

PHARMACEUTICAL SCIENCES (MS)

Contacts

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Program Website (<https://www.jefferson.edu/academics/colleges-schools-institutes/pharmacy/programs/ms-pharmaceutical-sciences.html>)

Program Description

The MS program in Pharmaceutical Sciences is housed in the Jefferson College of Pharmacy (JCP) and offered in collaboration with Jefferson College of Life Sciences. The program may be completed on either a full-time or part-time course of study and students enrolling in this 34 credit MS program may select either a thesis or non-thesis track.

The curriculum provides instruction in all phases of the drug and biologic development process, including preclinical drug discovery and development (computational design and synthesis of new molecular entities and molecular characterization), screening and formulation, analytical support for clinical trials, health care pharmacogenomics profiling, metabolite analysis, pharmacokinetic characterization and pharmacodynamics.

Learning Goals/Outcomes

- Graduates will demonstrate expertise in the design and application of research methodologies to meet the needs of the evolving biomedical and pharmaceutical industries and academic laboratories.
- Graduates of this program will be prepared for employment as Research Technicians/Assistants in various laboratories in academic institutions and the pharmaceutical industry.
- Graduates will be prepared to pursue further education and training, including Ph.D degree programs.

Thesis Track

- Curriculum: 2 Years, 34 Credits

Course	Title	Credits
First Year		
PSCI 704	Molecular Pharm Sciences	3
PSCI 707	Drug Discovery	2
GC 660	Statistical Methods	3
PSCI 703	PharmaceuticalSciencesRotation	1
PSCI 705	Biological Pharm Sciences	3
PSCI 702	Research Foundation & Ethics	1
PSCI 799	Pharmaceutical Sciences Resrch	3
PSCI 706	Spec Techniq in Pharm Sciences	2
PSCI 798	Pharmaceutical Sciences Pract	1
Credits		19
Summer		
PSCI 799	Pharmaceutical Sciences Resrch	1
Credits		1
Second Year		
PSCI 708	Pharma Biotech in Drug Develop	2

Course	Title	Credits
General Elective		
General Elective		2
PSCI 709	Scientific Writing	2
PSCI 799	Pharmaceutical Sciences Resrch	4
PSCI 701	PharmaceuticalSciences Seminar	1
General Elective		
General Elective		2
General Elective		
General Elective		2
Credits		15
Total Credits		35

Non-Thesis Track

- Curriculum: 2 Years, 34 Credits

Course	Title	Credits
First Year		
PSCI 704	Molecular Pharm Sciences	3
PSCI 707	Drug Discovery	2
GC 660	Statistical Methods	3
PSCI 703	PharmaceuticalSciencesRotation	1
PSCI 705	Biological Pharm Sciences	3
PSCI 702	Research Foundation & Ethics	1
PSCI 798	Pharmaceutical Sciences Pract	3
PSCI 706	Spec Techniq in Pharm Sciences	2
Credits		18
Summer		
PSCI 798	Pharmaceutical Sciences Pract	1
Credits		1
Second Year		
PSCI 708	Pharma Biotech in Drug Develop	2
General Elective		
General Elective		2
PSCI 709	Scientific Writing	2
PSCI 798	Pharmaceutical Sciences Pract	2
PSCI 701	PharmaceuticalSciences Seminar	1
General Elective		
General Elective		2
General Elective		
General Elective		2
Credits		13
Total Credits		32