

So You're Interested in Pharmacy?

Pharmacists dispense drugs prescribed by physicians and other health practitioners, and they provide information to patients about medications and their use. Also, they may advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.

Common Area of Confusion: Another health field, Pharmacology, is often confused with Pharmacy. Keep in mind that Pharmacology is focused on the study of how a drug affects the biological system and how the body responds. Pharmacy is the science or practice of the preparation, formulation, and dispensing of medicinal drugs.

Quick Facts

Sample Job Titles	Median Wages (2019-2020)*	Required Education
<ul style="list-style-type: none"> Clinical Pharmacist Hospital Pharmacist Pharmacist in Charge 	In CA: \$144,660 In Los Angeles Area: \$141,240 <small>*For current wages, visit CareerOneStop.org/salary</small>	Doctorate Degree: <ul style="list-style-type: none"> Doctor of Pharmacy (PharmD)

The Path to Pharmacy



Admission to pharmacy school is highly competitive. Some pharmacy schools will accept students upon the completion of a minimum of 60 semester units of pre-pharmacy coursework. However, a bachelor's degree is required and/or preferred at some institutions.

A solid understanding of fundamental sciences is essential to study pharmaceutical and biochemical sciences. A pharmacy degree typically requires four academic years of graduate study. The first two years usually cover the basic sciences and the last two years, pharmacy theory and practice. At the completion of the curriculum, students are awarded a PharmD degree (Doctor of Pharmacy). Additionally, graduates are required to successfully complete the North American Pharmacist Licensure Examination (NAPLEX) and other licensure assessments required by a state board of pharmacy before they can legally practice as a pharmacist in the United States.

Choosing an Undergraduate Major

As with most medical fields, there is **no required undergraduate major** to apply to a PharmD program. You should give careful consideration to your choice of major and select an area of study that interests you.

Some colleges offer bachelor's degrees in pharmaceutical sciences, pharmaceutical chemistry, or pharmacology. Students applying to pharmacy school need to plan carefully and complete the pharmacy schools' requirements and the requirements for their undergraduate major.



How to Prepare as an Undergraduate

As an undergraduate pursuing your bachelor's degree, there are several things you can do to prepare for graduate school. You can begin now as a Citrus College student!

- Complete the **prerequisite coursework** for the PharmD programs you are interested in. We've included a sample of common prerequisites on the next page of this handout. Prerequisites vary, so be sure to research schools and determine their requirements.
- Maintain a **high GPA**.
- Gain **experience** in the pharmacy profession through volunteering, interning, or taking a summer job in a pharmacy or healthcare setting.
- Develop your **leadership skills** through student organizations and/or **community service**.
- **Study** for the standardized test(s) required for the programs you will be applying to.
- **Connect** with faculty and professionals. Remember, most programs will require multiple letters of recommendation!

Sample Prerequisite Courses

In general, all prerequisite courses should be taken for a letter grade. Some campuses may have policies regarding if their requirements can be met through lower-division or upper-division coursework (Citrus College does not offer upper-division classes; these are courses that must be taken at a university).

Common Prerequisites	Citrus College Courses
One year of English	ENGL 101 & 103 or 104
One year of Biology	BIOL 124 & 125
Anatomy	BIOL 200
Physiology	BIOL 201
Microbiology	BIOL 220
One year of Organic Chemistry	CHEM 210/211 & 220/221
One year of Physics	PHYS 201 & 202 or 203*
	<small>*Some campuses may accept PHYS 111 & 112. Refer to program specific websites for more information.</small>
Additional Coursework	MATH 190, 165
Recommended Courses:	PSY 101, SPCH 101, ECON 102

IMPORTANT: This list is meant to be used as an informational guide. All students must refer to the individual campuses/programs for specific information on prerequisite requirements.

Pharmacy School Application Process

- Apply to pharmacy doctoral programs using the **Pharmacy College Application Service (PharmCas)**. PharmCas is a centralized application which allows students to apply to multiple PharmD programs offered by schools and colleges of pharmacy. PharmCas also has a school directory which houses information on the various graduate programs, as the deadlines and requirements are unique for each program.
- Some schools may require admission tests such as the **Pharmacy College Admissions Test (PCAT)** or the Graduate Record Exam (GRE) as an admission requirement. Check with the pharmacy schools you plan to apply to for program-specific information.

Resources

Professional Organizations

- American Association of Colleges of Pharmacy (aacp.org)
- Pharmacy is Right for Me (pharmacyforme.org)
- PharmCas - Pharmacy College Application Service (pharmcas.org)
- American Pharmacists Association (aphanet.org)

Visit **CandidCareer** to learn more about this occupation from the perspective of current Pharmacists!

bit.ly/CandidPharmacy

Podcasts

- The Elective Rotation: A Critical Care Hospital Pharmacy (pharmacyjoe.com)
- CorConsult Rx: Evidence-Based Medicine and Pharmacy (corconsultrx.com/podcast)
- Pharmacy Podcast Network: Inspiring Pharmacy Leadership Interviews (pharmacypodcast.com)

Related Occupations

Not sure if getting a doctorate degree in pharmacy is the right fit for you? Here are some related careers with different educational requirements. For more information on these careers or others, visit ONetOnline.org.

Job Title	Median Wages	Required Education	Holland Interest Code
Pharmacy Technician	In CA: \$40,120	~HS diploma or equivalent	CR
Registered Nurse	In CA: \$104,410	Associate's Degree	SIC