

Class of 2025 Graduation Requirements

Doctor of Pharmacy (PharmD)

Students in the PharmD program are required to complete a minimum of 156 units over the course of four years of study. The coursework is comprised of required courses, elective courses, and a capstone. Included in the required 156 total units, students must complete 10 rotations consisting of 3 Introductory Pharmacy Practice Experiences (IPPE), for a minimum of 320 hours, and 7 Advanced Pharmacy Practice Experiences (APPE), for a total of 1,680 hours.

Program Requirements

1st Year FALL Core Courses	Units
PHAR 5310 Pharmaceutics and Biopharmaceutics	3.0
PHAR 5311 Pharmaceutical Calculations	2.0
PHAR 5315 Principles of Drug Action	4.5
PHAR 5325 Integrated Series 1 – Introduction to Pharmacy Practice	5.0
PHAR 5332 Biostatistics	2.5
PHAR 5350 Professional Development Series 1	1.0
PHAR 5360 Recitation 1	1.0
Subtotal	19.0

1st Year Spring Core Courses	Units
PHAR 5318 Pharmacokinetics	3.0
PHAR 5321 Pharmacy Law and Ethics	2.0
PHAR 5335 Integrated Series 2 – Endocrinology and Urology	5.0
PHAR 5342 Drug Information, Study Design, and Literature Evaluation	2.0
PHAR 5351 Professional Development Series 2	1.0
PHAR 5365 Recitation 2	1.0
PHAR 5370 Introduction to Industry	2.0
PHAR 5375 Pre-IPPE Readiness and Patient Assessment	3.0
Subtotal	19.0



Program Requirements

2nd Year FALL Core Courses	Units
PHAR 6420 Pharmacy Management	2.0
PHAR 6425 Integrated Series 3 – Cardiology	6.0
PHAR 6430 Introduction to Pharmacy Informatics	2.0
PHAR 6435 Integrated Series 4 – Nephrology	4.0
PHAR 6450 Professional Development Series 3	1.0
PHAR 6460 Recitation 3	1.0
PHAR 6471 IPPE 1 – Community Pharmacy Practice	4.5
Subtotal	20.5

2nd Year Spring Core Courses	Units
PHAR 6411 Sterile Products	1.0
PHAR 6421 Pharmacoeconomics and Pharmacovigilance	2.0
PHAR 6428 Health Care Delivery	2.0
PHAR 6445 Integrated Series 5 – Immunology, Rheumatology, and Dermatology	4.0
PHAR 6455 Integrated Series 6 – Infectious Disease	7.0
PHAR 6451 Professional Development Series 4	1.0
PHAR 6465 Recitation 4	1.0
PHAR 6472 IPPE 2 – Communication in Senior Chronic Care	0.5
Subtotal	18.5

Program Requirements

3rd Year FALL Core Courses	Units
PHAR 7515 Integrated Series 7 – Neurology and Psychiatry	6.0
PHAR 7525 Integrated Series 8 – Gastroenterology	4.0
PHAR 7552 Pre-APPE Readiness 1	2.0
PHAR 7560 Recitation 5	1.0
PHAR 7571 IPPE 3 – Health Systems Pharmacy Practice	3.0
Didactic Certificate Courses	4.5-6.0
Subtotal	20.5-22

3rd Year Spring Core Courses	Units
PHAR 7536 Integrated Series 9 – Hematology, Oncology, Pulmonology and Ophthalmology	6.0
PHAR 7553 Pre-APPE Readiness 2	2.0
PHAR 7565 Recitation 6	1.0
Didactic Certificate Electives	4.5- 6.0
Subtotal	13.5-15

4th Year FALL Core Courses	Units
PHAR 8600 Advanced Community Practice APPE	6.0
PHAR 8601 Advanced Health-System Practice APPE	6.0
PHAR 8602 Ambulatory Care APPE	6.0
PHAR 8603 General Medicine APPE	6.0

4th Year FALL Core Courses	Units
Subtotal	24.0



4th Year Spring Core Courses	Units
PHAR 8610, 8620-8631 Direct Patient Care APPE	6.0
PHAR 8611, 8620-8631, 8650-8656, 8672-8676 Elective APPE	12.0
PHAR 8640 Pharmacy Capstone Seminar	1.5
Subtotal	19.5

- **IPPE/APPE** = Introductory Pharmacy Practice Education/Advanced Pharmacy Practice Education – courses that are designated experiential and will take place off campus in a variety of pharmacy practice settings.

Introductory Pharmacy Practice Experiences (IPPE rotations)

Includes three rotations that will take place during the second (P2) and third (P3) year.

Students will complete a minimum of 320 hours in IPPE rotations. More than 50% of the IPPE hours are in community and institutional sites.

Advanced Pharmacy Practice Experiences (APPE rotations)

APPE rotations take place during the fourth (P4) year.

In total, seven APPE rotations are required in the program and will take place during the fourth professional (P4) year. Seven APPEs will provide the students with a total of 1,680 hours of practice experience during the PharmD program (40 hours/week for 6 weeks for 7 rotations).



PharmD Certificates

PharmD graduates will earn a certificate from one of the following three options: Healthcare Management/Pharmacy Informatics (HCM/PI), Medical and Clinical Affairs (MCA), or Medication Therapy Outcomes (MTO). Below are the required core and elective courses to successfully complete each certificate. In addition to the 9.0 credit hours required for each certificate, HCM/PI and MCA students must complete an additional MTO course (1.5 credit hours) for a total of 10.5 units.

Healthcare Management/Pharmacy Informatics (HCM/PI)

The HCM certificate program offers management training, healthcare technology, and experience in dynamic healthcare settings. The curriculum emphasizes analytical and problem-solving skills in conjunction with a deep understanding of the healthcare environment. In addition to the core courses (6 units) and elective courses (3 units), HCM/PI students are required to take one MTO elective course (1.5 units), for a total of 10.5 units.

Healthcare Management/Pharmacy Informatics (HCM/PI)	Units
PHAR 7513 Healthcare Finance and Reimbursement	1.5
PHAR 7546 Healthcare Delivery Science & Medication Safety	1.5
PHAR 7542 Applying Technology to the Medication Use Process	3.0
Total	6.0

Preferred electives totaling 3 units include: BUS 5000; BUS 5200; BUS 6400; MATH 5200; PHAR 7563; and, other courses upon the recommendation of the certificate coordinator.

Medical and Clinical Affairs (MCA)

The MCA certificate program will provide student pharmacists with the skills needed to provide strategic, tactical, and operational direction within regulations to expedite the development and delivery of safe and effective healthcare products. In addition to the core and elective courses, MCA students are required to complete the three core MCA courses below (6 units), electives (3 units), and one MTO elective course (1.5 units), for a total of 10.5 units.

Medical and Clinical Affairs	Units
BUS 5000 Introduction to the Biosciences Industries (ALS 359)	3.0
REG 6510 Design of Clinical Trials, Conduct, and Strategy (ALS 433)	1.5
PHAR 7563 Fundamentals of Medical Affairs	1.5
Subtotal	6.0



Preferred electives totaling 3 units include: BUS 5200; BUS 6410; BUS 6500; and, other courses upon the recommendation of the certificate coordinator.

Medication Therapy Outcomes (MTO)

The MTO certificate program provides opportunities to develop skills to provide care for patients in rural settings, from underserved populations, in accountable care organizations, and throughout the continuum of care process. Students who are enrolled in the MTO certificate are required to complete 7.5 units from the MTO list of courses below in addition to elective courses (3 units) for a total of 10.5 units.

Medication Therapy Outcomes (MTO)	Units
PHAR 7581 Advanced Topics in Drug Interactions	1.5
PHAR 7582 Critical Care	1.5
PHAR 7587 Nutrition Support	1.5
PHAR 7588 Geriatric Patient Care	1.5
PHAR 7593 Cardiology	1.5
Subtotal	7.5

Preferred electives totaling 3 units include: any HCM/PI or MCA certificate core course; GENE 5040; GENE 5290; and, other courses upon the recommendation of the certificate coordinator.