

GEOSPATIAL INTELLIGENCE ANALYTICS GRADUATE CREDIT CERTIFICATE PROGRAM

Person-in-Charge	Todd Bacastow
Program Code	GEOINT
Campus(es)	World Campus

The graduate credit certificate in Geospatial Intelligence Analytics is for geospatial intelligence professionals with experience in Geographic Information Systems and Remote Sensing who are only able to participate part-time and at a distance, while maintaining professional responsibilities. The program promotes sound theory, methodologies, techniques, ethics, and best practices in the professional application of geospatial intelligence. The 15-credit curriculum integrates the geospatial information science and intelligence disciplines in a synergistic manner. The program is well suited for the geospatial intelligence professional serving outside the continental U.S.

Effective Semester: Fall 2018
Expiration Semester: Fall 2023

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (<http://gradschool.psu.edu/prospective-students/how-to-apply/>). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions Policies (<http://gradschool.psu.edu/graduate-education-policies/>). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students/>) for more information.

An entering student must have worked, anticipate working, or have completed in a satisfactory manner course work in an area related to national security, law enforcement, or business. The student must be admitted to (1) Penn State's Graduate School, and (2) the graduate certificate in Geospatial Intelligence Analytics offered by the department of Geography.

Certificate Requirements

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

Code	Title	Credits
Required Courses		
GEOG 571	Intelligence Analysis, Cultural Geography, and Homeland Security	3
GEOG 594A	Culminating Experiences in Geospatial Intelligence	1
GEOG 594B	Geospatial Intelligence Capstone Experience	2
GEOG 883	Remote Sensing Image Analysis and Applications	3

GEOG 884	Geographic Information Systems for the Geospatial Intelligence Professional	3
Electives		
Select at least 3 credits of the following:		3
GEOG 480	Exploring Imagery and Elevation Data in GIS Applications	
GEOG 482	Making Maps That Matter With GIS	
GEOG 483	Problem-Solving with GIS	
GEOG 484	GIS Database Development	
GEOG 485	GIS Programming and Software Development	
GEOG 486	Cartography and Visualization	
GEOG 487	Environmental Applications of GIS	
GEOG 488		
GEOG 489	Advanced Python Programming for GIS	
GEOG 583	Geospatial System Analysis and Design	
GEOG 586	Geographical Information Analysis	
GEOG 588		
GEOG 861	The Earth is Round and Maps are Flat: Working with Spatial Reference Systems in GIS	
GEOG 862	GPS and GNSS for Geospatial Professionals	
GEOG 863	Web Application Development for the Geospatial Professional	
GEOG 871	Geospatial Technology Project Management	
GEOG 885	Advanced Analytic Methods in Geospatial Intelligence	

Total Credits 15

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Learning Outcomes

- Combine advanced geospatial information science & technology knowledge and cognitive processes including theories, methodologies, techniques, ethics, and best practices to resolve complicated situations.
- Integrate professional experience, science, analytics, and the intelligence disciplines to create effective solutions.

Contact

Campus	World Campus
Graduate Program Head	Todd Smith Bacastow
Program Contact	Kary D Blaschak-Isett 418 Earth Engr Sciences University Park PA 16802 kdb6@psu.edu (814) 865-2557
Program Website	View (https://gis.e-education.psu.edu/geointel/)