Pharm.D.
Doctor of Pharmacy
What is Pharmacy?

Pharmacy is a doctoral health profession in which licensed professionals provide information about medications to patients and health care professionals. As “medication experts,” pharmacists are concerned with safeguarding the public’s health in matters relating to medication distribution and use and disease state management. In short, pharmacists help people live healthier, better lives.
What do Pharmacists Do?

Pharmacists dispense prescription medications to patients and offer expertise in the safe use of prescriptions. They also may conduct health and wellness screenings, provide immunizations, oversee the medications given to patients, and provide advice on healthy lifestyles.

Typical Duties

› Fill prescriptions: verifying physicians instructions, checking for possible negative interactions with other drugs the patient is taking or medical conditions the patient has, instruct patients on how and when to take a medication and inform them about potential side effects

› Give flu shots and, in most states, other vaccinations

› Advise patients about general health topics: diet, exercise, stress management, treatment

› Complete insurance forms and work with insurance companies

› Oversee the work of pharmacy techs and interns

› Record keeping and other administrative tasks

› Educate other healthcare practitioners about proper medication therapies for patients
Types of Pharmacists

› **Community pharmacists** work in retail stores such as chain drug stores or independently owned pharmacies. They dispense medications to patients and answer any questions that patients may have about prescriptions, over-the-counter medications, or any health concerns that the patient may have. They also may provide some primary care services such as giving flu shots.

› **Clinical pharmacists** work in hospitals, clinics, and other healthcare settings. They spend little time dispensing prescriptions. Instead, they are involved in direct patient care. Clinical pharmacists may go on rounds in a hospital with a physician or healthcare team. They recommend medications to give to patients and oversee the dosage and timing of the delivery of those medications. They also may conduct some medical tests and offer advice to patients. For example, pharmacists working in a diabetes clinic may counsel patients on how and when to take medications, suggest healthy food choices, and monitor patients’ blood sugar.

› **Consultant pharmacists** advise healthcare facilities or insurance providers on patient medication use or improving pharmacy services. They also may give advice directly to patients, such as helping seniors manage their prescriptions.

› **Pharmaceutical industry pharmacists** work in areas such as marketing, sales, or research and development. They may design or conduct clinical drug trials and help to develop new drugs. They may also help to establish safety regulations and ensure quality control for drugs.
Which Pharmacy Career is Right for You?

Thinking about a career in pharmacy, but aren’t sure which direction is right for you? Take this Pharmacy Is Right for Me quiz and find out which pharmacy career might be a great fit for you!
Why Become a Pharmacist?

1. You’ll help people get well.
2. You’ll work directly with patients.
3. There are a wide variety of career opportunities.
4. There is an increased demand for pharmacists.
5. You’ll be an important member of the healthcare team.
6. You’ll have job mobility, stability and flexibility.
7. You will be part of major innovations in drug therapy.
8. You’ll work with state-of-the-art technology.
9. You can help defend against bioterrorism.
10. You’ll be a highly respected member of your community.
How to Become a Pharmacist

1. **Complete postsecondary education.**
2. **Take the Pharmacy College Admissions Test.** Most of the more than 100 PharmD programs require applicants to take the PCAT.
3. **Earn your PharmD degree.** The PharmD degree typically takes four years to complete, though some programs last only three years and others admit high school graduates for six-year terms.
4. **Become licensed.** Pharmacy school graduates need to pass the North American Pharmacist Licensure Exam and also obtain a state-specific license to practice pharmacy.

Pharmacists are expected to keep up with continuing education coursework throughout their career. You can also earn certifications in various specialty areas.
The Pharmacy Application Process

› Complete prerequisite courses and take the PCAT standardized test.
› Apply in the summer, about 14 months prior to desired matriculation (e.g., July 2021 for Fall 2022 matriculation).
› The common application (PharmCAS) opens in July.
› Application will include demographic information, description of work and activities, personal statement, and letters of recommendation.
# Pharm.D. Academic Prerequisites

*check individual school websites for the most up to date prereqs*

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Jefferson</th>
<th>UCSF</th>
<th>Purdue</th>
<th>Maryland</th>
<th>New England</th>
<th>Rutgers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio w lab</td>
<td>1 yr</td>
<td>1 sem w lab, 1 add’l</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 sem</td>
<td>1 yr</td>
</tr>
<tr>
<td>Gen Chem w lab</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
</tr>
<tr>
<td>Orgo w lab</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
</tr>
<tr>
<td>Biochem</td>
<td>1 sem</td>
<td>na</td>
<td>1 sem</td>
<td>na</td>
<td>na</td>
<td>1 yr</td>
</tr>
<tr>
<td>Phys w lab</td>
<td>1 sem</td>
<td>1 yr</td>
<td>1 sem</td>
<td>1 sem</td>
<td>1 sem</td>
<td>1 sem</td>
</tr>
<tr>
<td>Anat/Physio w lab</td>
<td>1 yr</td>
<td>1 sem Physio.</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
<td>1 yr</td>
</tr>
<tr>
<td>Microbio</td>
<td>1 sem w lab</td>
<td>1 sem w lab</td>
<td>1 sem</td>
<td>1 sem w lab</td>
<td>1 sem</td>
<td></td>
</tr>
<tr>
<td>Math</td>
<td>Calc I</td>
<td>Calc I, Stats</td>
<td>Calc I, Stats</td>
<td>Calc I, Stats</td>
<td>Calc I, Stats</td>
<td>Calc I, Stats</td>
</tr>
<tr>
<td>English</td>
<td>1 sem</td>
<td>1 yr</td>
<td>1 sem</td>
<td>1 sem</td>
<td>1 sem</td>
<td>1 yr</td>
</tr>
<tr>
<td>Others?</td>
<td>Humanities &amp; Social Sciences</td>
<td>Humanities &amp; Social Sciences</td>
<td>Econ, Immuno, Speech</td>
<td>Econ, Speech, Hum &amp; SS</td>
<td>Psych, Speech, Global Awareness</td>
<td>Wri, Econ, Psych/Soc</td>
</tr>
</tbody>
</table>

**AACP 2020-2021 Summary of Course Prerequisites for U.S. Colleges and Schools of Pharmacy**
The Pharmacy College Admission Test (PCAT)

› The Pharmacy College Admission Test (PCAT) measures general academic ability and scientific knowledge necessary for the commencement of pharmaceutical education.

› The PCAT consists of approximately 240 multiple-choice items, and two writing topics.

› Candidates are given approximately four hours to complete the test.

› The six content areas measured by the PCAT include: verbal ability, biology, reading comprehension, quantitative ability, chemistry and a written essay.

› More than 85% of all pharmacy programs require applicants to submit scores from the PCAT. Use the PSAR handbook to determine if the schools you’re interested in are among them.
Finding Your Pharmacy School

Choose a program based upon factors that are important to your learning needs, which may include program content, geographic location, faculty, facilities, experiential training opportunities, class size, student demographics, extra-curricular opportunities and cost.

The Pharmacy School Admission Requirements (PSAR)©: The Pharmacy School Admission Requirements is designed to provide the most up-to-date information about each pharmacy school, including specifics about admission requirements, selection factors and educational costs for students entering pharmacy school.

PharmCAS PharmD School Directory: An interactive search/compare tool that allows you to create a list of schools that best fits your needs. Use designated filters to create a list of schools that suits your needs. See at a glance: the accreditation status, residency requirements, supplemental requirements, and more. Click each individual school to get a detailed overview, provided by PharmCAS.
# Sample Pharm.D. Curriculum Overview

from [UNC Eshelman School of Pharmacy](http://pharmacy.unc.edu)

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Orientation Work</td>
<td></td>
<td></td>
<td>Pharmacy Bridging Course</td>
<td>Pathology of Human Disease</td>
<td>Molecular Foundations of Drug Action</td>
<td>Pharmacuetics &amp; Drug Delivery Systems I</td>
<td>Pharmaceutical Compounding I</td>
<td>Pharmaceutical Calculations</td>
<td>Immunization Certification Program</td>
<td>On Becoming a Pharmacist</td>
<td>Evidence Based Practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 2</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 3</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elective Student Directed Practicum</td>
<td></td>
<td></td>
<td>Pharmacotherapy: Integrated II</td>
<td>Immersion Experience: Community, Health-System, or Direct Patient Care (Am Care or Inpatient)</td>
<td>Holiday</td>
<td>The Patient Care Experience II</td>
<td>Pharmacy Law</td>
<td>Electives</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YEAR 4</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
<th>SEPTEMBER</th>
<th>OCTOBER</th>
<th>NOVEMBER</th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
<th>APRIL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Advanced Immersion (9 months)**

- Leading Change in Healthcare I
- Leading Change in Healthcare II
Upcoming Information Sessions

› **UNTHSC Pharmacy Information Session**
  April 5 • 1:00pm – 2:00pm • Online • [Register](#)

› **Pharmacy School Virtual Fair**
  April 7 • 10:00am - 7:00pm • Online • [Register](#)

› **University of Washington Doctor of Pharmacy Information Sessions**
  April 14 • 12:00pm – 1:00pm • Zoom • [Register](#)

› **Touro College of Pharmacy Information Sessions**
  April 21 • 4:30pm - 5:30pm • Online

› **U IL Chicago PharmD Virtual Information Session**
  April 23 • 4:30pm – 6:00pm • Online • [Register](#)

› **Nova Southeastern College of Pharmacy Information Session**
  April 27 • 12:00pm – 1:00pm • Zoom • [Register](#)
For More Information

American Association of Colleges of Pharmacy Student Center
aacp.org/resources/student-center

American Pharmacist Association
pharmacist.com/

Pharmacy School Admissions Requirements (PSAR) Publication
aacp.org/resource/pharmacy-school-admission-requirements

Bureau of Labor Statistics Career Info
BLS.gov/OOH/Healthcare/Pharmacists.htm

Pharmacy Application
PharmCAS.org

Pharmacy College Admission Test
PCATweb.info

Pharmacy is Right for Me
pharmacyforme.org

US News Profile of Pharmacy
Money.USnews.com/Careers/Best-Jobs/Pharmacist