

# PHARMACEUTICAL SCIENCES, M.S.

## Program Description

The Department of Pharmaceutical Sciences at the Marshall University School of Pharmacy offers the Master of Science (M.S.) degree with a major in Pharmaceutical Sciences. Students complete the requirements for a M.S. under a faculty mentor, in areas ranging from cellular and molecular pharmacology to drug formulation and methods of drug delivery.

The M.S. (Thesis) degree in Pharmaceutical Sciences is preparation for further study or employment requiring pharmaceutical research experience and requires a thesis. A M.S. student must be mentored by a faculty member, so applicants are encouraged (but not required) to contact potential faculty advisors about research projects and graduate assistantships prior to applying for admission. Information about faculty may be accessed through the School of Pharmacy website.

## Admission Requirements

Applications may be submitted under the Graduate applicant link on the Marshall University's Admissions website (<http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission> (<http://www.marshall.edu/graduate/admissions/how-to-apply-for-admission/>)). Requirements for program admission include:

- An earned baccalaureate degree from an accepted, accredited institution with a recommended degree GPA of 3.0 on a 4.0 scale.
- Two letters of recommendation from academic or professional references.
- Official transcripts from degree-granting institution (additional transcripts may be required, at the discretion of the program).
- No entrance exam is required; however, a Graduate Record Exam (GRE) score may be submitted to strengthen an application.
- Complete an on-site or video interview.
- International applicants are required to have earned a Test of English as a Foreign Language (TOEFL) score of at least 80 or minimal score on an alternative test to demonstrate language proficiency. Please visit the international applicants website (<https://www.marshall.edu/admissions/graduate-proof-of-english-proficiency/>) for more information.

## Graduate Assistantships

All M.S. applicants will be considered for funding (up to \$12K/year stipend plus tuition waiver) after the requirements for enrollment have been met (e.g., transcripts, recommendation letters, interview etc.). There are a limited number of graduate assistantships offered on a competitive basis and there is no application to apply for funding. Once a student is enrolled into the M.S. program, the Admissions Committee will review their credentials to determine if program funding will be extended.

## Program Requirements

### Requirement for All Degrees

A Plan of Study approved by the student's advisor must be submitted for approval to the Director of Graduate Studies before the student

registers for his or her 12th semester hour. The Plan of Study is a student's "blueprint" for completing graduation requirements. Students must also have a thesis committee (M.S.) consisting of no fewer than three faculty (including the student's advisor) assembled by the end of their first year. Students must meet with their committees at least once within their first year and at least once per semester (excluding the defense) in subsequent years.

## M.S. Degree Requirements for Thesis Option

- Students must complete the graduate coursework as noted in the following section, including MSPS 699 Thesis. The maximum number of credits that may be earned for the thesis is 12 hours.
- Candidates must register for and participate in MSPS 542 Science Seminars, Graduate Seminar, during each of the semesters in which they are actively enrolled in the graduate program.
- Not more than 4 hours of Graduate Seminar (MSPS 542 Science Seminars) may be used to complete the M.S. program credit requirement.
- Successful completion of the master's program requires a GPA of 3.0 or higher, and no more than 6 credit hours of C grades may be applied to the total hours for graduation.
- Upon completion of course requirements and the thesis, M.S. candidates must pass a comprehensive oral examination.
- No more than 12 credit hours of PHAR courses may be applied towards the degree.

## Plan of Study

Code	Title	Credit Hours
<b>The following courses are required:</b>		
MSPS 561 or PHAR 531	Biopharmaceutics I	3
MSPS 562 or PHAR 532	Biopharmaceutics II	3
MSPS 544 or PHAR 544	Prin Dis Drug Action Prin of Disease & Drug Action	4
MSPS 542	Science Seminars	4
MSPS 699	Thesis	12
<b>Six credit hours of electives are required. Electives include, but are not limited to:</b>		
MSPS 513	Biopharm 2	
PHAR 537	Pharmacokinetics	
MSPS 632	Prod Dev by Quality Design	
PHAR 635	Research Outcomes Patient Care	
PHAR 542	Immunology and Microbiology	
PHAR 523	Pharmacogenomics	
PHAR 547	Pharmaceutical Chemistry	
MSPS 685	Independent Study	
MSPS 686	Problem Report	
MSPS 581	Special Topics	

**Total Credit Hours**

**32**