PhD – Geospatial Information Systems Exams & Qualifiers

Qualifying Examination and Defense of Proposal
At end of the first year of being registered as a PhD student, a student must demonstrate through a general written examination his/her competency in four thematic areas of geographic information systems and science. The general examination will test a student’s (i) mastery of basic principles in geospatial information science, (ii) mastery of the technology (ies) and methodologies, and (iii) thorough knowledge of the application of geospatial information systems to potential research questions. The four thematic areas in which a student must demonstrate competence are: Vector and Raster GIS, Remote Sensing, Geospatial Science Theory, and Spatial Data Analysis. Students must pass at least three of the four thematic areas to continue in the PhD program.

Ph.D. Research Design
All doctoral students must register for and complete GISC 7387 GIS Research Design. A student must register for GISC 7389 in the semester immediately following the one in which he/she passes the PhD Qualifying Exam. GISC 7387 GIS Research Design can substitute for GISC 6389 GIScience Master’s Research but not the reverse unless a special petition is presented and granted.

Defense of Research Proposal
Each PhD student will complete a GIS Research draft proposal in accordance with the uniform guidelines established by the GIS program. The draft proposal will be evaluated by a committee of at least three GIS faculty, two of whom are chosen by the student with approval of the Director of the GIS Doctoral Program, and the third is appointed by the Head of the GIS Program and represents the program.

A student must successfully present, in public, and defend his/her dissertation proposal through an oral examination. The proposal defense will evaluate the viability of the proposed research and its contribution to knowledge.

The committee will judge the quality of the project as it exemplifies the student’s potential to conduct original research (including their ability to define their research objective, survey literature, develop an appropriate design, etc.) and the strength of the student’s course record to date, and make a determination of the student’s suitability to continue toward the PhD degree.

Upon successful completion of the qualifying examination and the proposal defense, a student is officially “advanced to a candidacy” for the Ph.D. degree and a dissertation committee of at least four faculty is formally constituted to oversee the research.

Grade Point Qualifier
Normally a student must have a GPA of at least 3.25 and preferably 3.5 in courses taken at UT Dallas at the time she/he registers for GISC 7387 Research Design. A student may petition the GIS faculty for an exemption for extenuating circumstances beyond the student’s control.

Defense of Dissertation
A dissertation must be prepared and defended successfully following the procedures established by the Dean of Graduate Studies.