PHARMACEUTICAL SCIENCES: RESEARCH, M.S.

REQUIREMENTS

MINIMUM GRADUATE SCHOOL REQUIREMENTS

Review the Graduate School minimum academic progress and degree requirements (http://guide.wisc.edu/graduate/#policiesandrequirementstext), in addition to the program requirements listed below.

NAMED OPTION REQUIREMENTS

MODE OF INSTRUCTION

Face to Face	Evening/ Weekend	Online	Hybrid	Accelerated
Yes	No	No	No	No

Mode of Instruction Definitions

Accelerated: Accelerated programs are offered at a fast pace that condenses the time to completion. Students typically take enough credits aimed at completing the program in a year or two.

Evening/Weekend: Courses meet on the UW–Madison campus only in evenings and/or on weekends to accommodate typical business schedules. Students have the advantages of face-to-face courses with the flexibility to keep work and other life commitments.

Face-to-Face: Courses typically meet during weekdays on the UW-Madison Campus.

Hybrid: These programs combine face-to-face and online learning formats. Contact the program for more specific information.

Online: These programs are offered 100% online. Some programs may require an on-campus orientation or residency experience, but the courses will be facilitated in an online format.

CURRICULAR REQUIREMENTS

Requirement	Detail
Minimum Credit Requirement	30 credits
Minimum Residence Credit Requirement	16 credits
Minimum Graduate Coursework Requirement	15 credits must be graduate-level coursework. Details can be found in the Graduate School's Minimum Graduate Coursework (50%) Requirement Policy: https://policy.wisc.edu/library/UW-1244 (https://policy.wisc.edu/library/UW-1244/)
Overall Graduate GPA Requirement	3.00 GPA required. This program follows the Graduate School's policy: https://policy.wisc.edu/library/UW-1203 (https://policy.wisc.edu/library/UW-1203/).
Other Grade Requirements	Candidates will be dropped from the program if they receive more than 7 credits of grades at the BC level or lower. This applies to formal courses and research credits.
Assessments and Examinations	The program expects the M.S. candidate to engage in a research project of a scope appropriate to the time devoted to earning the degree. The M.S. degree may be awarded following approval of the candidate's committee after either of the following: 1) passing of the preliminary exam or 2) writing a M.S. thesis describing the candidate's research that is presented and defended before the student's M.S. thesis committee.
Language Requirements	No language requirements.

REQUIRED COURSES

Code	Title	Credits
Foundational Content		
PHM SCI 780	Principles of Pharmaceutical Sciences	3
Select 6 credits from two Core Areas:		**6**
Drug Discovery Core:		
PHM SCI 786	Natural Product Synthesis, Biosynthesis and Drug Discovery	
Drug Action Core:		
PATH 750	Cellular and Molecular Biology/ Pathology	
PHMCOL-M 781	Molecular and Cellular Principles in Pharmacology	
BIOCHEM 630		
Drug Delivery Core:		
PHM SCI/ CHEM 766	Molecular Recognition	
PHM SCI 773	Molecular Solids	
PHM SCI 775	Polymeric Drug Delivery	
Research ethics/Responsible conduct of research		
PHARMACY 800	Research Ethics: Scientific Integrity and the Responsible Conduct of Research	2
Seminar & Research		**16**
PHM SCI 931	Pharmaceutical Sciences Seminar (required every fall term during enrollment as a graduate student in the program) [1]	
PHM SCI 932	Pharmaceutical Sciences Seminar (required every spring during enrollment as a graduate student in the program) [1]	
PHM SCI 990	Research [2]	
PHM SCI 999	Advanced Independent Study [3]	
Three additional credits from the Drug Action, Drug Delivery, or Drug Discovery electives.		**3**

Courses with the graduate attribute in the following subject listings can count toward this requirement: ANATOMY, ANAT&PHYS, BIOCHEM, BSE, BIOLOGY, BME, BMOLCHEM, BMI, BOTANY, CRB, CBE, CHEM, COMP BIO, COMP SCI, ECE, EP, FAM MED, FOOD SCI, GENETICS, H ONCOL, ISY E, MS & E, MATH, MD GENET, M M&I, MED PHYS, MED SC-M, MED SC-V, MEDICINE, MICROBIO, M&ENVTOX, MOL BIOL, NEUROL, NEURODPT, NTP, NURSING, NUTR, SCI, ONCOLOGY, PATH-BIO, PATH, PHM SCI, PHMCOL-M, PHS, PHYSICS, PL PATH, PSYCH, RADIOL, SOIL SCI, SURGERY, SURG SCI, ZOOLOGY. A list of popular elective courses at this level taken by recent Pharmaceutical Sciences graduate students is maintained at https://pharmacy.wisc.edu/programs/pharmsci/curriculum/electives (https://pharmacy.wisc.edu/programs/pharmsci/curriculum/electives/)/.	
Total Credits	**30**

1

Seminar is required every fall and spring semester during enrollment as a graduate student in the program.

2

Research credits are typically taken every semester in the program, beginning in the second semester. Credits will vary.

3

Research rotations in first semester of first year. At least one credit required.

To enhance a required core curriculum, an individualized course of study is planned with a faculty advisor. Faculty advisors have the option to require additional courses beyond the minimum requirements listed above.