



## CENTER FOR CAREER & PROFESSIONAL DEVELOPMENT

# Planning for Pharmacy School

## Why Pharmacy?

Pharmacy is a career that offers great benefits, flexible work schedules, outstanding growth opportunities, profit sharing, and much more. If you enjoy working with people, excel in science, and would like a rewarding healthcare career, you may want to consider pharmacy.

- **A well-rounded career:** Pharmacy is a blend of science, healthcare, direct patient contact, computer technology, and business.
- **A vital part of the healthcare system:** Pharmacists play an integral role in improving patient's health through the medicine and information they provide.
- **Outstanding opportunities:** There is an increasing need for pharmacists in a wide variety of occupational settings.
- **Excellent earning potential:** Pharmacy is one of the most financially rewarding careers.
- **A trusted profession:** Pharmacists are consistently ranked as one of the most highly trusted professionals because of the care and service they provide (according to data by Wirthlin Worldwide and Gallup International).

## 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 healthcare 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 healthcare 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 healthcare facilities, are employed in research and development efforts for pharmaceutical companies, or teach and/or conduct research at universities. Opportunities are also becoming available for pharmacists with advanced training (PharmD, plus fellowship or residency) to work as clinical pharmacists in practitioner specialties such as ambulatory care, clinical pharmacokinetics, geriatrics, oncology, psychopharmacology, drug information, and

nutrition support. Pharmacists have also been instrumental in establishing many of the poison information and control centers across the country.

## Career Options in Pharmacy:

- Academic pharmacy
- Community practice
- Government agencies
- Hospice and home care
- Hospital and institutional practice
- Long-term care or consulting pharmacy
- Managed care pharmacy
- Medical and scientific publishing
- Pharmaceutical industry/sciences
- Pharmacy law
- Trade or professional associations
- Uniformed (public health) services

Many pharmacists spend most of their workday on their feet. Community and hospital pharmacies are often open for extended hours or around the clock, so pharmacists may work nights, weekends, and holidays. Most pharmacists work full-time, although about 20 percent worked part-time in 2016. There is currently a nationwide shortage of pharmacists and the job outlook for the profession is excellent. Employment of pharmacists is expected to increase by 6 percent from 2016 to 2026, a growth rate similar to the average for all occupations. The median annual wage of wage and salary pharmacists in May 2018 was \$126,120. The lowest 10 percent earned less than \$87,790, and the highest 10 percent earned more than \$161,250.

## How to Become a Pharmacist

The **Doctor of Pharmacy (PharmD)** is the professional degree to prepare licensed pharmacy practitioners. The PharmD is granted after a four-year doctoral program following a minimum two years of pre-pharmacy college coursework. The majority of students who enter PharmD programs have completed a bachelor's degree. There are currently 138 U.S. pharmacy schools.

The American Association of Colleges of Pharmacy (AACP) annually publishes *Pharmacy School Admission Requirements* (PSAR), which offers information on each pharmacy school. [www.aacp.org](http://www.aacp.org) features the same information and more, as well as links to individual school sites.

## Texas Pharmacy Programs

- Texas A&M Health Science Center, Rangel College of Pharmacy
- Texas Southern University, College of Pharmacy and Health Sciences
- Texas Tech University Health Sciences Center, School of Pharmacy
- University of Houston, College of Pharmacy
- University of North Texas System, College of Pharmacy
- University of the Incarnate Word, Feik School of Pharmacy
- University of Texas at Austin, College of Pharmacy
- University of Texas at Tyler, Fisch College of Pharmacy

The **professional pharmacy curriculum** is designed to educate pharmacists to:

- Counsel patients on the proper use of their medications,
- Promote the public health,
- Develop and manage medication distribution and control systems,
- Manage pharmacy practice, and
- Plan and perform ongoing evaluations to provide patients with the best drug therapy for their individual needs.

## Admission Requirements

Admissions committees assess a candidate's **academic preparation** (i.e. undergraduate coursework and GPA and, in some cases, standardized test scores) as well as his or her **professional potential** (via biographic information, personal characteristics, and knowledge of the profession conveyed in the application, letters of reference, and admissions interview). Undergraduate grade point averages for incoming pharmacy students average range by school, from 3.0 to 4.0. Pharmacy schools seek to admit students from a diversity of academic, cultural, economic, and social backgrounds.

### PRE-PHARMACY COURSE REQUIREMENTS

These typically include, but are not limited to:

General chemistry (with lab)	Physics (with lab)
Organic chemistry (with lab)	Calculus
General Biology (with lab)	Statistics
Anatomy/Physiology	Genetics
Microbiology	Speech/Public speaking

Applicants must take additional electives in humanities and social sciences to satisfy general admission requirements for schools of pharmacy. For the most updated admission requirements, check school-specific information on [www.pharmcas.org](http://www.pharmcas.org), contact individual pharmacy schools, and/or review the AACP's *Pharmacy School Admission Requirements* publication.

### STANDARDIZED TESTS

Many pharmacy schools require applicants to take the Pharmacy College Admission Test (PCAT), a half-day, computer-based examination administered by Pearson and offered on one or more dates in July, September, October, November, January, and

February. The test consists of a writing section and four multiple-choice sections entitled Biological Processes, Chemical Processes, Critical Reading, and Quantitative Reasoning. The PCAT is scored on a scale from 200 to 600. Detailed information about the PCAT, including testing locations (Austin is one option), registration, and sample tests are available online at [www.pcatweb.info](http://www.pcatweb.info).

### NON-ACADEMIC REQUIREMENTS

The demonstrated ability to communicate effectively (both orally and in writing), motivation to be a pharmacist, maturity, and interest in serving others are desirable qualities in pharmacy school applicants assessed through application essays, letters of reference, and personal interviews. Pharmacy schools encourage applicants to seek out experiences (paid or unpaid) to help them confirm pharmacy as their career choice.

A **personal statement** or other written narrative is part of each application. This essay provides the candidate an opportunity to describe the process by which he/she decided to become a pharmacist and to share other academic and life experiences that helped develop the candidate as a person. The Center for Career & Professional Development critiques essays on request.

**Letters of reference** (two or three) from some combination of the applicant's instructors, supervisors, extracurricular advisors, or pharmacy professionals are required to provide more information on each candidate.

**Interviews** are required of applicants whom the admissions committee views as most competitive for admission. The interview facilitates assessment of the applicant and affords the chance to tour campus, meet with faculty and currently enrolled students, and learn about financial aid and housing.

## The Application Process

PharmCAS (Pharmacy College Application Service), a service of the AACP, is the initial application for most U.S. pharmacy schools. Applicants complete the PharmCAS application and send college transcripts to PharmCAS. Pharmacy schools then invite qualified applicants to complete a secondary application, including reference letters. **Application deadlines** typically range from November 1 to March 1 for entry in the following fall. Applicants should apply early, particularly if the school has rolling admission. Consult the AACP's *Pharmacy School Admission Requirements* or [www.pharmcas.org](http://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.

## Additional Resources

- Bureau of Labor Statistics: Pharmacists <http://www.bls.gov/ooh/healthcare/pharmacists.htm>
- American Pharmacists Association: [www.pharmacist.com](http://www.pharmacist.com)

*Adapted from: Career Services Center, University of California, San Diego; U.S. Department of Labor Bureau of Labor Statistics; [www.aacp.org/resource/career-center](http://www.aacp.org/resource/career-center)*