

Dual Master of Science in Pharmaceutical Sciences and Doctor of Pharmacy

Overview

The College of Pharmacy and Health Sciences offers both the professional Doctorate of Pharmacy (PharmD) and the thesis-based Master of Science in Pharmaceutical Sciences (MSPS). The MSPS program offers students a wide array of research focus areas (using sequence electives) in which to develop their Master's thesis and research, including pharmacology/neuropharmacology; medicinal chemistry and drug development; pharmaceuticals and drug delivery; pharmacogenomics; biomedical sciences; and pharmacoeconomics and healthcare data analytics. The description of what sequence electives to take, dependent on a student's focus area interests can be found in the "Master of Science in Pharmaceutical Sciences" program description in this catalogue. The intent of this dual degree option is to expand the opportunities available to pharmacy graduates, particularly those pursuing clinical fellowships or residencies with an eventual goal of working in the pharmaceutical industry, academics, or at an academic medical center.

This is a dual degree program, where students completing the requirements for each program will receive two separate degrees, the PharmD degree and the MSPS degree, within five years of entry as a PharmD student. Initially, students admitted by the College's Admissions are only admitted into the PharmD degree portion of the program. Transition into the MSPS program is not automatic, nor is acceptance into the MSPS program guaranteed, but requires application and acceptance into the MSPS program. The MSPS program admission requirements can be found in the "Master of Science in Pharmaceutical Sciences" program description in this catalogue.

PharmD students would be eligible to apply for admission to the MSPS degree program after January 1st during their first year in the PharmD program. Application to the MSPS program could occur later in the PharmD program; however, such later application and enrollment in the MSPS program could impact on the timeline to completion. Candidates must successfully submit their application materials to be considered for enrollment in the MSPS portion of the dual degree option.

The PharmD program consists of 146 credits (refer to "Doctor of Pharmacy Major" in this catalogue for details) and the MSPS program consists of 38 credits (refer to "Master of Science in Pharmaceutical Sciences" in this catalogue for details). The dual degree option was designed to take advantage of courses already part of the PharmD program, so the two programs can share 18-24 credits, depending on sequence elective choices. With required and elective course sharing, the dual degree program can be accomplished in 5 years, 1 year past the completion of the PharmD degree. In addition, to accommodate those students who elect to delay taking of the NAPLEX/MPJE (the pharmacist licensing examinations) until they finish the MSPS program, the mock NAPLEX examinations, and week of NAPLEX/MPJE review would be available to these dual degree students as an option during the fifth year of the dual degree program.

Total MSPS Credit Hours: 38

Degree Requirements

The semester-by-semester PharmD-MSPS dual degree program course listings below show those courses required in the PharmD program that can count as sequence electives in the MSPS program (PHAR designated courses), or those specific to the MSPS (PHRSC designated courses).

Course Sequence

1st Year PharmD - Fall Semester

PHAR 512	Immunology	3 cr.
PHAR 513	Biochemistry	3 cr.
PHAR 514	Pharmaceutics I	2 cr.

1st Year PharmD - Spring Semester

PHAR 522	Pathophysiology	3 cr.
PHAR 523	Genetics & Genomics	2 cr.
PHAR 524	Pharmaceutics II	2 cr.
PHAR 525	Pharmaceutics II Lab	1 cr.

2nd Year PharmD/1st Year MSPS - Summer Semester

PHAR 642/643	IPPE Community or Health System	2 cr.
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2nd Year PharmD/1st Year MSPS - Fall Semester

PHAR 611/ PHRSC 515	Principles of Pharmacology	3 cr.
PHRSC 529	Responsible Conduct of Research	3 cr.

PHAR 612	Principles of Medicinal Chemistry	3 cr.
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3rd Year PharmD/2nd Year MSPS - Summer Semester

PHAR 642/643	IPPE Community or Health System	2 cr.
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3rd Year PharmD/2nd Year MSPS - Fall Semester

PHRSC 510	Seminar & Journal Club 1	1 cr.
PHRSC 527	Data Analysis & Biostatistics	3 cr.

3rd Year PharmD/2nd Year MSPS - Spring Semester

PHRSC 520	Seminar & Journal Club 2	1 cr.
PHRSC 526	Analytical Techniques Lab	1 cr.

4th Year PharmD – Summer, Fall, and Spring Semesters

No PHRSC	No MSPS Courses	
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5th Year Post-PharmD/3rd Year MSPS - Summer Semester

PHRSC 528	Thesis Research 1	2 cr.
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5th Year Post-PharmD/3rd Year MSPS - Fall Semester

PHRSC 618	Thesis Research 2	3 cr.
PHRSC 630	Scientific Communication	3 cr.

5th Year Post-PharmD/3rd Year MSPS - Spring Semester

PHRSC 628	Thesis Research 3	3 cr.
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Total MSPS Credit Hours: 38