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 Date: Fall 2018
Expiration Date: 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 (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).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEOG 571</td>
<td>Intelligence Analysis, Cultural Geography, and Homeland Security</td>
<td>3</td>
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<tr>
<td>GEOG 594A</td>
<td>Culminating Experiences in Geospatial Intelligence</td>
<td>1</td>
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<tr>
<td>GEOG 594B</td>
<td>Geospatial Intelligence Capstone Experience</td>
<td>2</td>
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<tr>
<td>GEOG 883</td>
<td>Remote Sensing Image Analysis and Applications</td>
<td>3</td>
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Electives
Select at least 3 credits of the following:

- 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 Acquiring and Integrating Geospatial Data
- GEOG 489 Advanced Python Programming for GIS
- GEOG 583 Geospatial System Analysis and Design
- GEOG 586 Geographical Information Analysis
- GEOG 588 Planning GIS for Emergency Management
- 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.

Contact
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Program Website: View (https://gis.e-education.psu.edu/geointel)