Applied Statistics

Certificate Offered

- Applied Statistics

Nature of the Program

The School of Mathematical and Data Sciences offers a Certificate in Applied Statistics for professionals or students who want to take applied statistics courses to enhance their quantitative skills and job opportunities. Because many students receive baccalaureate degrees from colleges that do not offer undergraduate programs in statistics, and because historically statistics has been primarily a field of graduate education, a student does not need a degree in statistics to enter the certificate program. A background in mathematics, science, or engineering is reasonable preparation for graduate work in statistics.

Admissions for 2025-2026

GRADUATE CERTIFICATE IN APPLIED STATISTICS

Applicants must meet WVU's general admission requirements (http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#classificationstext) for graduate admission. The GRE is not required for admission to this program.

All students must have successfully completed College Algebra. Single and Multi-variable Calculus are recommended.

List of Admission Requirements:

- See the steps to apply for admissions and access the application here (https://graduateadmissions.wvu.edu/how-to-apply/).
- Curriculum Vitae or Resume.
- A one page (250 word) personal statement that describes the applicant's interest in the certificate program.

International Applicants:

- See the steps to apply for admissions and access the application here (https://graduateadmissions.wvu.edu/how-to-apply/).
- International applicants should view additional requirements here (http://catalog.wvu.edu/graduate/graduateeducationatwestvirginiauniversity/#internationaltext) and here (https://graduateadmissions.wvu.edu/information-for/international-students/).
- English language proficiency is required in order to hold a graduate teaching assistantship. See here (https://elli.wvu.edu/testing-resources/english-proficiency-gtas/).

Application Deadline:

- The Certificate in Applied Statistics program admits students on a rolling basis.

For additional questions, please contact stat@mail.wvu.edu

Major Code: CG29

Certificate in Applied Statistics

CERTIFICATE CODE - CG29

Graduation requirement: Students must earn a minimum cumulative GPA of 3.0 and a minimum GPA of 3.0 in courses applied to the certificate.

Code	Title	Hours
CORE COURSES		**6**
STAT 512	Statistical Methods 2	
STAT 513	Design of Experiments	
ELECTIVES		**9**
Select 9 credits from the following options:		
Any STAT courses at the 500 level or above		
STAT 461	Introduction to Probability Theory	
STAT 462	Theoretical Introduction to Statistical Inference	
Total Hours		15

Certificate Learning Outcomes

APPLIED STATISTICS

Upon completion of the certificate students will be able to:

- Identify appropriate statistical methods for the analysis of real-world data;
- Analyze data using statistical programming tools;
- Apply the principles of experimental design in a science and engineering context;
- Interpret the results of designed experiments and observational studies.