

Why UB?

We proudly create and graduate pharmacy and pharmaceutical sciences leaders. For over 130 years, the School of Pharmacy and Pharmaceutical Sciences (SPPS) at UB has continually been a leader in the education of pharmacists and pharmaceutical scientists, renowned for innovation in clinical practice and research. The school is accredited by the American Council of Pharmaceutical Education (ACPE) and is the #1 ranked school of pharmacy in New York State and #14 in the United States by U.S. News & World Report. The school is located in a state-of-the-art building with specialized research labs and centers. It is home to a productive international research program with Distinguished Teaching Professors and faculty members who are recipients of the Chancellor's Awards for Excellence. UB SPPS offers the “best of both worlds” – you will live and learn among a close-knit community of students and faculty with the resources and facilities of a large research university at your fingertips.

Prerequisite Courses for University at Buffalo's Doctor of Pharmacy (PharmD) Program

- MTH 160 - Statistics I
- MTH 210 - Calculus I
- BIO 144 - Anatomy & Physiology I
- BIO 145 - Anatomy & Physiology II
- BIO 155 - General Biology I
- BIO 156 - General Biology II
- BIO 209 - General Microbiology
- BIO 221 - Principles of Biochemistry
- BIO 230 - Molecular Genetics
- CHE 151 - General College Chemistry I
- CHE 152 - General College Chemistry II
- CHE 251 - Organic Chemistry I
- CHE 252 - Organic Chemistry II
- ENG 101 - English Composition
- ENG 200 - Advanced Composition - A social/behavioral science course

Note: Effective Fall 2019, Physics I (PHY 145, 154 or 161) is no longer required but is highly recommended

SUNY General Education Curriculum

For electives, choose from MCC's Approved List of SUNY General Education Requirements.

Admission

To be considered for the PharmD program at UB, students must:

- Complete all prerequisite courses by the end of the summer session prior to fall admission.
- Apply to the PharmD program via PharmCAS (Pharmacy College Application Service). Visit pharmacy.buffalo.edu/admissions and pharmcas.org/school-directory for details. UB's application deadline is June 1.
- There is no minimum GPA required; competitive candidates have a 3.00 cumulative GPA in all prerequisite science and math courses.
- Earn a grade equal to or greater than C- in all prerequisite courses.

- Have a minimum of two letters of recommendation submitted to PharmCAS. Instructions for submission of letters can be found on the [PharmCAS website \(pharmcas.org\)](http://pharmcas.org). Do not send your letters directly to UB.
- Prepare for an admissions interview.

Additional Criteria of Importance for Acceptance

- Selection is based on scholastic achievement, aptitude, personal qualifications, and character. These are judged from the college record, grade point average, the PCAT, letters of reference and evaluation, a supplemental application, and a personal interview. In addition to intellectual and academic competence, the School's Admissions Committee considers communication skills, leadership ability, community service, health care-related or research experience, and motivation for pursuing a career in pharmacy.
- The faculty of the UB SPPS have established Personal Attributes and Capabilities Essential for Admission, Progression, and Graduation ([Technical Standards - https://pharmacy.buffalo.edu/academics/pharmd/curriculum/technical-standards.html](https://pharmacy.buffalo.edu/academics/pharmd/curriculum/technical-standards.html)) for our doctor of pharmacy Degree.
- See important information on [student intern permits and pharmacy practice licensing requirements \(https://pharmacy.buffalo.edu/academics/pharmd/curriculum/intern-permits-licensing.html\)](https://pharmacy.buffalo.edu/academics/pharmd/curriculum/intern-permits-licensing.html).
- Learn about our [Non-Discrimination Policy \(https://pharmacy.buffalo.edu/non-discrimination.html\)](https://pharmacy.buffalo.edu/non-discrimination.html).

What is the Difference Between the Programs in Pharmacy Practice & Pharmaceutical Sciences?

The PharmD enables one to work as a pharmacist, interacting with patients and other health care practitioners about medications. It is not an undergraduate degree (such as a BS or BA) nor is it a graduate degree (such as an MS, MBA, or PhD). The PharmD is a professional degree for pharmacists similar to the doctor of medicine (MD) for physicians or a doctor of dental surgery (DDS) for dentists. A degree in the pharmaceutical sciences or a related discipline does not prepare or permit students to practice pharmacy, but rather enables one to engage in drug development and research for the pharmaceutical industry.

Pharmaceutical Scientists at UB perform cutting-edge research in drug delivery, protein formulation, drug metabolism, pharmacokinetics, pharmacodynamics, and pharmacogenomics. These research studies are aimed at improving therapy for many diseases, such as cancer, transplantation rejection, multiple sclerosis, autoimmune diseases, and cardiovascular diseases. UB students are exposed to contemporary research techniques and practices. Graduates are highly recruited by national laboratories, in academia, industry and government. UB's long standing tradition of excellence in education and research continues to receive national and international acclaim and recognition. UB offers several pharmaceutical sciences programs:

- **BS:** While the program is structurally a basic four-year science program (similar to biochemistry and biology), it uniquely offers an interdisciplinary field of study which seeks to achieve better understanding and control of the factors influencing clinical response to drug therapy.
- **Combined BS/MS:** An accelerated program for academically qualified students that are already enrolled in the BS degree; graduates of this program are highly sought after by pharmaceutical companies.
- **MS in Pharmaceutical Sciences:** Normally involves two years of additional post-graduate education beyond the BS; this comprehensive degree has internationally-renowned faculty in the fields of drug development and delivery whose research and cutting-edge knowledge has resulted in many novel drug delivery approaches and treatments.
- **MS in Pharmacometrics and Personalized Pharmacotherapy:** A new and unique graduate program focused on advanced training in pharmacometric principles of advanced pharmacokinetics (study of

absorption, distribution, metabolism and excretion of drugs) and pharmacodynamics (study of drug effects and toxicity in treatment of diseases) to enhance personalized pharmacotherapy.

- PhD: The highly sought-after PhD gives students the opportunity to work with internationally-renowned faculty specializing in the fields of systems pharmacology and drug delivery. Students receive distinct and rigorous training, allowing them to assume cutting-edge and leadership positions in industry, government and academia.

Please [email the UB SPPS Office of Admissions & Advisement \(pharm-admit@buffalo.edu\)](mailto:pharm-admit@buffalo.edu) if you have any questions.

Note: While every effort is made to ensure that the information in this guide is accurate, students are advised to contact transfer institutions for specific course requirements and the most up-to-date information.