KECK GRADUATE INSTITUTE
Doctor of Pharmacy

2026-27 Academic Catalog/Class of 2030 Graduation Requirements

Doctor of Pharmacy (PharmD)

Students in the PharmD program are required to complete a minimum of 154.0 units over the course of four years of study. The coursework is comprised of required courses and elective courses. Included in the required total units, students must complete 8 experiential rotations. These include 2 Introductory Pharmacy Practice Experience (IPPE) rotations for a minimum of 300 hours, and an additional 6 Advanced Pharmacy Practice Experience (APPE) rotations, for a minimum of 1,440 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	2.0
PHAR 5350 Professional Development Series 1	1.0
PHAR 5361 Patient CARE 1	1.0
Subtotal	18.5

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 5366 Patient CARE 2	1.0
PHAR 5370 Introduction to Industry	2.0
PHAR 5375 Pre-IPPE Readiness and Patient Assessment	3.0
Subtotal	19.0

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Program Requirements

2nd Year FALL Core Courses	Units
PHAR 6420 Pharmacy Management	2.0
PHAR 6425 Integrated Series 3 – Cardiology	6.5
PHAR 6430 Introduction to Pharmacy Informatics	2.0
PHAR 6435 Integrated Series 4 – Nephrology	3.0
PHAR 6450 Professional Development Series 3	1.0
PHAR 6461 Patient CARE 3	1.0
PHAR 6471 IPPE 1 – Community Pharmacy Practice	4.5
Subtotal	20.0

2nd Year Spring Core Courses	Units
PHAR 6411 Sterile Products	1.0
PHAR 6421 Pharmacoeconomics and Pharmacovigilance	2.0
PHAR 6428 Population Health	2.0
PHAR 6445 Integrated Series 5 – Immunology, Rheumatology, and Dermatology	4.0
PHAR 6455 Integrated Series 6 – Infectious Disease	6.0
PHAR 6451 Professional Development Series 4	1.0
PHAR 6466 Patient CARE 4	1.0
Subtotal	17.0

Program Requirements

3rd Year FALL Core Courses	Units
PHAR 7515 Integrated Series 7 – Neurology and Psychiatry	7.0
PHAR 7525 Integrated Series 8 – Gastroenterology	4.0
PHAR 7552 Pre-APPE Readiness 1	3.0
PHAR 7561 Patient CARE 5	1.0
PHAR 7571 IPPE 2 – Health Systems Pharmacy Practice	3.0
Didactic Certificate Courses	4.5-6.0
Subtotal	22.5-24.0

3rd Year Spring Core Courses	Units
PHAR 7536 Integrated Series 9 – Hematology, Oncology, Pulmonology and Ophthalmology	5.0
PHAR 7553 Pre-APPE Readiness 2	3.0
PHAR 7566 Patient CARE 6	1.0
Didactic Certificate Courses	4.5-6.0
Subtotal	13.5-15.0

Program Requirements

4th Year 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
PHAR 8620-8659, 8690 Elective APPE	6.0
PHAR 8672-8675 Certificate APPE	6.0
PHAR 8641 Pharmacist Licensure Immersion	6.0
Subtotal	42.0

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)

In total, two IPPE rotations are required in the program and will take place during the second (P2) and third (P3) professional years. The IPPE rotations will provide the students with at least 300 hours. More than 50% of the IPPE hours are in community and institutional sites.

Advanced Pharmacy Practice Experiences (APPE rotations)

In total, six APPE rotations are required in the program and will take place during the fourth professional (P4) year. At least 5 APPEs must focus on direct patient care. All six APPEs will provide the students with a total of 1,440 hours of practice experience during the PharmD program (40 hours/week for 6 weeks for 6 rotations).

PharmD Certificates

PharmD graduates will earn a certificate in one of the following three options: Healthcare Management/Pharmacy Informatics (HCM/PI), Medical and Clinical Affairs (MCA), or Medication Therapy Outcomes (MTO). Shown 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). In addition to the didactic electives, students will take two certificate-related APPE electives totaling 12 credits.

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 and elective courses, HCM/PI students are required to take one MTO elective course (1.5 units) in addition to elective courses (3.0 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 3.0 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 below MCA courses, MCA students are required to take one MTO elective course (1.5 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
PDEV 5000 Team Masters Project	3.0
Total	9.0

Medication Therapy Outcomes (MTO)
The MTO certificate program provides opportunities to develop skills to provide care for patients in multiple care-based settings, from underserved populations, in accountable care organizations, and throughout the continuum of care process. Students selecting the MTO certificate are required to complete 7.5 credit hours from the list below in addition to elective courses (3.0 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 7593 Cardiology	1.5
PHAR 7595 Neurology / Psychiatry Pharmacotherapy	1.5
Subtotal	7.5

Preferred electives totaling 3.0 units include: any HCM/PI or MCA certificate course; GENE 5040; GENE 5290; and other courses upon the recommendation of the certificate coordinator.