

# 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.

## Curriculum: 34 Credits

### MS Non-Thesis Track Courses:

Course	Title	Credits
<b>First Year</b>		
PSCI 701	PharmaceuticalSciences Seminar	1
PSCI 703	PharmaceuticalSciencesRotation	1
PSCI 704	Molecular Pharm Sciences	3
PSCI 705	Biological Pharm Sciences	3
PSCI 706	Spec Techniq in Pharm Sciences	2
PSCI 707	Drug Discovery	2
PSCI 710	Biostatistics	3
<b>Credits</b>		<b>15</b>
<b>Second Year</b>		
PSCI 701	PharmaceuticalSciences Seminar	1
PSCI 702	Research Foundation & Ethics	1
PSCI 709	Scientific Writing	2

Course	Title	Credits
PSCI 798	Pharmaceutical Sciences Pract	1-6
<b>Credits</b>		<b>5-10</b>
<b>Total Credits</b>		<b>20-25</b>

## Curriculum: 34 Credits

### MS Thesis Track Courses:

Course	Title	Credits
<b>First Year</b>		
PSCI 701	PharmaceuticalSciences Seminar	1
PSCI 703	PharmaceuticalSciencesRotation	1
PSCI 704	Molecular Pharm Sciences	3
PSCI 705	Biological Pharm Sciences	3
PSCI 706	Spec Techniq in Pharm Sciences	1-2
PSCI 707	Drug Discovery	2
PSCI 710	Biostatistics	3
<b>Credits</b>		<b>14-15</b>
<b>Second Year</b>		
PSCI 701	PharmaceuticalSciences Seminar	1
PSCI 702	Research Foundation & Ethics	1
PSCI 709	Scientific Writing	2
PSCI 799	Pharmaceutical Sciences Resrch	1-6
<b>Credits</b>		<b>5-10</b>
<b>Total Credits</b>		<b>19-25</b>