

APPLIED STATISTICS GRADUATE CREDIT CERTIFICATE PROGRAM

¹ Credits cannot be taken for both STAT 483 and STAT 480, STAT 481, or STAT 482.

Certificate Requirements

Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs/>).

Students earn the certificate by completing 12 credits of instructor-led online course work. Two 3-credit courses are required, and the remaining 6 credits are selected from a list of electives. Students who successfully complete the certificate earn 12 academic credits and receive the graduate certificate in Applied Statistics. Students subsequently admitted to the Department of Statistics's professional Master of Applied Statistics degree program may count up to 15 credits of certificate courses toward the M.A.S. degree, subject to restrictions outlined in GCAC-309 Transfer Credit (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/>). Certificate students who wish to have certificate courses applied towards the Master of Applied Statistics must apply and be admitted to that degree program. Admission to the Applied Statistics graduate degree program is a separate step and is not guaranteed.

Code	Title	Credits
Required Courses		
STAT 500	Applied Statistics	3
STAT 501	Regression Methods	3
Electives		
Select at least 6 credits of the following:		6
STAT 414	Introduction to Probability Theory	
STAT 415	Introduction to Mathematical Statistics	
STAT 480	Introduction to SAS ¹	
STAT 481	Intermediate SAS for Data Management ¹	
STAT 482	Advanced Topics in SAS ¹	
STAT 483	Statistical Programming in SAS ¹	
STAT 484	The R Statistical Programming Language	
STAT 485	Intermediate R Statistical Programming Language	
STAT 487	Introduction to Statistical Analysis with Python	
STAT 502	Analysis of Variance and Design of Experiments	
STAT 503	Design of Experiments	
STAT 504	Analysis of Discrete Data	
STAT 505	Applied Multivariate Statistical Analysis	
STAT 506	Sampling Theory and Methods	
STAT 507	Epidemiologic Research Methods	
STAT 508	Applied Data Mining & Statistical Learning	
STAT 509	Design and Analysis of Clinical Trials	
STAT 510	Applied Time Series Analysis	
GEOG 483	Problem-Solving with GIS	
Total Credits		12