

## GRADUATE CERTIFICATE IN GEOGRAPHIC INFORMATION SCIENCE (GIS)

GIS technologies are applied to wide-ranging fields with interests in spatially distributed information such as transportation, environmental/resource management, marketing, facility management, healthcare delivery, agriculture and planning. In addition, the synergistic linkages between GIS and Remote Sensing (RS) technologies are increasing. The need for qualified individuals in these fields is growing rapidly. The GIS certificate program has been designed to meet this demand.

The Office of the President has approved this program, and it will appear on the official Texas A&M University transcript. This certificate is administered jointly through the departments of Ecosystem Science and Management and Geography.

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### Certificate guidelines

- Students must be admitted to Texas A&M University as a G6 (non-degree seeking), G7 (master's) or G8 (doctoral) student. (See the TAMU admissions website at: [admissions.tamu.edu](http://admissions.tamu.edu).)
- The program consists of 12 credit hours, including three foundation courses and one elective. Students must choose courses from the approved list on page 2.
- Students must maintain a 3.0 GPA for all applicable course work.
- All coursework for the certificate must be complete (not in progress) when students apply for the certificate.
- Classes taken for the RS certificate cannot be used in lieu of courses required for GIS certificate or vice versa.
- Substitutions/exceptions: Must be submitted to the GIS/RS Graduate Certificate Committee for consideration and acceptance. The letter of petition must include:
  - GIS or RS classes taken or in progress;
  - a syllabus for each course to be considered for substitution;
  - the corresponding required course for which substitution is requested; and
  - detailed work experience in applicable field

For a petition to be considered, it must be completed and returned to Sara Eliason, [skeliason@tamu.edu](mailto:skeliason@tamu.edu), by October 15 for fall semester or February 15 for spring semester.

### Certificate application

Students must submit the signed certificate application form two months PRIOR to graduation to Sara Eliason, ESSM graduate programs assistant, [skeliason@tamu.edu](mailto:skeliason@tamu.edu).

If you have any questions, please contact:

- Sara Eliason, ESSM graduate programs assistant, at 979.862.6470 or [skeliason@tamu.edu](mailto:skeliason@tamu.edu),
- Spatial Science Lab (SSL) at 979.862.7956, or
- the Director of Graduate Studies in the Department of Geography at 979.845.7128.

**Approved course options**

**Introductory level (one of the following is required) .....3 hours**

- ESSM 651/BAEN 651 – Geographic Information Systems
- GEOG 660 – Applications in GIS

**Intermediate level (both are required) .....6 hours**

- ESSM 652/BAEN 652 – Advanced Topics in Geographic Information Systems
- GEOG 665 – GIS-based Spatial Analysis and Modeling

**Specialized GIS courses (one of the following is required) .....3 hours**

- ENTO 625/GEOG 625 – Landscape Ecology
- ESSM 660 – Landscape Analysis and Modeling
- ESSM 665 – Computer Programming for Natural Resource Applications
- PLAN 625 – Introductory GIS in Landscape and Urban Planning

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| <b>TOTAL SEMESTER CREDIT HOURS</b> | <b>12</b> |
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