Biostatistics, PhD

NHBSTPHD

This program will begin accepting applications for the Fall 2025 semester.

Elevate your career in biostatistics, contribute to cutting-edge research, and drive advancements in health care.

Program description

Degree awarded: PHD Biostatistics

The PhD program in biostatistics offers a comprehensive and specialized education in the novel development and application of biostatistical methods to the health and biomedical sciences. This innovative program is designed to equip students with advanced skills in designing research studies, analyzing data and implementing biostatistical solutions to address applicable health challenges. Collaborating closely with health researchers and professionals from various disciplines, students develop expertise in crafting impactful strategies for improving health outcomes and advancing medical research.

Emphasis is placed on designing and analyzing randomized, controlled clinical trials; intervention studies and biostatistical models. Collaborations within ASU's College of Health Solutions foster a dynamic environment for cross-disciplinary learning and research. Students are encouraged to engage with a wide spectrum of health-related fields, including behavioral science, biomedical informatics, kinesiology, nutrition, population health and others.

By working closely with health researchers, students gain valuable hands-on experience in problem-solving, data analysis and collaborative research. This approach not only enhances their technical skills but also cultivates effective communication and teamwork abilities, which are vital for thriving in diverse health care environments.

GI BillÂ® benefits

This new program is not yet approved for use with GI BillÂ® benefits.

GI BillÂ® is a registered trademark of the U.S. Department of Veterans Affairs. More information about education benefits offered by VA is available at the official U.S. government website at https://www.benefits.va.gov/gibill/.

At a glance

- **College/School:** College of Health Solutions
- **Location:** Downtown Phoenix

Degree requirements

Required Core (18 credit hours)
BST 601 Biostatistical Theory and Inference (3)
BST 602 Applied Multi-level and Longitudinal Data Analysis (3)
BST 603 Survival Data Analysis (3)
BST 606 Applied Clinical Trial Design and Analysis (3)
BST 608 Applied Meta-analysis (3)
BST 609 Categorical Data Analysis in Health Sciences (3)

Electives (42 credit hours)

Research (12 credit hours)
BST 792 Research (12)

Culminating Experience (12 credit hours)
BST 799 Dissertation (12)

Additional Curriculum Information
Elective coursework should be selected in consultation with the program advisor. Students may also work with their program director to identify suitable elective alternatives.

This program requires a qualifying exam and a written comprehensive exam. A submission of a written dissertation prospectus and its oral defense are required. It is expected that the submission of a written dissertation prospectus and its oral defense will take place no later than the end of the fourth year.

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the College of Health Solutions.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in applied statistics, applied mathematics, quantitative psychology or a related field from a regionally accredited institution.

Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program, or applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

Applicants are required to submit:

1. graduate admissions application and application fee
2. official transcripts
3. professional resume
4. two references (academic or professional)
5. statement of purpose
6. writing sample (six to ten pages)
7. proof of English proficiency

Additional Admission Information

An applicant whose native language is not English must provide proof of English proficiency regardless of current residency.

All applicants must have completed and passed an undergraduate statistics course (e.g. HCD 300, STP 226, ECN 221, or PSY 230), a linear algebra course (e.g. MAT 242, MAT 342 or MAT 343) and a calculus course (e.g. MAT 210, MAT 251 or MAT 270) prior to admission. If the requisite coursework is not completed prior to admission then it must be completed prior to matriculating.

Contact information of two references is required. References will be contacted via email to submit a letter of recommendation. Letters of recommendation preferably are written by instructors, research mentors or supervisors who can speak to the applicant's aptitude for research and graduate-level coursework.

The statement of purpose should be one to two pages that indicate the applicant's interest in the program, knowledge of the field and career plans. Applicants are encouraged to connect with program faculty who could be potential research mentors and include this information in their statement, if available at the time of application.

Preference will be given to students with extensive quantitative background and computation skills with health-related experience.

An oral interview with the program faculty is required. Strong applicants will be contacted to schedule an interview in person or via videoconference prior to acceptance.

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.

Application deadlines

Fall

Career opportunities

Graduates with a doctorate in biostatistics can be employed in academic institutions, government agencies and industries as:

- biostatisticians
- data scientists
- professors
- senior data analysts
- statisticians

These positions are all classified as "Bright Outlook occupations" from the Bureau of Labor Statistics, which defines them as the occupations expected to grow rapidly in the next several years with large numbers of job openings. They are new and emerging occupations with potential high salaries.

Contact information

College of Health Solutions | HLTHN 401
chsgrad@asu.edu | 602-496-3300
Admission deadlines