DOCTOR OF PHILOSOPHY IN THE FIELD OF STATISTICS (STEM)

OVERVIEW

Statistics plays an important role throughout society, providing methodologies for advances in medicine, genetics, and other research arenas, and for making decisions in business and public policy. GW's PhD in statistics program provides advanced training in topics including probability, linear models, time series analysis, Bayesian statistics, inference, reliability, statistics in law and regulatory policy, and more. The degree provides training in theory and applications and is suitable for both full- and part-time students. Most graduate courses are offered in the early evening to accommodate student schedules.

Nearly all GW statistics PhD graduates have secured positions in the statistics or data science industry, with employers including Amazon, Facebook, and Capital One. During the program, students work closely with faculty (https://statistics.columbian.gwu.edu/people/) on original research in their area of interest.

To be admitted, applicants typically have a master's degree in statistics or a related discipline. Students need a strong background in mathematics, including courses in advanced calculus, linear algebra, and mathematical statistics.

This is a STEM designated program.

Visit the program website (https://statistics.columbian.gwu.edu/graduate/phd-statistics/) for additional information.

ADMISSIONS

Visit the Columbian College of Arts and Sciences website for application requirements (https://columbian.gwu.edu/application-requirements/).

Supporting documents not submitted online should be mailed to:

> Columbian College of Arts and Sciences, Office of Graduate Studies
> The George Washington University
> 801 22nd Street NW, Phillips Hall 107
> Washington DC 20052

For additional information about the admissions process visit the Columbian College of Arts and Sciences Frequently Asked Questions (https://columbian.gwu.edu/graduate-admissions-faq/) page.

Contact for questions:

askccas@gwu.edu
202-994-6210 (phone)
Hours: 9:00 am to 5:00 pm, Monday through Friday

REQUIREMENTS

Code	Title	Credits
Required		
STAT 6201	Mathematical Statistics I	
STAT 6202	Mathematical Statistics II	
STAT 6223	Bayesian Statistics: Theory and Applications	
STAT 8257	Probability	
STAT 8258	Distribution Theory	
STAT 8263	Advanced Statistical Theory I	
STAT 8264	Advanced Statistical Theory II	
At least two of the following:		
STAT 6218	Linear Models	
STAT 8226	Advanced Biostatistical Methods	
STAT 8259	Advanced Probability	
STAT 8262	Nonparametric Inference	
STAT 8265	Multivariate Analysis	
STAT 8273	Stochastic Processes I	
STAT 8274	Stochastic Processes II	
STAT 8281	Advanced Time Series Analysis	
A minimum of 21 additional credits as determined by consultation with the departmental doctoral committee		
The General Examination, consisting of two parts:		
A. A written qualifying examination that must be taken within 24 months from the date of enrollment in the program and is based on:		
STAT 6201	Mathematical Statistics I	
STAT 6202	Mathematical Statistics II	
STAT 8257	Probability	
STAT 8263	Advanced Statistical Theory I	
B. An examination to determine the student's readiness to carry out the proposed dissertation research		
A dissertation demonstrating the candidate's ability to do original research in one area of probability or statistics.		