

Biostatistics, PHD

The Ph.D. in Biostatistics (<https://biostatistics.georgetown.edu/phd/>) integrates biostatistics with world-class biomedical research at Georgetown University. The goal of the program is to train outstanding biostatisticians who will advance the field of biostatistics. The program prepares students for research and teaching careers in academia and for research and technical careers in industry and government. The program also emphasizes quantitative skills, biomedical research relevance, and communication skills.

- Modality: On Campus
- Academic Policies and Procedures: BGE Handbook (https://docs.google.com/document/d/1rkaOm8U_1eVwabvkl_HFvpfSWrMGnrc6Ex41erxP7g/edit?usp=sharing)
- Contact the Program (<https://biostatistics.georgetown.edu/contact-us/#phd-in-biostatistics>)

This program is offered through Biomedical Graduate Education (BGE) (<https://biomedicalprograms.georgetown.edu/>) at Georgetown University School of Medicine.

Requirements

Students are required to complete a total of 40 credits, which includes 19 credits of core requirements and 21 credits of electives.

Thesis research begins in the 3rd year. The research should constitute a significant original contribution to the field of Biostatistics. An internship is not required, but strongly recommended. Students are encouraged to complete an internship related to biostatistics which provides them with practical, hands-on training as a biostatistician.

Additionally, students are required to pass a Comprehensive Examination and present a Preliminary Oral Examination.

Coursework

Code	Title	Credits
Required Courses		
BIST 7610	Probability & Lrg Sample Theory	3
BIST 7615	Advance Statistical Inference	3
BIST 7620	Generalized Linear Model	3
Elective Courses		21
BIST 6625		
BIST 7630	Bayesian Inference	
BIST 7635	Longitudinal Data Analysis	
BIST 7640	Causal Inference	
BIST 7645	Advanced Survival Analysis	
BIST 7650	Semiparametric Inference	
BIST 7655	Stat. Genetics & Genomics	
Cognate Requirement		6

A cognate area will be defined as an area of specialized study within the PhD degree, in a health-related field. This gives students an opportunity to gain knowledge and expertise in a biomedical research field other than Statistics/ Biostatistics. Students must take a minimum of 6 credits in that cognate area.

COGNATE COURSES: Chemistry/ Biotechnology, Cell Biology, Environmental Biology, Epidemiology, Global Health, Global Infectious Diseases, Health Physics & Radiation Protection, Integrative Neuroscience, Interdisciplinary Program in Neuroscience, Neuroscience and Tumor Biology.)

NON-COGNATE COURSES: (Biostatistics, Computer Science, Econometrics, Mathematics, Psychometrics and Statistics.)

Bioinformatics Requirement

BIST 7660	Deep Learning&Artificial Intel	3
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Consulting & Data Analysis Requirement

BIST 7665	Stats Ethics & Communication	1
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Research Ethics Requirement

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This requirement is met by completing a course in responsible conduct of research.

Total Credits	40
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Related Programs

- Biostatistics, MS (<http://coursecatalog.georgetown.edu/programs/biostatistics-ms/>)