

CAREER PATH

PHARMACEUTICAL SCIENTIST VS REGISTERED PHARMACIST

College of Pharmacy

B.S. PHARMACEUTICAL SCIENCES

PROGRAM DESCRIPTION

The B.S. in Pharmaceutical Sciences is a 4-year undergraduate degree program designed to provide an education in drug development, drug discovery and laboratory-centered research.

ADMISSIONS REQUIREMENTS

Students must first be admitted by the Office of Undergraduate Admissions. Students in the Intended Pharmaceutical Sciences major must complete 60 credit hours of required courses, have a 2.5 cumulative GPA and complete all CHEM, BIOL, PHYS, ENGL and MATH courses with a grade of C or higher before they can be admitted into the major.

DEGREE REQUIREMENTS

Students admitted to the Pharmaceutical Sciences major must complete 60 credit hours of major requirements and complete all PMCY courses with a grade of C or higher. Students must also complete all other undergraduate degree requirements as mandated by the University.

NOTABLE EDUCATIONAL EXPERIENCES

Students in the Pharmaceutical Sciences program will learn Good Manufacturing Practices in a state-of-the-art laboratory. Students will also complete hands-on research directed by faculty members.

CAREER OPPORTUNITIES

Graduates from the Pharmaceutical Sciences program will be well prepared to fill critical roles in the pharmaceutical industry. These roles can be in pharmaceutical production, research laboratories, medical device development, biotechnology and drug development and discovery.

EXCELLENT GATEWAY FOR APPLYING TO...

PROFESSIONAL SCHOOLS - Medical, Pharmacy, Dental, Veterinary, Physician Assistant GRADUATE STUDIES - MS. PhD Pharmaceutical Sciences, Regulatory and Clinical Programs

GEORGIA

DOCTOR OF PHARMACY (PHARMD)

PROGRAM DESCRIPTION

The Doctor of Pharmacy is a 4-year professional degree program that requires 69 hours of prerequisite courses (may take 2+ years depending upon AP credits). It is designed to provide an education to those individuals who wish to become a pharmacist.

ADMISSIONS REQUIREMENTS

The Doctor of Pharmacy program requires completion of 69 credits of pre-pharmacy coursework at an accredited institution, completion of the PCAT, an admissions application submitted through PharmCAS, and an online application submitted to the College of Pharmacy. Selected applicants are also required to participate in an admissions interview. Applicant pool size determines the competitiveness of admission to the program.

DEGREE REQUIREMENTS

Students admitted to the Doctor of Pharmacy program must complete 148 credits of required coursework. Students must also become licensed Pharmacy Interns by the Georgia Board of Pharmacy.

NOTABLE EDUCATIONAL EXPERIENCES

Students will work in specially designed spaces that simulate environments and experiences found in pharmacies. In their 4th year, students will have the opportunity to take part in rotations in retail, hospital and community-based pharmacies throughout the State of Georgia.

CAREER OPPORTUNITIES

Graduates from the program will be eligible to become pharmacists. Pharmacists play a crucial role in the healthcare industry by dispensing medicines, administering vaccines, providing information to patients, and managing complex medication regimens.



BS PHARMACEUTICAL SCIENCES VS. PRE-PHARMACY (PHARMD)

College: Pharmacy

Department: Pharmaceutical and Biomedical Sciences

Major: Pharmaceutical Sciences (BS)

Years: 4

Description: Designed to prepare students to work in the pharmaceutical industry, this major consists of core classes in chemistry, biology, math and physics and then progresses to advanced classes in pharmacology, toxicology, drug discovery, development, manufacturing, quality assurance and regulatory compliance.

College: None
Department: None

Major: Any

Years: 69 prerequisite hours (approx. 2+ years undergraduate

study) + 4 (PharmD study)

Description: The pre-pharmacy curriculum consists of the courses required for admittance into the PharmD program in UGA's College of Pharmacy. The PharmD degree is the minimum requirement to

become a pharmacist.

REQUIRED ENGLISH COURSES

ENGL 1101 English Composition I 1st yr Fall ENGL 1102 English Composition II 1st yr Spring

REQUIRED COMMUNICATION COURSE

COMM 1110 or 1500 Public or interpersonal Communication

REQUIRED MATH COURSES

STAT 2000 or BIOS 2010 Statistics or Biostatistics 1st or 2nd yr
MATH 2250 Calculus I 1st or 2nd yr
MATH 2260 Calculus II 1st or 2nd yr or 3rd yr Fall

REQUIRED CHEMISTRY COURSES

CHEM 1211/1211L Freshman Chemistry I 1st yr Fall
CHEM 1212/1212L Freshman Chemistry II 1st yr Spring
CHEM 2211/2211L Organic Chemistry I 2nd yr Fall
CHEM 2212/2212L Organic Chemistry II 2nd yr Spring

REQUIRED PHYSICS COURSE

PHYS 1211/1211L Physics for Scientists and Engineers before 4th yr

REQUIRED BIOLOGY COURSE

BIOL 1107/1107L Biology I 1st or 2nd yr

REQUIRED MAJOR COURSES

BCMB 3100 Biochemistry & Molecular Biology 3rd yr Fall **ENGL 3590W Professional Communication** 3rd or 4th yr Human Physiology PMCY 3000 3rd yr Fall Intro to Pharmaceutical Sciences **PMCY 3200** 3rd yr Spring **Pharmaceutical Techniques PMCY 3300L** 3rd yr Spring Pharmaceutical Analysis PMCY 3500 3rd yr Spring Introduction to Pharmacology PMCY 3800 3rd yr Spring

Pharm'kinetics and Pharm'dynamics 4th yr Fall PMCY 4200 PMCY 4300 Medicinal Chemistry 3rd or 4th yr Pharmaceutical Drug Develop 4th yr Fall PMCY 4500/4500L 4th yr Fall Advanced Drug Delivery Systems PMCY 4510/4510L 4th yr Spring **Biological Therapeutics** PMCY 4600 4th yr Fall Pharmaceutical Sciences Research I PMCY 4960 PMCY 4970 Pharmaceutical Sciences Research II 4th yr Spring

Three major elective courses from: BIO, BCMB, CBIO, CHEM, EPID,

MIBO, PMCY, STAT

UNIVERSITY GRADUATION REQUIREMENTS

FYOS Seminar

US and GA History e.g. HIST 2111 or 2112 Federal and Georgia Constitution e.g. POLS 1101

Cultural Diversity

PMCY 2020 Pills, Potions and Drugs in Modern Medicine

Physical Education Requirement

REQUIRED ENGLISH COURSES

ENGL 1101 English Composition I
ENGL 1102 English Composition II

REQUIRED COMMUNICATION COURSE

COMM 1110 or 1500 Public or Interpersonal Communication

REQUIRED MATH COURSES

MATH 2200 or 2250 Calculus I STAT 2000 Statistics

REQUIRED CHEMISTRY COURSES

CHEM 1211/1211L Freshman Chemistry I
CHEM 1212/1212L Freshman Chemistry II
CHEM 2211/2211L Organic Chemistry I
CHEM 2212/2212L Organic Chemistry II

REQUIRED PHYSICS COURSE

None

REQUIRED BIOLOGY COURSE

BIOL 1107/1107L Biology I BIOL 1108/1108L Biology II

OTHER REQUIREMENTS

BCMB 3100 or 4010 Biochemistry & Molecular Biology

MIBO 2500 or 3000 or 3500 Microbiology CBIO* 3000 or 3010 Anatomy VPHY* 3100 or PMCY* 3000 or CBIO* 3710 Physiology

ECON 2105 or 2106 Macroeconomics or Microeconomics

*The sequence CBIO 2200 and CBIO 2210 can substitute for CBIO and VPHY or PMCY

Two Social Science courses from: ANTH, HIST, INTL, PHIL, POLS, PSYC, SOCI, WMST

Three World Languages & Culture courses from: AFAM, AFST, AMHA, ARAB, ARHI, BENG, CHNS, CLAS, CMLT, FREN, GEOG, GREK, GRMN, HEBR, HIST, INDO, ITAL, JPNS, KREN, LACS, LAND, LATN, LING, MAND, NAMS, PASH, PERS, PORT, QUEC, RELI, ROML, RUSS, SCAN, SEMI, SLAV, SPAN, SWAH, TURK, URDU, VIET, YORB, ZULU

UNIVERSITY GRADUATION REQUIREMENTS

Not Applicable

PharmD Admissions Counselor

Erik Dennison | (706) 542-5278 | PharmDadmissions@uga.edu

RX.UGA.EDU