

SPATIAL DATA SCIENCE GRADUATE CREDIT CERTIFICATE PROGRAM

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 five courses – three required and two electives. Students who successfully complete the program earn 15 academic credits.

Students admitted to the Department of Geography's Master of Spatial Data Science or Master of Geographic Information Systems degree programs may count up to 15 credits of certificate program courses toward their degree, subject to restrictions outlined in GCAC-309 Transfer Credit (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-309-transfer-credit/>). Certificate students who wish to have certificate courses applied towards a graduate degree must apply and be admitted to that degree program. Admission to a Master's degree program is a separate step and is not guaranteed.

Code	Title	Credits
Required Courses		
GEOG 485	GIS Programming and Software Development	3
GEOG 486	Cartography and Visualization	3
GEOG 586	Geographical Information Analysis	3
Electives		
Select 6 credits from the following:		6
GEOG 580	GEOVISUAL ANALYTICS	
GEOG 581	Spatial Data Science Ethics	
GEOG 583	Geospatial System Analysis and Design	
GEOG 585	Open Web Mapping	
GEOG 588	Analytical Approaches in Spatial Data Science	
GEOG 589	Emerging Trends in Remote Sensing	
Total Credits		15