## GEOSPATIAL PROGRAMMING AND WEB MAP DEVELOPMENT 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/).

Code	Title	Credits
Required Courses		
GEOG 485	GIS Programming and Software Development	3
GEOG 863	Web Application Development for the Geospatia Professional	al 3
GEOG 585	Open Web Mapping	3
Electives		
Choose 6 credits	from:	6
GEOG 486	Cartography and Visualization	
GEOG 489	Advanced Python Programming for GIS	
GEOG 868	Spatial Database Management for the Geospati Professional	al
GEOG 865	Cloud and Server GIS	
Total Credits		15