

College of Pharmacy

College of Pharmacy

Overview

The Purdue College of Pharmacy, consistently ranked among the 10 best pharmacy programs in the nation, offers a uniquely diverse range of undergraduate and graduate study opportunities. A total of 10 different programs and 700 pharmacy practice experiences prepare students for a range of top-paying careers in the fields of pharmacy, pharmaceutical sciences, and the health sciences.

Undergraduate Programs

The Purdue College of Pharmacy offers three undergraduate programs:

- The Pre-Pharmacy Program is a two-year, non-degree program that is intended to prepare students for entry into the PharmD program below. Completing this program, however, does not guarantee entry into the PharmD program.
- The Bachelor of Science in Pharmaceutical Sciences (BSPS) is a four-year undergraduate program that stresses the multidisciplinary basic sciences related to drug discovery, development, and commercialization. A degree in this program does not allow graduates to become licensed pharmacists.

Professional Programs

- The Doctor of Pharmacy (PharmD) is a professional degree program, which requires completion of a recognized pre-pharmacy program. Successful completion of this degree allows you to sit for the licensing exam to practice pharmacy.

Graduate Programs

The Purdue College of Pharmacy boasts one of the oldest and most-respected graduate programs in the U.S. Each of the three departments of the Purdue College of Pharmacy offer graduate programs:

- Industrial and Physical Pharmacy
- Medicinal Chemistry and Molecular Pharmacology
- Pharmacy Practice

Each department offers a PhD degree program. All six of these programs require strong undergraduate preparation, including completion of a Bachelors Degree for admission.

A combined-degree program allows students in the third year of the PharmD program to begin work on a Pharmacy PhD program while completing the PharmD curricula. Through a judicious choice of electives and research rotations, such students can save up to two years on the total time required for the PhD program. Additional information can be found by reading the full program description.

For more information, please contact Dr. Tonglei Li, the Associate Dean for Graduate Programs.

Continuing Education Programs

The College's continuing education programs offer several non-degree certificate programs.

Admissions

<https://www.pharmacy.purdue.edu/future-students/admissions>

College Advising

<https://www.pharmacy.purdue.edu/oss/contact-information>

Contact Information

Prospective undergraduate and professional program students

Contact Holly W. Keckler, Associate Director for Recruitment, Office of Student Services:

Phone: (765) 496-7381

Fax: (765) 496-1875

E-mail: keckler@purdue.edu

Office: Room 156 RHPH

Prospective undergraduate and professional students who are interested in visiting the College and learning about programs for minorities are urged to contact the Office of Multicultural Programs to arrange for their visit.

Transfer students should contact T. Patrick George.

Prospective graduate students

Generally, you should contact the graduate program in which you are interested. The College's graduate programs are administered by the three departments in the College - Industrial and Physical Pharmacy, Medicinal Chemistry and Molecular Pharmacology, and Pharmacy Practice. Additionally, some of the faculty in the College participate in some of the University's interdisciplinary graduate programs, which can be contacted directly.

If you have difficulty contacting a department or program, you may contact Janine Mott, Administrative Assistant for Graduate Affairs:

Phone: (765) 494-1362

Fax: (765) 494-7880

E-mail: jmott@purdue.edu

Office: Room 112 RHPH

College of Pharmacy Administration

Overview

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- The Bachelor of Science in Pharmaceutical Sciences (BSPS) is a four-year undergraduate program that stresses the multidisciplinary basic sciences related to drug discovery, development, and commercialization. A degree in this program does not allow graduates to become licensed pharmacists.
- The Doctor of Pharmacy (PharmD) is a professional degree program, which requires completion of a recognized pre-pharmacy program. Successful completion of this degree allows you to sit for the licensing exam to practice pharmacy.

Faculty

<https://www.pharmacy.purdue.edu/directory>

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Professional

Pharmacy, Pharm.D

About the Program

The Doctor of Pharmacy (Pharm D) is a four-year professional degree. The classroom, lab, and experiential requirements provide students with the educational background to enter any field of pharmacy practice. Upon graduation, students are eligible to take the pharmacy licensing examination. Or they may choose to move on to graduate-level studies in pharmacy or related fields. PharmD graduates may also pursue post-graduate residency programs in general or specialty practice areas. To be considered for entrance into the PharmD program, applicants must have successfully completed Purdue College of Pharmacy's two-year Pre-Pharmacy Program or the equivalent coursework at another accredited institution.

Purdue College of Pharmacy is consistently ranked in the top ten pharmacy programs in the U.S. and boasts an extremely distinguished 85-member faculty renowned for both its cutting-edge work in pharmaceutical research and for developing educational curricula used in pharmacy programs around the world. Students benefit from an integrated, hands-on approach, learning valuable lessons not just in classrooms and laboratories, but also in a two-semester series of rotations in hospitals, pharmacies, and other real-world settings for pharmaceutical professionals.

Doing your Pre-Pharmacy work through Purdue's condensed two-year program can save you up to two years of study and student loan debt, as well as get onto the job market two years faster. That's a big part of the reason why Purdue PharmD graduates have less debt upon completion of their degree than PharmD students from any other Big Ten pharmacy program.

Summary of Program Requirements

The Summary of Program Requirements for Doctor of Pharmacy is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

Program: DPHRM-DP
Major: DPTR
Credit Hours: 140

College of Pharmacy

University Core Requirements

exempt for professional program

Departmental/Program Major Courses (128 credits)

- PHRM 82000 - Professional Program Laboratory I
- PHRM 82100 - Professional Program Laboratory II
- PHRM 82200 - Pharmacy Skills And Patient Counseling **
- PHRM 82400 - Principles Of Pathophysiology And Drug Action
- PHRM 82500 - Integrated Pharmacotherapy I
- PHRM 82600 - Introduction To Patient Centered Care
- PHRM 82700 - Public Health Pharmacy
- PHRM 82800 - Dosage Forms I

- PHRM 82900 - Dosage Forms II
- PHRM 83000 - Introduction To Pharmacy Law And Ethics
- PHRM 83100 - Health Care Systems
- PHRM 83200 - Principles Of Diagnosis Labs And Monitoring
- PHRM 83400 - Pharmaceutical Calculations
- PHRM 83600 - Biochemistry For Pharmaceutical Sciences II
- PHRM 84000 - Professional Program Laboratory III
- PHRM 84100 - Professional Program Laboratory IV
- PHRM 84200 - Community Pharmacy IPPE ***
- PHRM 84400 - Integrated Pharmacotherapy II
- PHRM 84500 - Integrated Pharmacotherapy III
- PHRM 84600 - Principles Of Pharmacokinetics
- PHRM 84700 - Principles Of Pharmacogenomics
- PHRM 84800 - Principles Of Drug Information And Literature Evaluation
- PHRM 84900 - Population Health Management
- PHRM 85000 - Immunization Certification ****
- PHRM 86000 - Professional Program Laboratory V
- PHRM 86100 - Professional Program Lab VI - Credit Hours: 1.00
- PHRM 86200 - Institutional Pharmacy Introductory Pharmacy Practice Experience ***
- PHRM 86400 - Integrated Pharmacotherapy IV
- PHRM 86500 - Integrated Pharmacotherapy V - Credit Hours: 6.00
- PHRM 86600 - Biotech/Advanced Parenteral Dosage Forms
- PHRM 86700 - Introduction to APPE - Credit Hours: 1.00
- PHRM 86800 - Patient Safety And Informatics
- PHRM 86900 - Practice Management & Marketing - Credit Hours: 2.00
- PHRM 87000 - Health Policy Applications
- PHRM 87100 - Pharmacy Law - Credit Hours: 2.00
- PHRM 88000 - Advanced Pharmacy Practice Experience

Free Electives (12 credits)

Note

** Semester 1 or 2

***Courses to be scheduled during either semester (four weeks during spring or fall semester for P-2 & P-3 years).

****Graduation Requirement/may substitute outside certification (Sem 3 or 4)

(Fall 2014 - elective; Fall 2015 - Core requirement)

Program Requirements

(see your academic advisor for other options creating your plan of study)

Fall 1st Year

- PHRM 82000 - Professional Program Laboratory I
- PHRM 82200 - Pharmacy Skills And Patient Counseling *
- PHRM 82400 - Principles Of Pathophysiology And Drug Action
- PHRM 82600 - Introduction To Patient Centered Care
- PHRM 82800 - Dosage Forms I
- PHRM 83000 - Introduction To Pharmacy Law And Ethics
- PHRM 83200 - Principles Of Diagnosis Labs And Monitoring
- PHRM 83400 - Pharmaceutical Calculations
- PHRM 83600 - Biochemistry For Pharmaceutical Sciences II

17 Credits

Spring 1st Year

- PHRM 82100 - Professional Program Laboratory II
- PHRM 82200 - Pharmacy Skills And Patient Counseling *
- PHRM 82500 - Integrated Pharmacotherapy I
- PHRM 82700 - Public Health Pharmacy
- PHRM 82900 - Dosage Forms II
- PHRM 83100 - Health Care Systems
- Electives - Credit Hours: 0.00 - 4.00

15-19 Credits

Fall 2nd Year

- PHRM 84000 - Professional Program Laboratory III
- PHRM 84200 - Community Pharmacy IPPE **
- PHRM 84400 - Integrated Pharmacotherapy II
- PHRM 84600 - Principles Of Pharmacokinetics
- PHRM 84800 - Principles Of Drug Information And Literature Evaluation
- PHRM 85000 - Immunization Certification ***
- Electives - Credit Hours: 0.00 - 3.00

18-21 Credits

Spring 2nd Year

- PHRM 84100 - Professional Program Laboratory IV
- PHRM 84200 - Community Pharmacy IPPE **
- PHRM 84500 - Integrated Pharmacotherapy III

- PHRM 84700 - Principles Of Pharmacogenomics
- PHRM 84900 - Population Health Management
- PHRM 85000 - Immunization Certification ***
- Electives - Credit Hours: 0.00 - 4.00

16-20 Credits

Fall 3rd Year

- PHRM 86000 - Professional Program Laboratory V
- PHRM 86200 - Institutional Pharmacy Introductory Pharmacy Practice Experience **
- PHRM 86400 - Integrated Pharmacotherapy IV
- PHRM 86600 - Biotech/Advanced Parenteral Dosage Forms
- PHRM 86800 - Patient Safety And Informatics
- PHRM 87000 - Health Policy Applications
- Electives - Credit Hours: 0.00 - 3.00

17-20 Credits

Spring 3rd Year

- PHRM 86100 - Credit Hours: 1.00
- PHRM 86200 - Institutional Pharmacy Introductory Pharmacy Practice Experience **
- PHRM 86500 - Credit Hours: 6.00
- PHRM 86700 - Credit Hours: 1.00
- PHRM 86900 - Credit Hours: 2.00
- PHRM 87100 - Credit Hours: 2.00
- Electives - Credit Hours: 0.00 - 4.00

16-20 Credits

Fall 4th Year

- PHRM 88000 - Advanced Pharmacy Practice Experience

40 Credits

Note

* Semester 1 or 2

** Courses to be scheduled during either semester (four weeks during spring or fall semester for P2 & P3 years)

*** P2 Fall or Spring Semester - may be fulfilled with proof of certification.

Degree Requirements

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Baccalaureate

Pharmaceutical Sciences, BS

The B.S. in Pharmaceutical Sciences begins with a foundation of coursework in mathematics and the basic sciences (chemistry, biology, physics). This interdisciplinary program then progresses to advanced coursework in the pharmaceutical sciences, including aspects of drug design and synthesis, mechanisms of drug action, pharmacology and toxicology, dosage formulation, manufacturing, quality assurance, and regulatory compliance. The curriculum also includes elective credits for individual preparation and educational focus.

The BSPPS program offers practical experience through internship programs in industry, government agencies, and on-campus research laboratories. Students are encouraged to spend at least one summer in an internship.

The faculty also encourages undergraduate students to engage in mentored laboratory research. Numerous undergraduate research opportunities are available in the Department of Medicinal Chemistry and Molecular Pharmacology and in the Department of Industrial and Physical Pharmacy, during the regular school year and during the summer months as interns. Career path opportunities with a degree in pharmaceutical sciences include entry-level technical positions in the pharmaceutical and biotechnology industry; graduate education in pharmaceutical, medical, and basic sciences; and post-baccalaureate professional education in medicine, law, and business. You should recognize that this is not a professional degree program. Completion of the B.S. in Pharmaceutical Sciences degree requirements does not qualify the student for state board examination to become a registered pharmacist.

Pharmaceutical Sciences Website

Summary of Program Requirements

The Summary of Program Requirements for Pharmaceutical Sciences is a comprehensive list of those categories which a student must fulfill in order to earn their degree. Unlike the full Detailed Program Requirements listed below, complete lists of selectives for any given category are not shown. These summaries are intended to be printer-friendly and less expansive in detail.

Detailed Program Requirements

Please see below for detailed program requirements and possible selective fulfillments.

Program Requirements

Fall 1st Year

First Semester

- BIOL 11000 - Fundamentals Of Biology I *
- CHM 12901 - General Chemistry With A Biological Focus *
- COM 11400 - Fundamentals Of Speech Communication *
- MA 16010 - Applied Calculus I *
- IPPH 10000 - Pharmaceutical Sciences Orientation

16 Credits

Spring 1st Year

Second Semester

- BIOL 11100 - Fundamentals Of Biology II *
- ENGL 10600 - First-Year Composition *
- MA 16020 - Applied Calculus II *
- MCMP 20400 - Organic Chemistry I ‡

15 Credits

Note

IMPORTANT: Students must have no grades lower than C- in core science courses to enroll in any PHRM or MCMP course listed in Semester 3 or higher.

Fall 2nd Year

Third Semester

- BIOL 30100 - Human Design: Anatomy And Physiology

- MCMP 20500 - Organic Chemistry II ‡
- PHYS 22000 - General Physics *
- STAT 30100 - Elementary Statistical Methods *

14 Credits

Spring 2nd Year

Fourth Semester

- BIOL 22100 - Introduction To Microbiology
- BIOL 30200 - Human Design: Anatomy And Physiology
- MCMP 20800 - Biochemistry For Pharmaceutical Sciences ‡
- MCMP 42200 - Immunology
- Free Elective - Credit Hours: 3.00

16 Credits

Summer Semester

Research or Industrial Internship (recommended)

Fall 3rd Year

Fifth Semester

- PHRM 82400 - Principles Of Pathophysiology And Drug Action
- PHRM 82800 - Dosage Forms I
- PHRM 83600 - Biochemistry For Pharmaceutical Sciences II
- Free Elective - Credit Hours: 3.00 †
- Humanities Selective - Credit Hours: 3.00 *

14 Credits

Spring 3rd Year

Sixth Semester

- CHM 37200 - Physical Chemistry
- ENGL 42100 - Technical Writing
- PHRM 82900 - Dosage Forms II

- Pharmacy Special Interest Selective - Credit Hours: 3.00 **
- Free Elective - Credit Hours: 3.00 †

16 Credits

Summer Semester

Research or Industrial Internship (recommended)

Fall 4th Year

Seventh Semester

- PHRM 46000 - Drug Discovery And Development I
- Science, Technology & Society Selective - Credit Hours: 3.00 *
- Pharmacy Special Interest Selective - Credit Hours: 3.00 **
- Free Elective - Credit Hours: 6.00 †

15 Credits

Spring 4th Year

Eighth Semester

- MCMP 54400 - Drug Classes And Mechanisms
- PHRM 46100 - Drug Discovery And Development II
- PHRM 48500 - Intercultural and Global Health Issues - Credit Hours: 2.00
- Behavior/Social Science Selective - Credit Hours: 3.00 *
- Free Elective - Credit Hours: 4.00 †

15 Credits

Note

* Fulfills University Undergraduate Core Curriculum Requirement.

** Pending BSPS Curriculum Approval.

† - Free Electives can be any course at the University, as long as it is 100-level or higher.

‡ - Must have a cumulative GPA of 2.5 or higher to enroll

See your advisor for recommendations based on your specific academic/career goals.

Foreign Language Courses

Foreign Language proficiency requirements vary by program. For acceptable languages and proficiency levels, see your advisor:

American Sign Language, Arabic, Chinese, French, German, (ancient) Greek, Hebrew, Italian, Japanese, Latin, Portuguese, Russian, Spanish

Critical Course

The ♦ course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

Expired Course

Any course without a link to its description is one that has been expired. However, this course could fulfill the degree requirement historically.

Other Programs

Pre-Pharmacy

The Pre-Pharmacy program is a two-year, non-degree program. Although the emphasis of the coursework is focused on biology, chemistry, physics, and math, Pre-Pharmacy students are also required to take a course apiece in composition and economics.

This plan of study is specifically designed for students preparing to apply for admission to the Doctor of Pharmacy (PharmD) program. **This is a non-degree seeking curriculum. Also note that admission into and completion of the Pre-Pharmacy program does not guarantee admission into Purdue's four-year PharmD program.**

Because of the accelerated pace of our Pre-Pharmacy program (our peer university's pre-pharm programs are four years), students incur two years less debt and get onto the job market two years faster.

Program: PRE-PHAR

Major: PRPP

Credit Hours: 60

Department of Industrial and Physical Pharmacy

Overview

The Department of Industrial & Physical Pharmacy (IPPH) is involved in teaching and research in pharmaceuticals, with emphasis on the following three minors: industrial pharmacy, pharmacokinetics/biopharmaceutics, and physical pharmacy.

Welcome to the Purdue University Department of Industrial and Physical Pharmacy! This is the place to find out more about our department's ongoing research, graduate degree programs, recent news and upcoming events.

Our mission is:

- **to educate and train students** to become leading pharmaceutical scientists and pharmacists
- **to advance scientific discovery and development**, with an emphasis on pharmaceutical formulation, manufacturing and drug delivery, and
- **to contribute** to the advancement of the pharmaceutical sciences through outreach and public service.

We're an academic department within the College of Pharmacy, located in the R. E. Heine Pharmacy Building (RHPH) on the main (West Lafayette) campus of Purdue University. For contact information, please see the Administration page.

Elizabeth M. Topp, Ph.D.
Dane O. Kildsig Chair and Department Head
Dept. of Industrial and Physical Pharmacy

Faculty

<http://www.ipph.purdue.edu/faculty/>

Contact Information

Industrial and Physical Pharmacy

Contact Information

Phone: (765) 494-1450

Fax: (765) 494-6545

Office: Room 124 Robert E. Heine Pharmacy Building

Postal address:

Department of Industrial and Physical PharmacyPurdue University
Heine Pharmacy Building
575 Stadium Mall Drive
West Lafayette, IN 47907-2091

Campus Mail Address:

IPPH, RHPH

Graduate Information

For Graduate Information please see Industrial and Physical Pharmacy Graduate Program Information.

Department of Medicinal Chemistry and Molecular Pharmacology

Overview

The mission of the Department of Medicinal Chemistry and Molecular Pharmacology (MCMP) is to serve the citizens of Indiana, the United States and the world through discovery, learning and engagement that integrates the basic chemical and biological

sciences for the improvement of human health. The Department of MCMP is an academic department in the College of Pharmacy. It is located in the R. E. Heine Pharmacy Building (RHPH) and in the Arthur E. Hansen Building (HANS) on the main (West Lafayette) campus of Purdue University.

Faculty

<http://www.mcmp.purdue.edu/faculty/>

Contact Information

Medicinal Chemistry and Molecular Pharmacology

Postal address

Department of Medicinal Chemistry and Molecular Pharmacology
Purdue University
R. E. Heine Building
575 Stadium Mall Drive
West Lafayette, IN 47907-2091

Campus Mail Address

MCMP, RHPH

Main Office

Room 202, Robert E. Heine Pharmacy Building
Phone: (765) 49-41403
Fax: (765) 49-41414

Graduate Program Inquiry

Phone: (800) 563-3568
Email: mcmp_grad_prog@pharmacy.purdue.edu

Graduate Information

For Graduate Information please see Medicinal Chemistry and Molecular Pharmacology Graduate Program Information.

Department of Pharmacy Practice

The Department of Pharmacy Practice (PHPR) at Purdue University is an academic department in the College of Pharmacy. It is located in the R. E. Heine Pharmacy Building on the main (West Lafayette) campus of the University and also has facilities in Sidney & Lois Eskenazi Hospital on the Indiana University Medical Center campus in Indianapolis. See the Administration page for information on how to contact the Department of Pharmacy Practice.

The mission of the Department of Pharmacy Practice is to demonstrate excellence through performance in the areas of discovery, learning, and engagement. The Department consists of 26 tenure-track faculty, 11 clinical faculty, and over 600 affiliate faculty preceptors. Many faculty practice in specialized areas such as: drug information, critical care, ambulatory medicine, cardiology, outcomes research, infectious disease, pharmacokinetics/pharmacodynamics, managed care, and pharmacy administration.

The experience and knowledge of the faculty of the Department of Pharmacy Practice enable professional degree students to receive excellent didactic and experiential training necessary to become well-rounded practitioners. The professional curriculum includes general, scientific, and patient centered content that prepares Doctor of Pharmacy graduates to deliver effective and cost-efficient pharmaceutical care.

The Department of Pharmacy Practice supports the College of Pharmacy's vision by:

- Providing education to students that enables them to acquire in-depth expertise in the pharmaceutical, social/economic management, and related sciences in order to function as educators and scientists in higher education, government service, and the pharmaceutical and healthcare industries
- Serving the community by engaging in scholarly activities that lead to improvements in healthcare delivery and enhance health outcomes
- Fostering innovation in research through interdisciplinary collaboration with other schools/colleges within Purdue, other national/international universities, and pharmacy practitioners to enhance to profession body of knowledge resulting in practice advancement
- Contributing to the profession of pharmacy by participation in leadership roles in pharmaceutical organizations and community programs

The Department also has extensive research opportunities for graduate and post-graduate pharmacists leading to M.S. and Ph.D. degrees in either Clinical Pharmaceutical Sciences or Pharmacy Administration. The Graduate Academic Program is directed toward the education and maturation of pharmacists in principles and techniques of research dealing with problems in the clinical, administrative, and educational aspects of pharmacy. These programs also encourage students to develop sound teaching techniques through appropriate coursework and supervised experience.

Pharmaceutical Sciences Website

Graduate Information

For Graduate Information please see Pharmacy Practice Graduate Program Information.