Geographic Information Systems (Certificate)

Building on NC State's strengths in technology, computational methods, and geographic information systems (GIS), this program provides professional, graduate-level academic preparation in the advanced application of GIS technologies to a wide spectrum of disciplines, including economics, public health, emergency planning and response, land use planning, environmental resources, etc. The certificate, which is also available to current NC State students enrolled in non-GIS graduate programs, forms the basis for the Master of Geospatial Information Science and Technology (https://online-distance.ncsu.edu/program/master-of-geospatial-information-science-and-technology/).

Admissions Requirements

Admission to the certificate program requires a baccalaureate degree from an accredited college or university with at least a 3.0 GPA. Students with less than a 3.0 undergraduate GPA may still be considered for admission based on the remaining criteria, including other graduate coursework. These determinations will be made on a case-by-case basis. All applicants must submit:

- Transcript showing Bachelor's degree conferred
- A clear and concise personal statement/statement of interest
- A resume/CV

Current NC State students in other degree programs may also be eligible to earn the certificate. These students should contact the Center for Geospatial Analytics for more information on how to apply.

Other relevant information

Up to 12 credit hours of B or better grades from the Certificate can transfer into the MGIST (https://online-distance.ncsu.edu/program/master-of-geospatial-information-science-and-technology/) program if/when a student applies and is accepted into that program.

Plan Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>GIS 510</td>
<td>Fundamentals of Geospatial Information Science and Technology</td>
<td>6</td>
</tr>
<tr>
<td>GIS 520</td>
<td>Spatial Problem Solving</td>
<td>6</td>
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</tbody>
</table>

Elective Courses

Choose 6 credit hours of electives from the "Elective Courses" listed below, at least 3 of which must be GIS prefix courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS 501</td>
<td>Geospatial Professionalism</td>
<td></td>
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<tr>
<td>GIS 512</td>
<td>Introduction to Environmental Remote Sensing</td>
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<tr>
<td>GIS 515</td>
<td>Cartographic Design</td>
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<tr>
<td>GIS 517</td>
<td>GIS Applications in Landscape Architecture and Environmental Planning</td>
<td></td>
</tr>
<tr>
<td>GIS 521</td>
<td>Surface Water Hydrology with GIS</td>
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Total Hours 12

Other courses not listed can be approved as an elective upon consultation with an advisor.

Faculty

Full Professors
Ross Meentemeyer
Helena Mitasova
Stacy Nelson
Gary Roberson

Associate Professors
Jeffrey White

Practice/Research/Teaching Professors
Perver Baran
Eric Money
Stacy Supak
Laura Tateosian
Vaishnavi Thakar
Emeritus Faculty
Heather Cheshire
Hugh Devine
Siamak Khorram