in chemistry will let you find work that will keep your science skills sharp, help you make useful contacts, look good on your application, and earn you a respectable wage.
- Prepare for life after professional school.** Science and technology are advancing at lightning speed, and medical professionals are struggling to keep up. It will be easier to assimilate information about new medicines and devices if you have a fundamental understanding of the science involved. In the long run, you – and your patients – will be relying on your ability to judge the pros and cons of new science.

#### **To discuss a Chemistry Major:**

Contact the Chemistry Department  
Voice: (718) 951-5758      Room 359NE  
Ask to speak to the Department Advisor.

#### **To discuss a Health Professions Career:**

Contact Dr. Steven Silbering  
Voice: (718) 951-4706  
E-mail: [silbering@brooklyn.cuny.edu](mailto:silbering@brooklyn.cuny.edu)