Pharmacy, MS

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The graduate program in pharmacy at the University of Iowa is primarily a PhD program with admission preference given to applicants with a PhD degree objective. Admission to the MS in pharmacy is granted under special circumstances only, which may include international government funding requirement, a Fulbright scholarship or another scholarship source that specifies a master's degree, or a person working in the industry seeking a specific set of knowledge or skills for the purpose of enhancing their value to that employer. A master's degree is not required to be eligible to apply to the PhD program.

Learning Outcomes

Graduates will exhibit the ability to:

- demonstrate both subject matter expertise and the ability to critically evaluate the current state of knowledge in that area of expertise;
- understand the fundamental concepts and applications of current methodology and techniques for the conduct and evaluation of research in their area of expertise;
- demonstrate the ability to conduct research under the direction of a faculty member and interact successfully with other members of a research team;
- effectively communicate research findings in both written and oral formats;
- know and apply the highest ethical standards in research and in the communication of the results of that research; and
- be prepared for career options in academia, industry, government, or other relevant fields.

Requirements

The Master of Science in pharmacy requires at least 30 s.h. of credit, which may include 9 s.h. of research. At least 24 s.h. must be completed at the University of Iowa after admission to a graduate program. Requirements for the master's degree include a final examination which, at the discretion of department, may be written or oral or both. The final examination will not duplicate course examinations. Various forms of extramural registration may qualify toward the 24 s.h. residence requirement. A master's degree can typically be earned in 3–4 semesters.

The Master of Science in pharmacy requires mastery of methodologies and practices of research and scholarship of the discipline. MS degrees may be designed to provide advanced study and accomplishment that serves a variety of career and other purposes. A thesis describing original scholarship or research may be required. No more than 9 s.h. of credit for thesis research and writing is counted toward the 30 s.h. requirement.

Three subprograms are available: drug discovery and experimental therapeutics, health services research, and pharmaceutics.

The drug discovery and experimental therapeutics curriculum provides a strong foundational base of knowledge along with options for a tailored experience for students. The thesis requirement provides an opportunity for engagement in cutting-edge scholarship, ongoing mentorship, and collaborative research interactions with multiple labs.

The health services research subprogram provides an innovative approach to studying the challenges facing the health care system and provides evidence to support policy-based solutions. The subprogram combines ideas across several distinct scientific paradigms (sociology, economics, psychology, business, and anthropology) to better understand the factors leading to decisions in health care and the consequences of these decisions. Students gain broad knowledge of health and pharmaceutical care, informed by theories from economics and social psychology. The subprogram teaches intellectual and practical skills to investigate research questions dealing with current issues.

The pharmaceutics subprogram is a multidisciplinary science that examines the development, production, and characterization of dosage forms, as well as the disposition and action of drugs in the body. As pharmaceutical scientists have been engaged in the development of novel biomaterials for sophisticated drug delivery systems, they also have expanded into research with applications in the development of medical devices and tissue engineering.

For more information about graduate study, visit the College of Pharmacy website.

Admission

The graduate program in pharmacy at the University of Iowa is mainly a PhD program with admission preference going to applicants with a PhD degree objective. Admission to the MS in pharmacy will be granted under special circumstances only, which may include the following: international government funding requirement, a Fulbright scholarship or some other scholarship source that specifies a master's degree, or a person working in the industry seeking a specific set of knowledge or skills for the purpose of enhancing their value to that employer. A master's degree is not required to be eligible to apply to the PhD program.

Applicants must meet the admission requirements of the Graduate College. They must:

- hold a bachelor's degree from a U.S. institution or an equivalent degree from another country as determined by University of Iowa Admissions;
- have a grade-point average of at least 3.00; and
- submit a Graduate Record Examination (GRE) General Test score.

Visit Graduate Degree: How to Apply on the College of Pharmacy website for a list of program requirements and application deadlines. Academic requirements for maintaining graduate registration are determined by the Graduate College and by the individual divisions in the College of Pharmacy.

Career Advancement

Advanced study in the pharmaceutical sciences prepares students for research, teaching, and administrative positions in the pharmaceutical industry, in colleges and universities, in government agencies, and in health-related institutions and organizations.