

Pharmacy (PharmD)

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The University offers the Pharm.D. as the sole entry-level pharmacy practice degree. As described in the [mission](#), this program emphasizes an integrated and problem-based approach to disease management as the core of the didactic, laboratory, and experiential program of study.

The capstone of the Pharm.D. program is a series of seven six-week rotations known as the advanced pharmacy practice experiences (APPE). Each six-week APPE course requires 240 hours of on-site, practitioner-faculty-supervised hours of internship experience.

The college expects but cannot guarantee that experiential regions will include Austin/Temple/Waco, Dallas/Fort Worth (UT Southwestern Medical Center and other area health care facilities), Galveston/Houston (UTMB Health at Galveston, The University of Texas M. D. Anderson Cancer Center, and other area health care facilities), the Rio Grande Valley (health care facilities primarily in Harlingen and McAllen), and San Antonio (UT Health San Antonio and other area health care facilities). Students assigned to San Antonio spend two years in this region, while students assigned to other regions spend only the final year in the APPE region.

College of Pharmacy students who complete their experiential courses at UT Health at San Antonio are considered part of a joint Pharm.D. degree program and receive a degree awarded jointly by the two institutions. The joint nature of this program is reflected on the student's diploma.

In completing the Doctor of Pharmacy degree, students also fulfill the internship requirements of the Texas State Board of Pharmacy. The final year of APPE courses and several introductory pharmacy practice experience (IPPE) courses, beginning in the first professional year, make up the experiential program. The professional experience courses are currently approved by the Texas State Board of Pharmacy to meet its standards for completion of the professional internship licensure requirement.

Minor

While a minor is not required as part of the Pharm.D. degree program, the student may choose to complete additional coursework in a field outside of the College of Pharmacy. A course may not be counted both toward the minor and toward the 224 hours of work required for the Pharm.D. degree.

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin; students pursuing an integrated undergraduate/graduate program must complete the requirements for the minor within one year after completing the undergraduate requirements of their program. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the [Minors and Certificate Programs](#) section of the *Undergraduate Catalog*.

Concurrent Degrees, Pathways, and Programs

Doctor of Pharmacy/Master of Public Health

Students who have been admitted to the Pharm.D. program can apply for a Master of Public Health (MPH) degree through UT Health Houston's School of Public Health. Students will complete requirements for both the Pharm.D. and MPH concurrently over the course of four years.

Information about this option is available through the Associate Dean for Academic Affairs.

Doctor of Pharmacy/Master of Biomedical Informatics

Students who have been admitted to the Pharm.D. program can apply for a Master of Science (MS) in Biomedical Informatics degree through UT Health at Houston's McWilliams School of Biomedical Informatics. Students will complete requirements for both the Pharm.D. and MS concurrently over the course of four years. Information about this option is available through the Associate Dean for Academic Affairs.

Doctor of Pharmacy/Master of Business Administration

Students who have been admitted to the Pharm.D. program can apply for a Master of Business Administration (MBA) degree through McCombs School of Business at UT Austin. Students will complete requirements for both the Pharm.D. and MBA concurrently over the course of five years. Information about this option is available through the Associate Dean for Academic Affairs.

Doctor of Pharmacy-To-Doctor of Philosophy Pathway

The college offers a sequential Pharm.D.-to-Ph.D. degree program to qualified Pharm.D. students. The program combines the features of a professional Pharm.D. degree with the advanced research training of a pharmaceutical sciences Ph.D. degree. The areas of emphasis of the program are: Chemical Biology and Medicinal Chemistry, Health Outcomes, Molecular Pharmaceutics and Drug Delivery, Pharmacology and Toxicology, and Pharmacotherapy. Information about this program is available through the Associate Dean for Research and Graduate Studies.

Lester Entrepreneurial Scholars Program

The Lester Entrepreneurial Scholars Program is designed to prepare pharmacy students in the professional program to develop entrepreneurial and innovative leadership and thinking skills to tackle healthcare issues in innovative new ways. The Program goals are to: identify, nurture, and promote entrepreneurship and innovation skills; promote innovative ideas that improve patients' lives; and, have projects go from concept to development. The program consists of distinct tracks: product entrepreneurship such as pharmaceuticals and technology; services entrepreneurship including pharmacy services and pharmacy business ownership; and, social entrepreneurship such as social, cultural, and environmental business ventures. Additional information can be found on the program [website](#).

Pathways of Distinction

The Pathways of Distinction are designed to prepare students in a specific area of pharmacy practice. Students must apply to a specific pathway during their second professional year. Each pathway has specific requirements that include elective and experiential education requirements in addition to a final project. Information about this option is available through the Associate Dean for Academic Affairs.

Total Hours Required: 224

Plan of Study

The Plan of Study is a suggested four-year course sequence to support academic planning and serves as a helpful guide. Currently enrolled students should meet with their academic advisor to tailor their course selections and timelines to their individual goals and circumstances.

Preprofessional

Course	Title	Hours
Year 1		
Semester 1		
BIO 311C	Introductory Biology I	3
CH 301	Principles of Chemistry I	3
M 408K or M 408N	Differential Calculus or Differential Calculus for Science	4
RHE 306	Rhetoric and Writing	3
UGS 302 or UGS 303	First-Year Signature Course or First-Year Signature Course	3
Hours		16
Semester 2		
<u>U.S. History (060)</u>		3
<u>Social and Behavioral Sciences (080)</u>		3
BIO 311D	Introductory Biology II	3
SDS 301	Elementary Statistical Methods	3
CH 204	Introduction to Chemical Practice	2
CH 302	Principles of Chemistry II	3
Hours		17
Year 2		
Semester 1		
CH 320M	Organic Chemistry I	3
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K	1
<u>American and Texas Government (070)</u>		3
Anatomy, Physiology, or Anatomy/Physiology		3
<u>Humanities (040)</u>		3
<u>Communication (010)</u>		3
Hours		19
Semester 2		
MBS 226L	General Microbiology Laboratory	2
<u>American and Texas Government (070)</u>		3
<u>U.S. History (060)</u>		3
<u>Visual and Performing Arts (050)</u>		3
CH 220C	Organic Chemistry Laboratory	2
CH 320N	Organic Chemistry II	3
MBS 326R	General Microbiology	3
Hours		19
Total Hours		71

Professional

Course	Title	Hours
Year 1		
Semester 1		
PHM 381M	Pharmaceutical Biochemistry I	3
PHM 387M	Physical and Chemical Principles of Drugs	3
PHM 180K	Medicinal Chemistry Principles	1
PHM 180P	Basic Pharmaceutical Sciences Laboratory	1
PHM 287N	Biopharmaceutics	2
PHM 480C	Human Normal Physiology/Pathophysiology and Basics in Pharmacology I	4
PHM 184M	Pharmacy Professional Communications	1
PHM 187F	Foundations of Patient-Centered Care I	1
PHM 181V	Pharmacy Practice Lab I	1
PHM 181S	Foundations of Professional Development I	1
PHM 191U	Foundations for Interprofessional Collaborative Practice I	1
Hours		19
Semester 2		
PHM 283L	Health Behavior and Health Outcomes	2
PHM 281N	Pharmaceutical Biochemistry II	2
PHM 388M	Pharmaceutics	3
PHM 188P	Pharmaceutics Laboratory	1

PHM 480D	Human Normal Physiology/Pathophysiology II	4
PHM 180	Pharmacotherapeutics of Vaccine-Preventable Diseases	1
PHM 185N	Biomedical and Professional Ethics	1
PHM 187G	Foundations of Patient-Centered Care II	1
PHM 182V	Pharmacy Practice Lab II	1
PHM 181T	Foundations of Professional Development II	1
PHM 191V	Foundations for Interprofessional Collaborative Practice II	1
PHM 384I	Community Introductory Pharmacy Practice Experience	3
Hours		21

Year 2		
Semester 1		
PHM 282E	Nonprescription Pharmacotherapeutics and Self-Care I	2
PHM 295Q	Drug Information and Evidence-Based Practice	2
PHM 384L	Pharmacy and the Health Care System	3
PHM 181	Pharmacotherapeutics of the Renal and Autonomic Systems	1
PHM 185	Pharmacotherapeutics of Diabetes	1
PHM 383	Pharmacotherapeutics of the Cardiovascular System	3
PHM 183V	Pharmacy Practice Lab III	1
PHM 182S	Foundations of Professional Development III	1
PHM 192U	Foundations for Interprofessional Collaborative Practice III	1
Professional Elective(s)		3

Hours		18
Semester 2		
PHM 390N	Integrated Basic and Applied Pharmacokinetics	3
PHM 282F	Nonprescription Pharmacotherapeutics and Self-Care II	2
PHM 184	Pharmacotherapeutics of the Gastrointestinal System and Nutrition	1
PHM 182	Pharmacotherapeutics of the Respiratory System	1
PHM 395	Pharmacotherapy of Bacterial Infections	3
PHM 194	Pharmacotherapy of Viral and Fungal Infections	1
PHM 184V	Pharmacy Practice Lab IV	1
PHM 182T	Foundations of Professional Development IV	1
PHM 192V	Foundations for Interprofessional Collaborative Practice IV	1
Professional Elective(s)		2

Hours		16
Semester 3		
PHM 383I	Institutional Introductory Pharmacy Practice Experience	3
Hours		3

Year 3		
Semester 1		
PHM 183F	Basic Intravenous Admixtures	1
PHM 183G	Basic Intravenous Admixtures Laboratory	1
PHM 295R	Advanced Evidence-Based Practice	2
PHM 187	Pharmacotherapeutics of the Endocrine System	1
PHM 288	Pharmacotherapeutics of Oncology and Transplant	2
PHM 189	Pharmacotherapeutics of the Reproductive System	1
PHM 190	Pharmacotherapeutics of Dermatology and Inflammatory Processes	1
PHM 186I	Contemporary Pharmacy Practice Introduction to Pharmacy Practice Experience I	1
PHM 185V	Pharmacy Practice Lab V	1
PHM 183S	Foundations of Professional Development V	1
PHM 193U	Foundations for Interprofessional Collaborative Practice V	1
Professional Elective(s)		3
Hours		16

Semester 2		
PHM 384E	Pharmacy Law	3
PHM 393F	Pharmacoeconomics and Pharmacy Management	3

PHM 291	Pharmacotherapeutics of Pain and Addiction	2
PHM 292	Pharmacotherapeutics of Psychiatric Disorders	2
PHM 193	Pharmacotherapeutics of Neurologic Disorders	1
PHM 186V	Pharmacy Practice Lab VI	1
PHM 183T	Foundations of Professional Development VI	1
PHM 193V	Foundations for Interprofessional Collaborative Practice VI	1
PHM 187I	Contemporary Pharmacy Practice Introduction to Pharmacy Practice Experience II	1
Professional Elective(s)		3
Hours		18
Year 4		
Semester 1		
PHM 693E	Elective in Pharmacy Practice I	6
PHM 693N	Advanced Hospital Pharmacy Practice	6
PHM 693P	Advanced Community Pharmacy Practice	6
Hours		18
Semester 2		
PHM 693S	Selective in Pharmacy Practice I	6
PHM 694C	Inpatient General Medicine Pharmacy Practice	6
PHM 694E	Elective in Pharmacy Practice II	6
Hours		18
Semester 3		
PHM 693C	Ambulatory Care Pharmacy Practice	6
Hours		6
Total Hours		153

Additional Requirements and Policy

The order in which students take the fourth-year internships is at the discretion of the College of Pharmacy

Requirements

All requirements are listed below, starting with the most specialized moving to the most general. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy [General Education](#) requirements, including [Core Curriculum](#).

Code	Title	Hours
Pre-Professional		
Major		
BIO 311C	Introductory Biology I	3
CH 401	Principles of Chemistry I	4
M 408K	Differential Calculus	4
or M 408N	Differential Calculus for Science	
BIO 311D	Introductory Biology II	3
SDS 301	Elementary Statistical Methods	3
CH 204	Introduction to Chemical Practice	2
CH 402	Principles of Chemistry II	4
CH 320M	Organic Chemistry I	3
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound	3
PHY 102M	Laboratory for Physics 302K	1
Anatomy, Physiology, or Anatomy/Physiology		3
RHE 306	Rhetoric and Writing	3
Hours chosen from: Humanities (040)		3
CH 320N	Organic Chemistry II	3
CH 220C	Organic Chemistry Laboratory	2
MBS 326R	General Microbiology	3
MBS 226L	General Microbiology Laboratory	2

Subtotal		49
General Education		
Foreign Language other than English, Beginning Proficiency		
Remaining Core Curriculum (42 hours total)		27
Subtotal		27
College Requirements - Pharmacy		
General University Requirements		
Professional		
PHM 381M	Pharmaceutical Biochemistry I	3
PHM 387M	Physical and Chemical Principles of Drugs	3
PHM 180K	Medicinal Chemistry Principles	1
PHM 180P	Basic Pharmaceutical Sciences Laboratory	1
PHM 287N	Biopharmaceutics	2
PHM 380C	Human Normal Physiology/Pathophysiology and Basics in Pharmacology I	3
PHM 184M	Pharmacy Professional Communications	1
PHM 187F	Foundations of Patient-Centered Care I	1
PHM 181V	Pharmacy Practice Lab I	1
PHM 181S	Foundations of Professional Development I	1
PHM 191U	Foundations for Interprofessional Collaborative Practice I	1
PHM 283L	Health Behavior and Health Outcomes	2
PHM 281N	Pharmaceutical Biochemistry II	2
PHM 388M	Pharmaceutics	3
PHM 188P	Pharmaceutics Laboratory	1
PHM 380D	Human Normal Physiology/Pathophysiology II	3
PHM 180	Pharmacotherapeutics of Vaccine-Preventable Diseases	1
PHM 185N	Biomedical and Professional Ethics	1
PHM 187G	Foundations of Patient-Centered Care II	1
PHM 182V	Pharmacy Practice Lab II	1
PHM 181T	Foundations of Professional Development II	1
PHM 191V	Foundations for Interprofessional Collaborative Practice II	1
PHM 282E	Nonprescription Pharmacotherapeutics and Self-Care I	2
PHM 195Q	Drug Information and Evidence-Based Practice	1
PHM 384L	Pharmacy and the Health Care System	3
PHM 181	Pharmacotherapeutics of the Renal and Autonomic Systems	1
PHM 182	Pharmacotherapeutics of the Respiratory System	1
PHM 383	Pharmacotherapeutics of the Cardiovascular System	3
PHM 183V	Pharmacy Practice Lab III	1
PHM 182S	Foundations of Professional Development III	1
PHM 192U	Foundations for Interprofessional Collaborative Practice III	1
PHM 390N	Integrated Basic and Applied Pharmacokinetics	3
PHM 182F	Nonprescription Pharmacotherapeutics and Self-Care II	1
PHM 182I	Nonprescription Pharmacotherapeutics and Self-Care: Introductory Pharmacy Practice Experience	1
PHM 186Q	Experiential Pharmacy Practice and Patient Counseling	1
PHM 184	Pharmacotherapeutics of the Gastrointestinal System and Nutrition	1
PHM 185	Pharmacotherapeutics of Diabetes	1

PHM 486	Pharmacotherapeutics of Infectious Diseases	4
PHM 184V	Pharmacy Practice Lab IV	1
PHM 182T	Foundations of Professional Development IV	1
PHM 192V	Foundations for Interprofessional Collaborative Practice IV	1
PHM 383I	Institutional Introductory Pharmacy Practice Experience	3
PHM 183F	Basic Intravenous Admixtures	1
PHM 183G	Basic Intravenous Admixtures Laboratory	1
PHM 295R	Advanced Evidence-Based Practice	2
PHM 187	Pharmacotherapeutics of the Endocrine System	1
PHM 288	Pharmacotherapeutics of Oncology and Transplant	2
PHM 189	Pharmacotherapeutics of the Reproductive System	1
PHM 190	Pharmacotherapeutics of Dermatology and Inflammatory Processes	1
PHM 284I	Community Introductory Pharmacy Practice Experience	2
PHM 185I	Ambulatory Introductory Pharmacy Practice Experience	1
PHM 185V	Pharmacy Practice Lab V	1
PHM 183S	Foundations of Professional Development V	1
PHM 193U	Foundations for Interprofessional Collaborative Practice V	1
PHM 284E	Pharmacy Law	2
PHM 393F	Pharmacoeconomics and Pharmacy Management	3
PHM 291	Pharmacotherapeutics of Pain and Addiction	2
PHM 292	Pharmacotherapeutics of Psychiatric Disorders	2
PHM 193	Pharmacotherapeutics of Neurologic Disorders	1
PHM 186V	Pharmacy Practice Lab VI	1
PHM 183T	Foundations of Professional Development VI	1
PHM 193V	Foundations for Interprofessional Collaborative Practice VI	1
PHM 693E	Elective in Pharmacy Practice I	6
PHM 693N	Advanced Hospital Pharmacy Practice	6
PHM 693P	Advanced Community Pharmacy Practice	6
PHM 693S	Selective in Pharmacy Practice I	6
PHM 694C	Inpatient General Medicine Pharmacy Practice	6
PHM 694E	Elective in Pharmacy Practice II	6
PHM 693C	Ambulatory Care Pharmacy Practice	6
Professional Electives		11
<i>Subtotal</i>		<i>148</i>
Total Hours		224

Additional Requirements

Foreign Language Requirement

All students must complete the foreign language requirement before they enter the professional curriculum (unless they hold a prior bachelor's degree).

Professional Electives Course Requirement

The student must complete at least four professional elective courses, for a total of at least 11 semester hours, on the letter-grade basis. The student must take the courses used to fulfill the professional electives requirement after admission to the professional curriculum.