Pre-Pharmacy

The degree needed to practice pharmacy is called the Doctor of Pharmacy, or the 'Pharm. D.' The college work for this degree is divided into two parts: the pre-pharmacy curriculum and the professional curriculum. The pre-pharmacy curriculum can be taken at the pharmacy school or at another college or university, whereas the professional curriculum must be taken at a school of pharmacy. Pre-professional requirements for pharmacy are available through the Department of Chemistry and Physics.

In general, students may fulfill two or three years at Southeast of the total six-year curriculum, then complete the training at a professional school. Although the first-year requirements at most pharmacy schools are similar, there are significant differences with some schools. Second-year requirements vary even more from school to school. Therefore, the pre-pharmacy student should be sure of his/her preferred school’s requirements. The student should also be aware that few, if any, pharmacy schools accept transfer students for the spring semester, so the student should plan coursework accordingly. Most pre-professional curricula place a strong emphasis on biology, chemistry and mathematics. Various other non-science courses are usually required, such as English and social science courses. A student should use the specific requirements of the schools he/she would prefer to attend in planning a course of study. Admission into Pharm. D. programs is competitive. Pharmacy schools take into consideration course grades, PCAT scores, previous pharmacy experience and communication skills.

Although the Pharm. D. programs at most pharmacy schools allow students to by-pass the bachelor’s degree, there are some advantages to completing a bachelor’s degree program prior to entering the Pharm. D. program. Pre-pharmacy students should consult with their faculty advisors to discuss the advantages and disadvantages of pursuing the bachelor’s degree prior to entering a Pharm. D. program.

**Becoming Career Ready...**

/ Faculty-mentored learning and guidance will help you develop the professional skills needed for success in a competitive job market and/or advanced study in graduate and professional programs.

/ Upon successful completion of the pre-pharmacy curriculum students are prepared for the professional pharmacy program because of the foundation of chemistry, science and math they receive within the context of a broad university education.

/ Pre-pharmacy students will study in the state-of-the-art, first-rate learning environment provided by the recently renovated Magill Hall of Science while gaining hands-on experience and training using a variety of lab equipment, chemical instruments, and tools in laboratory courses and undergraduate research.

**Career Opportunities:**

- Retail pharmacist
- Hospital pharmacist
- Clinical pharmacist
- Industrial pharmacy
- Pharmaceutical sales
- University teaching and research
- Graduate study in pharmaceutical science (pharmacology, medicinal chemistry, physical pharmacy), chemistry or biology.

**Career Information**

To learn more about career opportunities in pharmacy visit: [https://www.pharmacist.com](https://www.pharmacist.com).

According to the United States Bureau of Labor Statistics, there were 312,500 pharmacy related jobs in 2016. This number is expected to increase by 6% by 2026. Source: [https://www.bls.gov/ooh/healthcare/pharmacists.htm](https://www.bls.gov/ooh/healthcare/pharmacists.htm).

/ The path to a successful career starts with you! You can maximize your career development by working closely with Career Services and Southeast faculty – they are here to help you connect your passions, interests and skills to jobs and opportunities in the field. Career Services provides professional career counseling and coaching, resume critiques, practice interviews, job search strategies, career events, networking opportunities and more.

**Transfer and Dual Credit Students**

If you have dual credit or transfer credit, please visit our transfer course equivalencies guide at semo.edu/transfercredit.
University of Missouri-Kansas City School of Pharmacy

- BI173 Cell and Organismal Biology (4)
- BI283 Genetics (4)
- BI310 Microbiology (4)
- BI404 Cell Biology (1)
- BI531 Foundations of Biochemistry (3)
- BI532 Advanced Biochemistry (2)
- BS114 Anatomy and Physiology II (4)
- BS113 Anatomy and Physiology I (4)
- BI310 Microbiology (4)
- BI283 Genetics (4)
- BI163 Evolution and Ecology (4)
- CH185 General Chemistry (5)
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- CH341 Foundations of Organic Chemistry (4)
- CH342 Organic Chemistry Laboratory I (1)
- CH343 Advanced Organic Chemistry (3)
- CH344 Organic Chemistry Lab II (2)
- EN100 English Composition (3)
- EN140 Analytical Geometry and Calculus I (5)
- PH120/020 Introductory Physics I (5)
- SC105 Fundamentals of Oral Communication (3)
- US105 American History I (3) or US107 American History II (3) or PS103 U.S. Political Systems (3)

Not a prerequisite, but can transfer into Pharm. D. curriculum:
- CH31 Foundations of Biochemistry (3)
- CH32 Advanced Biochemistry (2)

Kansas City School of Pharmacy

- BI173 Cell and Organismal Biology (4)
- BI283 Genetics (4)
- BI310 Microbiology (4)
- BI283 Genetics (4)
- BI404 Cell Biology (1)
- BI413 Molecular Genetics (3)
- BI42 Immunology (4)
- BI543 Pathogenic Microbiology (2)
- BI544 Pathogenic Microbiology Laboratory (1)
- BS113 Anatomy and Physiology I (3) and BS114 Anatomy and Physiology II (3) or BS32 Human Physiology (3)
- CH185 General Chemistry (5)
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- CH31 Foundations of Organic Chemistry (4)
- CH32 Organic Chemistry Laboratory I (1)
- CH34 Advanced Organic Chemistry (3)
- CH344 Organic Chemistry Lab II (2)
- CH531 Foundations of Biotechnology (3)
- CH532 Advanced Biochemistry (2)
- E215 Principles of Microeconomics (3)
- EN100 English Composition (3)
- EN140 Analytical and Critical Thinking (3)
- MA223 Elementary Probability and Statistics (3)
- MA139 Applied Calculus (3)
- PH120/020 Introductory Physics I (5)
- SC105 Fundamentals of Oral Communication (3)
- PY101 Introduction to Psychology (3) or PY102 Society, Culture and Social Behavior (3)
- Social Science Elective (3)

*Stlcop also has a B.S./Pharm.D. program. For more information, contact the Department of Chemistry chairperson.

University of Mississippi School of Pharmacy

- BI163 Evolution and Ecology (4)
- BI173 Cell and Organismal Biology (4)
- BI173 Cell and Organismal Biology (3)
- BI283 Genetics (4)
- BI310 Microbiology (4)
- BI40 Cell Biology (3)
- BI41 Molecular Genetics (3)
- BI42 Immunology (4)
- BI543 Pathogenic Microbiology (2)
- BI544 Pathogenic Microbiology Laboratory (1)
- BS113 Anatomy and Physiology I (3) and BS114 Anatomy and Physiology II (3) or BS32 Human Physiology (3)
- CH185 General Chemistry (5)
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- CH31 Foundations of Organic Chemistry (4)
- CH32 Organic Chemistry Laboratory I (1)
- CH34 Advanced Organic Chemistry (3)
- CH344 Organic Chemistry Lab II (2)
- CH531 Foundations of Biotechnology (3)
- CH532 Advanced Biochemistry (2)
- EC215 Principles of Microeconomics (3)
- EN100 English Composition (3)
- EN140 Analytical and Critical Thinking (3)
- MA223 Elementary Probability and Statistics (3)
- MA139 Applied Calculus (3)
- PH120/020 Introductory Physics I (5)
- PY120/020 Introductory Physics II (5)
- SC105 Fundamentals of Oral Communication (3)
- UI102 Medical Ethics (3)

University of Missouri

- BI163 Evolution and Ecology (4)
- BI283 Genetics (4)
- BI310 Microbiology (4)
- BI40 Cell Biology (3)
- BI41 Molecular Genetics (3)
- BI42 Immunology (4)
- BI543 Pathogenic Microbiology (2)
- BI544 Pathogenic Microbiology Laboratory (1)
- BS113 Anatomy and Physiology I (3) and BS114 Anatomy and Physiology II (3) or BS32 Human Physiology (3)
- CH185 General Chemistry (5)
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- CH31 Foundations of Organic Chemistry (4)
- CH32 Organic Chemistry Laboratory I (1)
- CH34 Advanced Organic Chemistry (3)
- CH344 Organic Chemistry Lab II (2)
- CH531 Foundations of Biotechnology (3)
- CH532 Advanced Biochemistry (2)
- E215 Principles of Microeconomics (3)
- EN100 English Composition (3)
- EN140 Analytical and Critical Thinking (3)
- MA223 Elementary Probability and Statistics (3)
- MA139 Applied Calculus (3)
- PH120/020 Introductory Physics I (5)
- PY120/020 Introductory Physics II (5)
- SC105 Fundamentals of Oral Communication (3)
- UI102 Medical Ethics (3)

Harding University College of Pharmacy

- BI173 Cell and Organismal Biology (4)
- BI283 Genetics (4)
- BI310 Microbiology (4)
- CH185 General Chemistry (5)
- CH186 Foundations of Inorganic Chemistry (3)
- CH187 Inorganic Chemistry and Qualitative Analysis Laboratory (2)
- CH31 Foundations of Organic Chemistry (4)
- CH32 Organic Chemistry Laboratory I (1)
- CH34 Advanced Organic Chemistry (3)
- CH344 Organic Chemistry Lab II (2)
- CH531 Foundations of Biotechnology (3)
- EC215 Principles of Microeconomics (3) or EC225 Principles of Macroeconomics (3)
- EN100 English Composition (3)
- EN140 Analytical and Critical Thinking (3)
- MA223 Elementary Probability and Statistics (3)
- MA139 Applied Calculus (3)
- PH120/020 Introductory Physics I (5)
- PH121/021 Introductory Physics II (5)
- PY101 Introduction to Psychology (3) or SO102 Society, Culture and Social Behavior (3)
- Electives (9-10)