## **High School Preparation for Specific College Majors**

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If you already have a planned college major, you can get a head start on your studies by tailoring your high school schedule to prepare for the courses you'll be taking in college. This article will examine four of the most common specialized fields of study and what you can do to increase your chances of getting into the program of your choice.

**Engineering:** If you're college goals include an <u>engineering</u> degree, you'll probably need to give some thought to your high school studies to land on your feet in a college engineering program. College engineering programs typically have a defined schedule for the entire four or five years it takes to earn a degree. More than likely, you'll have to declare your intended major and enroll in the engineering school early (usually in the first or second year of college). It's highly recommended to take calculus before college starts. Your school may not offer calculus or you may not have the requirements to take specialized classes in high school. If so, look into summer or night classes with your high school or local community college. Take at least one applied science class (like shop) to get hands-on experience as well.

**Pre-Med:** If you see a set of scrubs in your future, you're probably thinking of some type of <u>pre-med</u> program for college. Science courses, specifically biology and chemistry, have the most applicability to pre-med curricula. Advanced Placement (AP) science courses (such as AP Biology, AP Chemistry or AP Physics) can give you a head-start on many of your classmates, as you may be eligible to take sophomore college courses as a freshman, pending the results of your AP Exams. Many universities, such as <u>Stanford University</u> and <u>Georgetown University</u>, offer summer programs for prospective medical students. These programs allow you to get a glimpse at a typical med student's laboratory responsibilities. If you enroll in the summer program at the university you'll be attending, you'll gain a better understanding of what will be expected of you in the next four years.

**Pre-Law:** Do you see yourself in a courtroom after college and law school? As a high school student, preparing for law school is a little more ambiguous than other fields, like engineering. Most schools do not have a set curriculum for <u>pre-law</u> students. Many pre-law students end up majoring in liberal arts disciplines such as <u>history</u>, <u>English</u>, <u>political science</u> or <u>economics</u>. In any of these areas, writing well is essential, so enrolling in AP English is highly recommended. You may also want to think about APs in American History and Government. In all likelihood, you'll take a Constitutional Law course along the way and these high school classes can prepare you for this tough course. Potential lawyers might also want to consider joining at least one extracurricular club like the debate team, speech club or mock trial. These activities will improve your public speaking and analytical skills - important traits for any future lawyer.

**Art School:** Whether you are looking to study theater, dance, painting, or other creative field, the application process for art school is significantly different than most other areas of study. At New York University's Tisch School of the Arts, performing arts applicants (dance, theater) must audition in front of a school panel, while fine arts applicants (painting, photography, film) must submit a portfolio of their work, in addition to a written statement. Make sure you participate in courses, clubs, and activities related to your field of study – a well-developed portfolio and resume will greatly increase your chances of getting into the school of your choice.

## High School Preparation for Specific College Majors: Tips and Tactics

- AP courses: All AP courses provide students with the opportunity to earn college credit in high school, which will free up
  your freshman year of college schedule and allow you to take more courses related to your major, rather than general
  education requirements.
- Stay well-rounded: No matter what you plan on studying, try to keep a balanced course load. All universities have general education requirements. Even if you are planning on studying math and science, you will need to take writing courses in college, so don't neglect them in high school. Remember, many students change their major at least once in college.
- Talk to your school counselor: Your school counselor can help you determine which available classes will prepare you
  for your prospective college major.
- Extracurricular activities: Having at least one club or activity related to your college major will make your resume that much more appealing come application time, regardless of your chosen major.
- Contact universities: If you have a list of colleges you plan on applying to, contact them about their specific admissions requirements.

## 10 Tips About College Majors and Careers for High School Seniors

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- 1. Try to ignore the pressure to declare your major before you're ready. It may feel like "everyone" has declared a major and knows what <u>career</u> they want to pursue, but that's really not the case. Surveys show that about 80% of first-year students don't know what they plan to major in-- and that over 50% of college students change their majors at least once before they graduate. Most schools allow you to pursue up to four semesters of study before you are required to declare a major, so if you need that much time, take it.
- 2. If you think you want to major in one subject, but aren't sure, try to select a college that offers flexibility. For example, if you are considering a music major but aren't 100% committed to the idea, you might want to attend a college/university that has a strong music program but will also allow you to take other courses your first year, rather than a conservatory which locks you into a heavy music curriculum your first year.
- 3. The primary goal of higher education is education. Yes, you want to find employment after you graduate, but you will be investing a lot of money in the classes you will be taking so focus on what you will learn, how you will develop your thinking, and how you will grow as a function of your experience in college. You want to be inspired by professors and intrigued by new knowledge. That is the priceless part of the education-- try not to cut it off by focusing exclusively on the job you will get later on. You can supplement your education with internships, <u>leadership</u> in student organizations, oncampus employment, and other activities that will enhance your resume and broaden your job opportunities.
- 4. Take a look at the range of majors your prospective colleges have to offer. Find out which schools are the strongest in your areas of interest. Colleges may look the same on the surface, but dig a little and you'll learn what makes each one unique. Some have outstanding study abroad programs, some are known for their science curriculum and laboratories, others for their arts programs, etc. If you have a general idea of your interests, seek out the programs with the best reputation in that area. In general, your employment prospects will improve if you attend a school known for the major you select, with a sufficient number of majors to justify on-campus recruiting by employers.

- 5. Read up on majors that are unfamiliar. Just what does one study in "sociology" or "rhetoric"? Take a look at the classes offered in each department to see which ones pique your interest. You can use your high school interests as a starting point, but don't stop there.
  - If you like science, but aren't sure what to major in, try an introductory science class that intrigues you (geology? astronomy? meteorology? biochemistry?) and see what happens.
  - If you did well in Spanish, for instance, consider a new foreign language when you get to
    college. Consider what cultures you'd like to learn more about-- in college you'll experience a
    broader range of languages to study such as Chinese, Japanese, or Arabic. And the career
    opportunities related to language study can be quite interesting--in business, education,
    government or nonprofit settings. Add courses in business, anthropology, and international
    studies to round out your language study.
- 6. While you're touring the campus, check out the bookstore. Look at the textbooks for various classes-- what looks appealing? What books might you read even if you weren't required to for a class? That might provide a clue for a possible major.
- 7. Be prepared to be surprised (parents, too!). Most colleges have distribution or core curriculum requirements that require you to take classes in subjects you are currently unfamiliar with-- or maybe even dislike. Keep an open mind-- one question I ask my seniors who take my career classes is: "How many of you are majoring in the subject you planned to major in when you came to college?" Out of a class of 40 students I usually see only about 5 raised hands. I then ask them how they discovered their chosen major--- and for a majority of those students it was because they "had" to take a class in the subject and found it and/or the professor so interesting they decided to learn more.
- 8. With the exception of a few specific areas (accounting or engineering, for example) **your major does not equal your career**. You will use your major as a starting point-- a way of thinking or a perspective-- and you will add internships and other experiences that will help you adapt your major to whatever career field you pursue. As you progress through your freshman and sophomore years, look for departments where you enjoy the professors, the classes, and the knowledge you're acquiring. Appreciating what you're learning makes it more likely you will get good grades-- something employers care about.
- 9. Look for courses or experiences which will help you develop skills valued in any work setting: computer skills, writing and communication, analytic thinking, <u>creativity</u>, basic mathematic/accounting skills, etc. Just remember that these skills can be learned in virtually any major.
- 10. As a career counselor, one of the saddest situations I see are seniors who chose a major because of the money they thought they would earn or the job they thought it would get them-- even though they didn't really enjoy the field of study. The workplace is too volatile for that kind of predictive behavior. Careers which are "hot" when you enter school can quickly cool off or become glutted. Hot "new" technologies get replaced. And jobs open up in fields that didn't even exist when you first enrolled in college. Develop skills which will serve you in a variety of settings. Flexibility will be the key to your future- so learn some basic workplace skills while you major in what you want.