# **POEC 6389 GIS Masters Project: Information & Requirements**



The UT-Dallas Course Catalog states that **GISC 6389** Geographic Information Sciences Master's Project: Requires completion of an original GIS project by the student working alone or in a team. Team efforts must result in products that can be associated uniquely with each student.

Below are answers to common questions, additional guidelines and specific requirements for completion of this course.

To download the accompanying *Content Requirements for Report/Web Site* click <u>here</u> To see examples of projects produced by previous students, go <u>here</u>

#### When is the Course Taken?

This course is intended as the culmination of your masters degree in Geographic Information Sciences. Normally, all other requirements of the program will have been completed prior to the master's project, with the possible exception that the student may be concurrently enrolled in one or two other courses required to complete the degree.

The course is offered every semester including summer. You should enroll in the course **in the semester in which you expect to complete the project**. It is commonly the case that preliminary work on the project, such as selecting and "fine-tuning" the project topic and identifying required data sources, commences in the prior semester.

If the project is not completed by the end of the semester in which you register, a grade of X (incomplete) will normally be assigned and you may complete the project during the immediate following semester, including summer. (You should **not** register again for the course in this semester.) If you fail to complete the requirements during this subsequent semester, a grade of F will be assigned.

You may then register for the course a second time without penalty, and the same procedure will be followed. Although both grades show on your transcript, in the calculation of your GPA the grade received the second time replaces that received on the first attempt. However, this substitution can occur only once. If you register a third time, the grade from the first time will be included in your GPA.

### **Applying for Graduation**

Normally, you register for the master's project in the semester you expect to graduate. However, you must file an application for graduation prior to the start of classes that semester if you wish to formally graduate that semester. Contact Judy Robertson (GR 3.104; 972-883-2720; e-mail: <a href="mailto:judy@utdallas.edu">judy@utdallas.edu</a>) to apply.

### **Selecting a Topic**

You are required to complete "an <u>original</u> GIS project." Ultimately, it is your responsibility to select a topic and the associated research methodology, but guidance should be sought from a GIS faculty member (see below on **Conducting the Research**)

It is important that the scope of the project be sufficient. It needs to go considerably beyond what would be presented as a "final project" for a substantive course (such as GIS 6384 *Spatial Analysis* or GEOS 5422 *Global Positioning System Satellite Surveying Techniques*). Similarly, it must be more sophisticated than the work conducted for GISC 6387 *GIS Workshop* by exhibiting a degree of originality. However, the master's project can certainly build upon work initiated in another course.

Similarly, for those employed in the GIS field, the masters project can build upon projects at work, but again must demonstrate a degree of originality in the results obtained or the methodology utilized.

Originality implies an increment to the knowledge base of GI science. Normally, this is exhibited in one of two ways: as an increment to our understanding of spatial patterns and/or processes, such as expanding our knowledge of the factors influencing crime patterns, or the salinity of a river system; or, as an increment to our methodological capabilities for conducting GI analysis or operations, including the development of appropriate software. Normally, you should prepare a *project proposal*, which outlines your proposed work, for review by a GIS faculty member. 500 words (2 double-spaced pages) should be sufficient. See the section on "Introduction" in **Content Requirements for Report and Web Site** for suggestions on content.

## **Conducting the Research**

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faculty member(s) in the program most familiar with the research area of the project. The faculty member with whom you work approves the topic, provides advice and guidance during execution of the research, and reviews and approves the results prior to your final presentation.

Normally, one GIS faculty member provides administrative coordination for the *GIS Masters Project* course each semester. This person does <u>not</u> necessarily serve as the adviser for your project. You should consult with the coordinator, or any GIS faculty member, for suggestions as to who is most appropriate for you to work with.

### **Required Project Deliverables**

Completion of the masters project requires:

- (1) a presentation to members of the GIS faculty, and
- (2) documentation of your work through either a hard copy report or a web site (or both).

See below for more detail. Additionally, you may wish to exhibit key aspects of your work with a *poster*. A student passes the masters project on the majority vote of the GIS faculty attending the presentation, <u>and</u> the agreement of the administrator of the GIS Masters Project course for that semester that the project has been appropriately documented.

### **Masters Project Presentation**

The project presentations are scheduled once per semester, normally during one afternoon in "exam week," at a mutually convenient time for all faculty and student presenters. You are expected to be present for all presentations in your session. Other students may also attend if they wish. Each student will be given one hour. A 30-40 minute presentation is suggested, leaving 20 minutes for questions and discussion. A laptop/desktop computer with Internet connection and projector will be available. The presentation may be based upon Powerpoint (or similar presentation software) or may use the web site developed to document the project.

A digital copy of the presentation must be included with the project documentation. This digital copy will be placed on the web site for the Program in Geographic Information Sciences.

### **Project Documentation:** hard copy report

As a guide, the organization and content of the written report should be similar to journal articles published in the field of Geographic Information Science or to "expanded abstracts" which are common in some fields (see for example the *Society of Exploration Geophysicists* <a href="http://seg.org/publications/archive/exAbsHist/">http://seg.org/publications/archive/exAbsHist/</a>).

There is no prescribed length for the document. 2,500 to 5,000 words (10-20 pages, double spaced) with up to five graphics and/or tables would likely be adequate. However, it must follow the content requirements laid out in the accompanying Content Requirements for Report and Web Site.

This report must be provided in hard copy <u>and</u> in digital form, either as a .pdf document or as a Word document suitable for conversion to .pdf format. This digital copy will be placed on the web site for the Program in Geographic Information Sciences.

### **Project Documentation:** web site

The Web site should provide an essentially equivalent set of information as in the written report, although there is a more scope with a web site for innovative presentation, more extensive illustrations and more complete documentation of data, software, etc.. As with the hard copy report, it must include the content requirements laid out in the accompanying Content Requirements for Report and Web Site.

The Web site should be placed on a CD-ROM with all references internal to the folder structure of the CD. The base (home) page for the web site should be called *index.html* or identified by the student's name (e.g. *smith.html*). Alternatively, space will be made available to you on a web server belonging to the Program in Geographic Information Sciences.

**Project Documentation:** poster (optional)

meetings. It will be displayed in the Geographic Information Sciences area at UTD. Students are also encouraged to submit this poster for display at the Southwest Arc Users group meetings or at the ESRI Annual User meetings. A large format printer can be made available to you for creating the poster. A digital copy of the poster in .pdf or .jpeg also should normally be provided. This digital copy will be placed on the web site for the Program in Geographic Information Sciences.

Following the guidelines above should result in the expeditious and successful completion of the Master's Project. If you have questions, please contact any of the GIS faculty. Good luck! updated 9/15/03

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