

**PharmD/Master of Science in Health Outcomes, Policy and Economics
Dual Degree Program**

Offered by

**Ernest Mario School of Pharmacy and School of Public Health
Rutgers, The State University of New Jersey**

The Ernest Mario School of Pharmacy and the School of Public Health offer a dual degree program that provides exceptional pharmacy students with a pathway to complete both the PharmD and the MS-HOPE in less time than it would take to complete both degrees sequentially. The dual degree program empowers pharmacists to promote value-based decision making on pharmaceuticals by coupling their clinical PharmD training with Master level scientific training to evaluate treatment outcomes and costs.

The program is available only for PharmD candidates in the Ernest Mario School of Pharmacy. Students are enrolled in full-time study in the PharmD program and graduate on time with their classmates. By taking selected MS-HOPE core courses while in the PharmD program, students are able to complete the MS-HOPE degree with approximately 18 months of full-time study or 2.5 years of part-time study, immediately following the completion of the PharmD degree.

The PharmD/MS-HOPE dual degree program combines the educational strengths of the Ernest Mario School of Pharmacy (EMSOP) and the School of Public Health (SPH). Graduates will have excellent training as professionals in pharmacy and health economics and outcomes research (HEOR).

1. Rationale for Program

The six-year Doctor of Pharmacy (PharmD) program provides students with an excellent foundation in basic and clinical sciences coupled with an emphasis on patient-centered care. The curriculum includes two years of pre-professional study and four years of professional study. The Pharmacy program, one of the oldest and most distinguished in the nation, provides a broad range of diverse opportunities and experience in clinical practice, industry, public health agencies, managed care, and laboratory and computational research. Approximately 210 students complete the PharmD each year.

The Master of Science in Health Outcomes, Policy and Economics (MS-HOPE) provides premier education and research on the effectiveness and costs of healthcare innovations, such as pharmaceuticals and devices. Coursework focuses on epidemiology, outcomes research, biocomputing, health economics, and health policy. The objective of MS-HOPE is to equip learners for entry level positions in HEOR.

The MS-HOPE program, launched in 2014, quickly garnered the attention of applicants from New Jersey as well as other parts of the US and world. Enrollment has grown steadily each year; in Fall 2020, the program included more than 40 students.

PharmD students are increasingly aware that education in HOPE (including an MS degree) can provide a formal path to employment in the pharmaceutical industry and in pharmacy benefit management. Graduates of the program are well prepared to take leadership positions in the pharmaceutical industry,

hospital or health system pharmacy administration, HEOR research consulting, and/or pharmacy benefit management.

2. Completion Time

Students are enrolled in full-time study in the PharmD program and graduate on time with their classmates. They will go on to earn the MS-HOPE degree in less time than it would take for them to complete the two degrees successively, with two years of pre-pharmacy, four years in the professional pharmacy program and 1.5 to 2.5 years of post-PharmD studies.

3. Application and Admission Overview

Applicants to the dual degree program must be currently enrolled in the Ernest Mario School of Pharmacy PharmD program with a cumulative professional GPA of 3.2 or higher. PharmD students may formally apply to MS-HOPE program as early as in the fall of the second professional year (P2) but no later than the SPH Spring application deadline of the fourth professional year (P4).

The GRE requirement for MS-HOPE admission will be waived. Students must use the School of Public Health Admissions System (SOPHAS) portal to apply to the program, and their applications will be reviewed by the MS-HOPE admissions committee.

EMSOP PharmD students who are interested in the dual degree should contact the EMSOP HOPE liaison to discuss their academic plans. With permission, they may fulfill HOPE course requirements during the academic year and/or over the summer. Up to two approved HOPE courses may count as professional electives in the PharmD program. Approved PharmD/MS-HOPE students may begin taking MS-HOPE classes in summer after the P1 year but may petition to begin courses as early as spring of the P1 year. Students must have permission from the MS-HOPE Program Director and the Office of Academic Services at EMSOP to take a HOPE course while on rotations during the P4 year. Only online or evening classes are permissible for P4 students.

Dual degree students who successfully attain a locally-based post-doctoral fellowship or residency after conferral of the PharmD may complete the MS-HOPE component of the program on a part-time basis. EMSOP students who have early goals of pursuing such post-doctoral training may apply for the MS-HOPE degree as early as the fall of the P2 year but no later than fall of the P4 year.

4. Competencies of Graduates

Graduates of the dual degree program will demonstrate the same competencies as candidates for the individual PharmD and the MS-HOPE degrees.

5. Curriculum and Requirements for the Dual Degree

PharmD students complete the full PharmD curriculum. PharmD/MS-HOPE dual degree students may complete up to six of the MS-HOPE courses while enrolled in the PharmD professional program (based on the criteria below).

Interested PharmD students must meet with the MS HOPE Program Director prior to registering for any MS-HOPE course. Beginning in the spring of their first professional year (P1), students who are

approved to begin coursework for the PharmD/MS-HOPE dual degree may substitute two approved MS-HOPE course requirements for two pharmacy professional electives. Students will choose two (3 credit) courses from the following:

- School of Public Health: Health Systems and Policy: PHCO 0501 (75:832:501)
- School of Public Health: Principles of Epidemiology: PHCO 0502 (75:832:502)
- School of Public Health: Introduction to Biostatistics: PHCO 0504 (75:832:504)
- Ernest Mario School of Pharmacy: Economic Modeling of Pharmaceuticals and Other Health Interventions (30:725:341)

If their schedules permit and with approval of the Program Director, prospective dual degree students may take additional HOPE courses while still enrolled in the PharmD program. Eligible PharmD students may take up to three MS-HOPE courses before applying to the PharmD/MS-HOPE dual degree program, but PharmD students must officially apply and be accepted into the PharmD/MS-HOPE dual degree program to take additional MS-HOPE courses as PharmD students. No more than 18 credits or six courses within the MS-HOPE program may be taken while still enrolled in the PharmD program. *Note: while enrolled in the PharmD program, students must register for all courses through the EMSOP Office of Academic Services.*

Upon matriculation into the MS-HOPE program, PharmD/MS-HOPE dual degree students may submit a credit transfer request form to enable three (3) MS-HOPE elective credits for the following PharmD course:

- Pharmaceutical Economics: 30:725:320

6. Tuition and Fees

Tuition and fees are the same as those in place for the PharmD and MS-HOPE degree programs. PharmD students enrolled full-time at EMSOP in the fall or spring semester may take additional coursework (including HOPE courses) with no additional tuition expense.

7. HOPE Program Director

Laura T. Pizzi, PharmD, MPH

Professor, Department of Pharmacy Practice, Ernest Mario School of Pharmacy

8. EMSOP Liaison to the HOPE Program

Carol S. Goldin, PhD

Senior Associate Dean for Planning and Assessment, Ernest Mario School of Pharmacy