

The **Doctor of Pharmacy (Pharm.D.)** is the professional degree to prepare licensed pharmacy practitioners. The Pharm.D. is granted after a four-year professional program following a minimum two years of pre-pharmacy college coursework. Most students who enter Pharm.D. programs complete the bachelor's degree. However, some six-year Pharm.D. programs accept "transfer" students into the first year of their professional program after completing the pre-requisite courses. (A master's degree or Ph.D. in pharmaceutical sciences, pharmacology or a related field prepares students for research careers.)

The American Association of Colleges of Pharmacy (AACP) annually publishes **Pharmacy School Admission Requirements** (PSAR), which offers information on each pharmacy school. The PSAR is available for review in the Career Services Center (CSC) along with school catalogs. The same information with links to schools and more can be found at www.aacp.org. More links to information about pharmacy school and the application process can be found at <http://career.ucsd.edu/undergraduates/thinking-about-grad-school/health-professions.html>.

ADMISSION REQUIREMENTS

Admissions committees will assess your **academic preparation** (*i.e.*, undergraduate coursework and GPA, and in some cases, standardized test scores) as well as your **professional potential** based on biographical information, your knowledge of the profession conveyed in the application, and personal characteristics communicated via letters of reference and an admissions interview. Undergraduate grade point averages for entering pharmacy students typically range between 3.1 and 3.6. Pharmacy schools seek to admit students from a diversity of academic, cultural, economic and social backgrounds.

Pre-pharmacy course requirements typically include, but are not limited to: Some schools also require a course in:

Calculus	1 to 2 quarters	Microbiology
General chemistry	1 year with up to two labs	Human Anatomy
Organic chemistry	2 to 3 quarters with up to two labs	Mammalian Physiology
Physics	0 to 2 quarters	Genetics/Immunology/Molecular Biology
Biology	3 quarters plus one lab	Biochemistry
Economics	1 quarter (macro or microeconomics)	Statistics
Psychology/Human Behavior	1 quarter general psychology	International/Cultural/Ethnic Studies
Speech/Public Speaking	1 quarter	Interpersonal Communication
Writing/English Composition	2 to 3 quarters	Computer Science

For the most current admissions requirements, check school specific information on www.aacp.org, contact pharmacy schools, or review *Pharmacy School Admission Requirements*. You may also need to take additional electives in the humanities and social sciences to satisfy general admission requirements for schools of pharmacy. However, your UCSD college's

UCSD's Skaggs School of Pharmacy received 1400 applications and will interview 280 for the 2008 entering class of 60 students. The mean cumulative GPA of admitted students is typically around 3.67. UCSD aims to train pharmacists interested in non-retail practice settings, and most graduates go on to pharmacy residencies. For more info, see <http://pharmacy.ucsd.edu>.

general education requirements typically have the diversity necessary to meet these requirements.

While there is no particular major preferred by pharmacy schools, UCSD does offer a major in pharmacological chemistry that includes most of the science courses required by pharmacy schools. You may be interested in the minor offered at UCSD, "Health Care – Social Issues", which offers the opportunity to examine health care related issues from the perspective of disciplines like Anthropology, Economics, Philosophy, Psychology, Sociology, and Urban Studies and Planning.

Standardized Tests

Some pharmacy schools may require you to take the Pharmacy College Admission Test (PCAT) although none of the seven pharmacy schools in California require it. The five content sections of the PCAT are designed to measure verbal ability, quantitative ability, reading comprehension, knowledge of basic principles and concepts of biology, and general and elementary organic chemistry. An additional subtest measures your writing skills on two essay prompts. The PCAT is typically offered four times each year in summer, fall and winter. PCAT registration/information booklets are available in the Career Services Center, and online at www.pcatweb.info.

Non-Academic Requirements

Admissions committees are interested in your personal characteristics such as demonstrated ability to communicate effectively both orally and in writing, motivation to be a pharmacist, maturity, and interest in serving others. These qualities are assessed through information you provide in the application essay, letters of reference and the personal interview. Pharmacy schools encourage applicants to seek out experiences (paid or unpaid) that will help them confirm pharmacy as their career choice.

Although not required, most successful applicants do have some record of service experience that might also have helped them develop skills like communicating, listening, advising or teaching. For suggestions on gaining experience, see the "Obtain Relevant Experience" section of our website at <http://career.ucsd.edu/undergraduates/thinking-about-grad-school/health-professions.html> where you can find links to the handout "Maximizing Your Volunteer Experience," contact the volunteer office of a hospital, visit the Volunteer Connection in the Price Center or check sites like www.volunteermatch.org. UCSD's Health & Medical Professions Preparation Program (HMP3) offers a volunteer placement service and a mentor program at <http://hpmp.ucsd.edu/> for students interested in exploring careers in health care.

A **personal statement** or some other form of written narrative is part of each application. This essay provides you an opportunity to describe the process and experience through which you decided to become a pharmacist, and other academic and life experiences which helped you develop as a person. The Career Services Center offers a handout, "Professional School Personal Statement" on our website to get you started. Advisors critique essays upon request.

Letters of recommendation (two or three) from some combination of professors, employers, supervisors, extracurricular advisors or pharmacy professionals are typically required to provide more information about you. "A Student Guide to Obtaining Letters of Recommendation" is available on the Career Services Center website. Specific details on required letters of recommendation are available at www.pharmcas.org for participating schools.

Interviews are required at most pharmacy colleges if the admissions committee determines that you are competitive for admission. The interview allows the school to assess you and gives you a chance to tour the campus, meet with faculty and currently enrolled students, and learn about financial aid and housing. Further information, including "The Professional School Admissions Interview" handout, an "Interview Preparation Checklist," and a link to an online, webcam-based interview preparation tool, is available at <http://career.ucsd.edu/undergraduates/thinking-about-grad-school/application-basics.html#interviewing>. Advisors also offer "Interview Interactive" workshops to prepare for admission interviews. A DVD on interviewing at pharmacy schools can also be viewed. Visit www.studentdoctor.net to read about interviewing experiences posted by pharmacy school applicants across the country.

THE APPLICATION PROCESS

PharmCAS (Pharmacy College Application Service), a service of the AACP, is the initial pharmacy application for the majority of U.S. pharmacy schools. You'll complete the PharmCAS application and send college transcripts to PharmCAS. Pharmacy schools then invite qualified applicants to complete a secondary application, including reference letters. Schools not participating in PharmCAS will have their own individual applications available through their websites. **Application deadlines** typically range from November 1 to March 1 for entry in the following fall. Applicants are advised to apply early, particularly if the school uses a rolling admissions process. Consult **Pharmacy School Admissions Requirements** or www.pharmcas.org for information on curriculum, GPA, test scores, admission requirements, tuition, location, housing and other factors as you choose schools to which you will apply. See the Career Services Center handout on *Financial Aid for Professional & Graduate School* for information on how to pay for school costs. Also, visit pharmacy school recruiters at UCSD's annual Professional and Graduate School Information Fair held each Fall quarter. An applicants' workshop is held each Spring. Advisors are available to speak with UCSD students and alumni. Call (858) 534-4939 to make an appointment.

THE PHARMACY PROFESSION

Although pharmacists are known as professionals whose primary function is to compound and dispense medicines prescribed by physicians, dentists, or other authorized health care providers, the responsibilities of pharmacists are substantially broader, primarily in the areas of direct patient care and patient education. Pharmacists must have strong communication skills and the ability to relate well to patients and other health care providers. As pharmacists have become more involved in educating patients about the medications they are taking, including drug interactions and side effects, communication skills have become increasingly important. Pharmacists who work in community pharmacies must also develop effective management and interpersonal skills.

The majority of pharmacists work in community pharmacies, from independent prescription only, such as those found in medical offices, to retail chain pharmacies which also sell other items. Other pharmacists work in hospitals and other health care facilities, are employed in research and development efforts in research or manufacturing companies, or are engaged in teaching or research in universities. Opportunities are also becoming available for pharmacists with advanced training (Pharm.D. plus fellowship or residency) to work as clinical pharmacists in practitioner specialties such as ambulatory care, clinical pharmacokinetics, geriatrics, oncology, psycho pharmacy, drug information and nutrition support. Pharmacists have also been instrumental in establishing many of the poison information and control centers across the country. There is currently a nationwide shortage of pharmacists, and the job outlook for the profession is excellent.

For additional **career information**, consult our library's copy of *Full Preparation: The Pfizer Guide to Careers in Pharmacy*, *Pharmacy School Admissions Requirements (PSAR)*, the Career Services Center website, and career books and binders, available in our library.