

## **Emphasis - Pharmaceutics**

- [M.S. in Pharmaceutical Sciences](#)
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### **M.S. in Pharmaceutical Sciences Description**

The M.S. in pharmaceutical sciences can be completed with an emphasis in environmental toxicology, medicinal chemistry, pharmaceuticals, pharmacology, pharmacognosy, or pharmacy administration.

**Minimum Total Credit Hours: 31**

#### **Course Requirements**

Requirements for each emphasis area are given in the respective program description sections. Each emphasis area requires students to complete a minimum of 24 semester hours of course work and 6 hours of thesis.

### **Emphasis - Pharmaceutics Description**

The M.S. in pharmaceutical sciences with emphasis in pharmaceuticals deals with the science of dosage form design and embraces all facets of the process of turning a new chemical entity into a medication that can be safely and effectively used by patients.

#### **Course Requirements**

The M.S. in pharmaceutical sciences with an emphasis in pharmaceuticals requires the following courses: 1. Seminar in Current Pharmaceutical Topics (Phar 543, 544). 2. Statistics and Experimental Design (Bisc 504 or Psy 501). 3. Analytical Pharmaceuticals (Phar 535). 4. Pharmacokinetics (Phar 546 or Phar 660). 5. Product Development (Phar 649).

In addition, two of the following electives are required: 1. Advanced Pharmaceuticals I (Phar 641). 2. Advanced Pharmaceuticals II (Phar 642). 3. Stability of Pharmaceutical Systems (Phar 644). 4. Surface Phenomena (Ch E 545 or Phar 645). 5. Advanced Pharmacokinetics (Phar 660). 6. Applied Pharmaceuticals (Phar 650).

Additional courses may be required by the student's graduate adviser and/or advisory committee. If a required course is unavailable, the Department of Pharmaceuticals graduate faculty may approve an alternative course for a particular student.

#### **Other Academic Requirements**

A thesis based upon experimental work in the general area of pharmaceuticals is also required.

Prior to the student's thesis defense, the student must have a minimum of one completed manuscript ready for submission to a referred journal for publication.

Note: An applicant may enter the Ph.D. program directly, without having to enroll in the Master's Program.

