

Pharmacology and Toxicology, BS

ASPTXBS


The human body comes into contact with countless chemicals that can have both positive and negative effects. In this laboratory-focused program, you learn the molecular basis for these chemicals and how drugs can affect cells, organs and organisms.

Program description

Students in the BS degree program in pharmacology and toxicology study how foreign materials react with human bodies. To have a thorough understanding of the interactions of chemicals in the biological system, students in the program study both biology and chemistry, and they become familiar with chemical interactions at physiological, molecular and cellular levels.

This major is eligible for the Western Undergraduate Exchange program at the following location: West Valley campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150% of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of [the WUE program](#).

At a glance

- **College/School:** [New College of Interdisciplinary Arts and Sciences](#)
- **Location:** [West Valley](#) **WUE** or [Online](#), [ASU Local](#)
- **Second language requirement:** No
- **First required math course:** MAT 210 - Brief Calculus
or MAT 251 Calculus for Life Sciences
- **Math intensity:** Moderate 

Required courses (Major Map)

[2024 - 2025 Major Map \(on-campus\)](#)

[2024 - 2025 Major Map \(online\)](#)

[Major Map \(Archives\)](#)

Concurrent program options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Accelerated program options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an [accelerated bachelor's plus master's degree](#) with:

[Biological Data Science, MS](#)

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program. Interested students can learn about eligibility requirements and [how to apply](#).

Admission requirements

General university admission requirements:

All students are required to meet general university admission requirements.

[First-year](#) | [Transfer](#) | [International](#) | [Readmission](#)

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

Change of Major Requirements

A current ASU student has no additional requirements for changing majors.

Students should visit the [Change of Major form](#) for information about how to change a major to this program.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

ASU Local

It is now possible to earn an ASU degree with [ASU Local](#), an integrated college experience in which students take advantage of in-person success coaching and programming experiences on site while completing one of 130+ undergraduate online degree programs, all of which come with online faculty interaction and tutoring support.

Transfer options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use [MyPath2ASU®](#) to outline a list of recommended courses to take prior to transfer.

ASU has [transfer partnerships](#) in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey.

Global opportunities

Global experience

Students gain valuable experience when they [study abroad](#) --- experience that enhances their resume. With more than 300 programs available, students can tailor their educational experience to their specific interests and skill sets. Pharmacology and toxicology students are able to expand their knowledge of how science impacts society in a variety of cultures.

Career opportunities

With a heavy focus on experiential learning within the laboratory, graduates of the pharmacology and toxicology degree program are better prepared for careers in diverse areas such as government, industry, health care and business and for a number of career paths, including:

- environmental risk assessor or consultant
- laboratory researcher
- pharmacist
- physician
- physician's assistant
- toxicologist

- veterinarian

Graduates also may work at governmental agencies or at private companies in areas such as:

- Arizona Department of Environmental Quality
- city government
- clinical trials
- Environmental Protection Agency
- product safety evaluation
- regulatory affairs
- teaching

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

Career	*Growth	*Median salary
<u>Biological Sciences Professor</u> ☀	8.6%	\$81,650
<u>Clinical Trial Manager</u> ☀	4.8%	\$144,440
<u>Health Sciences Manager</u> ☀	4.8%	\$144,440
<u>Medical Scientist</u> ☀	9.8%	\$99,930
<u>Molecular Biologist</u>	3.9%	\$87,300
<u>Pathologist</u> ☀	4.6%	\$0
<u>Pharmacist</u>	2.6%	\$132,750
<u>Physician Assistant (PA)</u> ☀	26.5%	\$126,010
<u>Veterinarian (Vet)</u> ☀	19.7%	\$103,260

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

☀ Bright Outlook

Contact information

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