# PHARMACY, PHARMD/MSPS DUAL DEGREE PROGRAM

The Master's in Pharmaceutical Sciences (MSPS) program serves as a dual degree in conjunction with the Doctor of Pharmacy (PharmD). The focus of the MSPS curriculum is to improve students' understanding of the chemical properties of drugs and their effects within biological systems in both healthy and diseased populations, with the goal of preparing individuals for technical positions in healthcare related to pharmaceutical research and development, regulation and sales. Core coursework will have an emphasis on basic science as well as techniques and knowledge highly relevant to pharmaceutical sciences in the industrial, academic and governmental settings. The MSPS has a requirement for a laboratory-based research thesis in which the student will work directly with their faculty mentor to develop and experimentally investigate a topic relevant to pharmacotherapeutics. The curricular offerings and research experience will give the individual the knowledge and skills to more competitively pursue a career related to drug development, assessment, regulation, and marketing in the private and public sectors.

Students must apply to the MSPS program no later than Spring Term of the Pharmacy curriculum for enrollment in Summer Term MSPS courses for the PharmD/MSPS. For students in the Pharmacy Program who have not earned a bachelor's degree, admission to the terminal year of the MSPS program will be contingent on successful completion of PharmD curriculum. This contingent admission enables students to take MSPS courses during Summer Term prior to completion of the PharmD as listed in the course map. Applicants must be in good academic standing with a minimum GPA of 2.8 in their PharmD coursework and have obtained at least a grade of C in the core courses to be applied to the MSPS listed in the Degree Map (PHAR 503 FOUNDATIONAL SCIENCE I, PHAR 591 PHARMACEUTICS I PHAR 592 PHARMACEUTICS II, PHAR 593 PHARMACEUTICS III, , and PHAR 530 Foundational Science III). Completion of these courses with a passing grade will fulfill the pharmacy didactic coursework used towards the MSPS.

Your degree map is a general guide of courses to complete each term on the academic pathway to your degree. It is based on the most current scheduling information from your academic program. Your program's degree map is reviewed annually and updated as schedules change.

**Year 1**

| Summer | Credit Hours | Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|---|---|
| PHAR 503 | 4 | PHAR 507 | 1 | PHAR 508 | 0.5 |
| PHAR 514 | 3 | PHAR 509 | 3.5 | PHAR 518 | 4.5 |
| PHAR 523 | 2.5 | PHAR 530 | 3 | PHAR 525 | 2.5 |
| PHAR 591 | 2 | PHAR 582 | 3 | PHAR 526 | 2.5 |
| | | PHAR 570 | 3 | PHAR 551 | 2 |
| | | PHAR 592 | 4.5 | PHAR 580 | 2 |
| | | | | PHAR 593 | 3.5 |
| | **11.5** | | **18** | | **17.5** |

**Year 2**

| Summer | Credit Hours | Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|---|---|
| Pharmacy Elective [1] | 3-6 | PHAR 603 | 2 | PHAR 628 | 0.5 |
| BIOL 468 | 3 | PHAR 608 | 2.5 | PHAR 633 | 3.5 |
| PHAR 609 | 3 | PHAR 618 | 3 | PHAR 634 | 3 |
| | | PHAR 619 | 3 | PHAR 635 | 3 |
| | | PHAR 627 | 0.5 | PHAR 644 | 3 |
| | | PHAR 643 | 3 | PHAR 645 | 2 |
| | | PHAR 657 | 2 | PHAR 652 | 2 |
| | | Elective | 3 | Elective | 3 |
| | **9-12** | | **19** | | **20** |

**Year 3**

| Summer | Credit Hours | Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|---|---|
| PHAR 700 | 3 | PHAR 770 | 5.5 | PHAR 773 | 5.5 |
| PHAR 701 | 3 | PHAR 771 | 5.5 | PHAR 774 | 5.5 |
| PHAR 702 | 3 | PHAR 772 | 5.5 | PHAR 775 | 5.5 |
| PHAR 703 | 2.5 | PHAR 777 | 0.5 | PHAR 777 | 0.5 |
| Elective | 2 | | | | |
| | **13.5** | | **17** | | **17** |

**Year 4**

| Summer | Credit Hours | Fall | Credit Hours | Spring | Credit Hours |
|---|---|---|---|---|---|
| NAPLEX/ BOARD CERT | | BIOL 480 | 3 | BIOL 482 | 3 |
| Required for PHARMD practice | | BIOL 485 (or BCHM 485) | 3 | BIOL 485 (or BCHM 485) | 3 |
| | | Elective [2] | 3 | Elective [2] | 3 |
| | **0** | | **9** | | **9** |

**Total Credit Hours 160.5-163.5**

[1] All students at Roosevelt University College of Pharmacy are required to complete 6 credit hours of electives, 3 of which must be designated as clinical electives. Electives are offered for students during terms 5 – 8, clinical electives begin in term 6.

[2] **Select from recommended course electives:** BIOL 404 HISTOLOGY & ULTRASTRUCTURE, BIOL 450 CANCER BIOLOGY, BIOL 451 GENERAL GENETICS, BIOL 453 MOLECULAR BIOLOGY, BIOL 456 DEVELOPMENTAL BIOLOGY, BIOL 458 CELL BIOLOGY, , BIOL 463 INTRODUCTION TO GENOME ANALYSIS, CHEM 436 ANALYTICAL CHEMISTRY, BCHM 456 EXP. MTHDS BIOCHEM & BIOTECH, BCHM 456 EXP. MTHDS BIOCHEM & BIOTECH, or BCHM 457 ADVANCED BIOCHEMISTRY

**Total Credit Hours applied to MSPS:** 41 semester credit hours

Includes 9 dedicated hours of research credit for thesis development and defense.