

Pharmacy Interest Guide 2022-2023

Pharmacists help patients with almost anything related to the use of medications. Pharmacists are one of the most accessible members of the healthcare team. Pharmacists are a key member in the medication distribution process to ensure patients receive medications safely. They advise patients, as well as physicians and other health practitioners, on the selection, dosages, interactions, and side effects of medications. Pharmacists monitor the health and progress of patients to ensure the medications are working safely and effectively. Many pharmacists work in a community setting, such as a drugstore, or in a health care facility, such as a hospital.

Some pharmacists specialize in specific drug therapy areas, such as oncology, nuclear pharmacy, nutrition support, geriatrics, pediatrics and psychiatric pharmacy. Some conduct research for pharmaceutical manufacturers, developing new drugs and therapies and testing their effects on people. Others work in marketing or sales, providing expertise to clients on a medication's use, effectiveness, and possible side effects. Some pharmacists work for health insurance companies, developing pharmacy benefit packages and carrying out cost-benefit analyses on certain drugs. Other pharmacists work for the government, managed care organizations, public health care services, or the armed services. Finally, some pharmacists are employed as college faculty, teaching classes and performing research in a wide range of areas. *(Some content taken from the Occupational Outlook Handbook)*

Students attend a four year professional pharmacy program after completing two or more years of undergraduate pre-pharmacy coursework. The University of Iowa offers a Doctor of Pharmacy (Pharm.D.) degree, which is fully accredited by the Accreditation Council for Pharmacy Education (ACPE). Some graduates may further their education by applying to pharmacy residency programs.

Sample Pre-Pharmacy Four-Year Academic Plans

Plan A: Starting with General Chemistry and Pre-Calculus

Year 1

RHET:1030 Rhetoric

CHEM:1070 General Chemistry I

MATH: based on UI math placement

General Education Elective**

CHEM:1110 Princ. of Chemistry I

MATH:1460 Calculus for Bio. Sciences

General Education Elective

General Education Elective

Year 2:

CHEM:1120 Princ. of Chemistry II

BIOL:1411 Found. of Biology

General Education Elective

General Education Elective

CHEM:2210 Org. Chemistry I

BIOL:1412 Div. of Form & Function

Statistics (any except STAT:1010)

General Education Elective

Take **PCAT**

in July or Sept.

Apply to

Pharmacy Schools

Year 3:

CHEM:2220 Org. Chem II

ACB:3110 Human Anatomy

BMB:3110 Biochemistry

General Education Elective

HHP:3500 Human Physiology

MICR:3164 Microbiology

PHYS:1400 Basic Physics*

General Education Elective

Plan B: Starting with Principles of Chemistry I and Calculus

Year 1:

RHET:1030 Rhetoric
CHEM:1110 Princ. of Chemistry I
MATH:1460 Calculus for Bio. Sciences
General Education Elective **

CHEM:1120 Princ. of Chem II
BIOL:1411 Found. of Biology
Statistics (any except STAT:1010)
General Education Elective

Summer:

BMB:3110
Biochemistry
Take **PCAT**
in July or Sept.
**Apply to
Pharmacy Schools**

Year 2:

CHEM:2210 Organic Chemistry I
ACB:3110 Human Anatomy
BIOL:1412 Diversity Form & Funct.
General Education Elective
General Education Elective

CHEM:2220 Organic Chemistry II
HHP:3500 Human Physiology
MICR:3164 Microbiology
General Education Elective
General Education Elective

Summer:
PHYS:1400
Basic Physics*

*The UI College of Pharmacy requires one year of high school physics, PHYS:1400 Basic Physics with or without a laboratory, or a physics course equivalent to PHYS:1400 with or without a lab.

** For application to the UI College of Pharmacy, completion of the College of Liberal Arts and Sciences General Education Program is not required, but it is highly encouraged. However, certain courses are not accepted by the UI College of Pharmacy; a list of these courses may be found at the end of this guide.

UI College of Pharmacy Admissions Profile 2022

92 students matriculated

Average PCAT: 410 (optional test)

1/3 of students had a Bachelor's Degree or higher

The Application Process

Students should begin researching schools early in their academic careers as programs have different admission requirements. Students can apply to over 100 pharmacy schools, including the UI College of Pharmacy, by completing their initial application through the web-based Pharmacy College Application Service (PharmCAS) at pharmacas.org. Programs not participating in PharmCAS accept applications directly to their schools. Schools using PharmCAS may or may not require a supplemental application; check with each program. PharmCAS also has in-depth information about preparing to apply, a list of pharmacy schools, and important deadlines.

UI Pharmacy applicants must have a minimum of 16 General Education credits to apply, although completion of 24 General Education credits is required to graduate with a PharmD. For UI admission in Fall 2023, applications are accepted between mid-July 2022 through February 1, 2023. Each applicant must complete the PharmCAS application which includes letters of reference and transcripts. A supplemental application and fee is not required. Applicants must also meet UI's technical standards.

Assured Admissions

UI does offer an assured admissions program for high school candidates. Students need to apply by February 1 with the class being selected by March 15. To learn more, visit

<https://pharmacy.uiowa.edu/pharmd/admissions/high-school>

Diversity in the Pharmacy Profession

Many pharmacy schools, including the UI College of Pharmacy, seek a diverse class of students. Programs seek to recruit individuals from diverse ethnicities, socioeconomic backgrounds, and life experiences to the Pharmacy profession and to equip them with the necessary clinical and professional knowledge, skills and abilities to provide high quality, compassionate medical care to diverse patient populations. Students may contact individual pharmacy schools for more information. For more information about the UI's commitment to diversity, visit https://pharmacy.uiowa.edu/about/diversity_equity_inclusion

Entrance Examination Requirement (PCAT)

UI has made the PCAT optional. However, if a candidate's math and science GPA are below a 3.0, the PCAT is highly recommended as a way to strengthen the application. The Pharmacy College Admission Test (PCAT) can be found at www.pcatweb.info. Scores must be sent to PharmCAS whose code number is 0104. It is recommended to take the PCAT in July and retest in the fall only if needed. It must be taken no later than November prior to the application deadline (be aware that the number of fall test seats are limited). Pre-registration for the exam is required; dates are listed on the PCAT web site. Students register for the test online. The UI College of Pharmacy accepts PCAT scores for two years. The registration fee is \$210. Study guides and practice tests are strongly recommended and can be purchased at the PCAT site.

Letters of Reference

Two letters of reference are required; additional letters will also be accepted. Letters are processed through the PharmCAS application service and may be submitted electronically. These letters can be from an employer, professor, pharmacist, supervisor of a community service project, etc. They may not come from a family member or friend.

Interviews

Interviews vary by school; students should check with their individual schools for interview timelines. The UI College of Pharmacy requires individual interviews either online or in person. Applicants selected for an interview will be contacted via email. Interviews are held September-May. Interview day consists of a 30-minute closed-file interview with 2 or 3 interviewers, a written essay, a tour of the Pharmacy Building given by current pharmacy students, a faculty panel, current student panel, and overview of the PharmD program. Practice interviews are available through the UI Career Center in C310 Pomerantz Center.

Criminal Background Checks

The PharmCAS requires applicants to report any felony and misdemeanor convictions. The UI College of Pharmacy performs criminal background checks on newly enrolled students. Other schools may participate in a centralized criminal background check and drug screening as well. Applicants using PharmCAS will also need to sign a Code of Conduct.

Citizenship/International Students

Pharmacy schools differ as to whether they accept U.S. permanent residents and/or foreign citizens. Applicants are encouraged to check PharmCAS (under School Directory>PharmD Directory>International Applicants) for each school's admission policy. The UI College of Pharmacy will consider applications from U.S. citizens, U.S. permanent residents, Canadian, and other foreign citizens.

Student Organization

Students wanting to learn more about the profession should attend Pre-Pharmacy Club meetings which provide educational and social opportunities for pre-pharmacy students. Meetings feature pharmacy student and alumni panels, a review of Iowa's admission requirements, and talks by pharmacists. Contact Liz Davis, Director of Admissions, liz-davis@uiowa.edu to learn more.

Websites

UI College of Pharmacy: pharmacy.uiowa.edu

Pharmacy College Application Service (PharmCAS): pharmacas.org

American Association of Colleges of Pharmacy: www.aacp.org

Pre-Pharmacy Coursework Checklist*

| | |
|--|---|
| _____ RHET:1030 Rhetoric | _____ MATH:1460 Calculus for Bio. Sciences |
| _____ CHEM:1110 Princ. of Chemistry I | _____ CHEM:2210 Organic Chemistry I |
| _____ CHEM:1120 Princ. of Chemistry II | _____ CHEM:2220 Organic Chemistry II |
| _____ BIOL:1411 Foundations of Biology** | _____ BMB:3110 Biochemistry |
| _____ BIOL:1412 Diversity of Form & Function** | _____ MICR:3164 Microbiology & Human Health |
| _____ ACB:3110 Human Anatomy, HHP:3105 Anatomy for Human Physiology, or HHP:1100 Human Anatomy | _____ HHP:3500 Human Physiology(preferred),*** HHP:1300 Fundamentals of Human Phys., or HHP:3550 Human Phys. with Lab |
| _____ STAT:XXXX Statistics (any course except STAT:1010) | _____ PHYS:1400 Basic Physics if needed**** |

_____ 16 credits General Education Electives are needed to apply with 6 of those 16 sh from within the Social Sciences (ANTH, ECON, POLI, PSY, or SOC). 24 sh General Education Electives are needed to graduate from the Pharm.D. program. It is recommended that students complete the College of Liberal Arts and Sciences General Education Program.

Applicants are strongly encouraged to choose Gen Ed credits in the following areas: oral communication skills, psychology, genetics, medical humanities, cultural perspectives, and an experience in service learning. See your advisor for suggestions. Note that classes may not be in the following areas:

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|--|---|
| No additional math or science classes | No performance dance classes |
| No activity-based classes or CPR classes | No acting classes |
| No P.E. classes such as jogging, weight lifting, etc. | No studio art classes such as drawing, painting, ceramics, etc. |
| No performance-based classes such as vocal or instrumental music classes | |
| No vocational/technical classes from a community college or junior college | |

* Students must earn a C- or higher on each course listed above for the UI College of Pharmacy.

**The UI College of Pharmacy recommends that students take their biology sequence at the same school and recommends an additional genetics course from BIOL:1311, 2211, 2512, 3713, or 3716 or HHP:4450.

***Preferred. Only take different course if time conflict.

****One year of high school physics or PHYS:1400 Basic Physics with or without a lab must be completed, or a physics course equivalent to PHYS:1400 with or without a lab. Online coursework is approved.

Please note: The above are prerequisites for the UI College of Pharmacy. Other pharmacy programs may have different requirements. Check the websites of individual schools or contact your pre-pharmacy advisor for more information.

This form is to be used as a planning tool. Your degree audit is the official record of degree requirements.
Academic Advising Center, updated 9/2022