

MASTER OF SCIENCE (M.S.)

The master's degree is offered only under special circumstances and upon recommendation by the program COGS and approval by the Graduate Dean.

Pharmacology Degree Requirements

A minimum of 30 credit hours and a minimum overall GPA of 3.0 is required for the M.S. degree. In addition, all master's candidates must register for IBMS 6098 Thesis for at least one semester in order to graduate. The student must successfully defend a thesis and be recommended by their program COGS for approval of their degree to the Dean of the Graduate School of Biomedical Sciences.

Pharmacology Sample Plans of Study

M.S. in Neuroscience ¹

First Year

Fall		Credit Hours
IBMS 5000	Fundamentals Of Biomedical Sciences	8
IBMS 5008	Lab Rotations	2
Total Credit Hours:		10.0

First Year

Spring		Credit Hours
INTD 5040 or PHYL 5041	Fundamentals Of Neuroscience1: Molecular, Cellular, & Developmental Neuroscience	1-2
IBMS 5008	Lab Rotations	2
Second Track course elective (Principles of Pharmacology, Cell Signaling, Aging, Genetics, etc.)		3
IBMS 6090	Seminar	1.5
TSCI 5070	Responsible Conduct Of Patient-Oriented Clinical Research	2
Total Credit Hours:		9.5-10.5

Second Year

Fall		Credit Hours
PHAR 5020	Basics Of Research Design	2
PHAR 5092	Special Problems In Pharmacology: Research Practicum	1-9
INTD 5043	Fundamentals Of Neuroscience 2: Systems Neuroscience	3
INTD 5047	Neuroanatomy	2
CSBL 5095	Experimental Design And Data Analysis	3
IBMS 6090	Seminar	1.5
IBMS 6097	Research	0.5-12
Total Credit Hours:		13.0-32.5

Second Year

Spring		Credit Hours
Electives- see department		5
IBMS 6097	Research	0.5-12
IBMS 6090	Seminar	1.5
Total Credit Hours:		7.0-18.5

Third Year

Fall		Credit Hours
IBMS 6090	Seminar	1.5
IBMS 6098	Thesis	1-9
Total Credit Hours:		2.5-10.5

Third Year

Spring		Credit Hours
IBMS 6090	Seminar	1.5
IBMS 6098	Thesis	1-9
Total Credit Hours:		2.5-10.5

Fourth Year

Fall		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fourth Year

Spring		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fifth Year

Fall		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fifth Year

Spring		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

¹ A minimum of 30 semester hours is required to grant a MS degree, and further requirements are outlined in the Neuroscience handbook.

MS in Pharmacology**First Year**

Fall		Credit Hours
IBMS 5000	Fundamentals Of Biomedical Sciences	8
IBMS 5008	Lab Rotations	2
Total Credit Hours:		10.0

First Year

Spring		Credit Hours
PHAR 5014	Integrative Physiology & Therapeutics	4.5
PHAR 5013	Principles Of Pharmacology & Physiology 1	3
IBMS 5008	Lab Rotations	2
IBMS 6090	Seminar	1.5
Total Credit Hours:		11.0

Second Year

Fall		Credit Hours
PHAR 5020	Basics Of Research Design	2
PHAR 5092	Special Problems In Pharmacology: Research Practicum	1-9
CSBL 5095	Experimental Design And Data Analysis	3
IBMS 6090	Seminar	1.5
IBMS 6097	Research	0.5-12
PHAR Electives ¹		
Total Credit Hours:		8.0-27.5

Second Year

Spring		Credit Hours
TSCI 5070	Responsible Conduct Of Patient-Oriented Clinical Research	2
IBMS 6090	Seminar	1.5
IBMS 6097	Research	0.5-12
PHAR Electives ¹		
Qualifying Exam		
Total Credit Hours:		4.0-15.5

Third Year

Fall		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Third Year

Spring		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fourth Year

Fall		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fourth Year

Spring		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fifth Year

Fall		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

Fifth Year

Spring		Credit Hours
IBMS 6098	Thesis	1-9
IBMS 6090	Seminar	1.5
Total Credit Hours:		2.5-10.5

¹ A minimum of 30 semester hours is required to grant an MS degree, and further requirements are outlined in the Pharmacology handbook.

Pharmacology Objectives/Program Outcomes

- The student will be able to conduct independent research.
- The student will demonstrate proficiency in core coursework.
- The student will be able to critically evaluate current scientific literature.
- The student will be able to communicate effectively in writing.
- The student will be able to communicate effectively in an oral format.