GRADUATE STUDENT CONTRACT

I, ____________________________________________ have received a copy of the Graduate Student Handbook from the Department of Environmental and Geosciences. I understand that I am expected to abide by all policies, deadlines, and time lines set forth both in this handbook and those found in the Graduate Catalog, Guidelines for Admission to Candidacy, Schedule of Classes, and Thesis Requirements. I also acknowledge that it is my responsibility, and not the Graduate Coordinator nor members of the department, to see that I meet these obligations and deadlines. Additionally, I agree that my admission status as well as any financial support by the Department of Environmental and Geosciences may be withdrawn should it be found that I have not followed these policies in good faith.

Signed: _______________________________ Date ____________________________

Expected Graduation (Semester, Year): ________________________________

Contact Information:

Student ID: __________________________

Email: _____________________________ Local Phone Number: _______________

Cell Phone Number: _____________ Permanent Phone Number: _____________

Permanent Address: ________________________________________________
____________________________________________________________________
ACADEMIC PROCEDURES

The department of Environmental and Geosciences offers a Master of Science degree in Applied GIS. The program requires students to complete 36 credit hour of graduate course work. The Master's program offers two tracks; a **Traditional track** (thesis and non-thesis option) that offers a mix of online and face-to-face classes and a **Professional track** (non-thesis only) that is offered completely online.

The traditional track (thesis and non-thesis option) of GIS Master's degree is geared towards students with no prior experience/background in GIS or towards students who have completed an undergraduate degree with no work experience. All face to face classes are offered at the Sam Houston State University campus located at The Woodlands Center on Hwy 242.

The online professional track is geared towards professionals with at least 2-3 years work experience.

APPLICATION / ACCEPTANCE PROCEDURES

Regular Admission

Applicants seeking admission to the Master of Science in Geographic Information Systems must submit the following directly to the Office of Graduate Admissions:

- Graduate Application ([http://www.shsu.edu/admissions/apply-texas.html](http://www.shsu.edu/admissions/apply-texas.html))
- Application fee ([http://www.shsu.edu/dept/graduate-studies/application-fee.html](http://www.shsu.edu/dept/graduate-studies/application-fee.html))
- Official transcript(s) of all previous college work (international students must submit third party evaluation of official transcripts for degrees from universities outside the United States)
- Official GRE scores.

**For students applying to the Professional track of the Master's program, GRE is waived in lieu of work experience.**

- TOEFL scores for international students
- Two letters of recommendation from faculty in the student's major at the degree-granting institution. For students applying to the Professional track of the master's program at least one letter from immediate supervisor preferred

For students applying to the **Professional track** following two items are required in addition to the above items

- Resume
- Statement of purpose that explains
  - Intent of degree
  - Expected outcome
  - Description of current and past involvement and employment using GIS and Remote Sensing technologies
International students who receive a Form I-20 (F-1) or DS-2019 (J-1) based on admission to this program will be required to maintain full time enrollment (9 credits per semester) and will be subject to the rules and regulations that pertain to the F-1 or J-1 student visa status. Prospective international students MUST also visit the International Programs page for more information about graduate studies at Sam Houston State University.

*Conditional Admission.

An applicant whose records are incomplete may be granted conditional admission. Such students will be classified as conditional graduate students until all records are complete and all regular admission requirements are fulfilled. Conditional admission allows for the completion of no more than six hours of graduate credit and is valid for only one semester. All requirements for regular admission must be met prior to enrollment for more than six hours graduate credit.

As per SEVIS/ICE policies international students are not allowed conditional admission.

*Probationary Admission.

An applicant whose records are complete but who did not qualify for regular admission can be granted probationary admission with graduate committee recommendation. The student may need to complete one or more stem courses as recommended by the graduate committee. Stem courses do not count towards the 36 credits of graduate coursework. The purpose of stem courses is to prepare a student for graduate coursework in GIS if conditions for regular admission are not met. Such a student is allowed in graduate classes to demonstrate that he/she can perform at the graduate level. Students must earn a grade of “B” or better in each course taken under probationary status in order to be considered for regular admission.

*Please note that conditional and probationary admission does not guarantee regular admission once deficiencies are met.

Non-Degree Admission/Graduate Certificate in GIS.

Non-degree admission may be granted to a student who does not intend to pursue a graduate degree but who wishes to take courses for professional advancement to pursue a Certificate in GIS and who holds a baccalaureate degree or higher from an accredited university. For admission into the Certificate program official transcripts and a resume is required.

GIS Certificate students may transfer to the regular Master’s program with a formal application, and a maximum of 12 graduate semester credit hours completed in the non-degree status may be applied to the graduate degree program. Transfer credits are not allowed in the graduate Certificate program.

Students pursuing Master of Science degree in GIS may be issued a Certificate with a formal request upon meeting the certificate requirements.
Transfer Credit.

A total of nine (9) credit hours may be transferred to SHSU from another accredited graduate program. However, for a course to be transferred, there should be an equivalent course in the current graduate program, and that course cannot be taken again. Only courses taken within the last six years can be transferred. Undergraduate credits cannot be transferred and used towards graduate degree. Exceptions to this rule require approval by the Department Chair and the Dean.
ACADEMIC EXPECTATIONS

Academic Expectations.

A minimum cumulative grade point of 3.0 (4.0 scale) is required. When a grade of C is earned in any course, it must be balanced by a grade of A in an equivalent course taken in the same academic program. (A grade of A earned at another institution may not be used to remove a grade deficiency earned in residency at Sam Houston State University).

Academic Probation and Suspension.

For a student to remain in good academic standing at Sam Houston State University, a graduate student must maintain an overall grade point average of at least 3.0 (B) on all graduate course work attempted.

A student with an overall grade point average below 3.0 at the end of any semester or completion of the summer session (both sessions) during which one or more semester hours are attempted, will be placed on probation. If a probationary student does not achieve a minimum of 3.0 overall grade point average at the close of the next semester or summer session, the student will be suspended.

A student who earns a total of two grades of C or one grade of F will be terminated from the program. Any appeal for a review of termination should be directed in writing to the graduate committee.

CREDIT HOUR RESTRICTIONS

The normal course load for graduate students is nine credit hours per full semester and 3-6 credit hours per summer session.
PROCEDURES FOR MASTER OF SCIENCE DEGREE

Graduate Coordinator.

Dr. Falguni Mukherjee, fsm002@shsu.edu, is the graduate coordinator for all graduate students seeking a Master’s degree in Applied GIS. Dr. Pat Harris, pat-harris@shsu.edu is the Department Chair and Dr. John Strait, jbs008@shsu.edu is the Assistant Chair.

The graduate coordinator will be the contact person for all graduate students submitting any official paperwork, to assist with course selection and any questions pertaining to the graduate program.

Course Requirements for Master of Science in GIS.

A suggested list of required courses is found in the Graduate Catalog (also included in the appendix). However, the Master’s program may be tailored to fit the needs and interests of each individual student.

The degree requires successful completion of 36 hours of graduate course work for the online professional track and non-thesis option (traditional track). For the thesis option (traditional track) 30 hours of graduate course work, plus 6 hours of thesis credit must be completed.

Degree Plan.

A degree plan is prepared for every student by the Graduate Coordinator after consultation with the student. A degree plan must be on file by the end of second semester of the degree program. At this time, the student commits to a degree plan, including whether or not to opt for a thesis or a non-thesis path (traditional track). A degree plan details the curriculum for the specific academic program and is developed for each graduate student. All courses on the approved degree plan must be completed with a satisfactory grade to meet the requirements for the degree. Changes in an approved degree plan may be made by petition to the graduate advisor and approved by the appropriate academic dean.

As per university policies, a student is required to complete master's level graduate work within a six-year period, measured from the date of initial enrollment for graduate credit in a particular degree program. The period of time a student is on an approved leave of absence will be counted as time accumulated toward that six-year deadline for completion of the degree. Any extension of the six-year deadline must be approved in writing by the appropriate academic dean.

Documentation.

Each student is responsible for submitting necessary paperwork to the graduate coordinator in a timely manner. It is the responsibility of the student to refer to the deadlines in the Graduate Catalog, Schedule of Classes, Academic Dean’s Office, Graduate Admissions etc. and adhere to those dates.
Examination of Completion.

All graduate students must pass a comprehensive exam (*see below*), over the graduate course work of their degree program.

Additionally, graduate students completing a thesis will be required to give a presentation of their thesis proposal/prospectus, an oral thesis defense and will be subject to an oral examination of the thesis topic.

Comprehensive Exam.

All graduate students must pass a Comprehensive Exam. The Comprehensive Exam will be administered by the Comprehensive Examination Committee that consists of three GIS graduate faculty members. A written comprehensive examination will be administered by the comprehensive exam advisory committee for each degree candidate. The written examination must be scheduled with the GIS Graduate Program Coordinator at least four weeks in advance. Students must be enrolled the semester in which they take the comprehensive examination.

The Comprehensive Examination Committee may or may not be the same as the student’s Thesis Advisory Committee. **Students must submit the Comprehensive Examination Committee Form (see Appendix) to the Graduate Coordinator by the beginning of the semester in which the exam is scheduled.** Students must successfully complete their comprehensive exam no later than the semester in which graduation is expected.

Students are eligible to take the comprehensive exam after completing GEOG 5361, GEOG 5362, GEOG 5364 and any three electives. The comprehensive exam is offered twice each academic year (once in the fall semester and once in the spring semester) during a five-day period to be determined by the Comprehensive Examination Committee. If a student fails any one test area of the comprehensive exam, he/she may retake the Comprehensive Examination just on that particular area in the following semester. If a student fails to pass the comprehensive exam a second time, then he/she will be terminated from the Graduate Program.

**THESIS**

The thesis requirement consists of an original written document over the research findings that were done in compliance with the project’s prospectus, a thesis presentation given to the public and performed publically during working hours, and a thesis defense wherein the candidate for the degree Master of Science defends their research hypothesis, research methods, and research results to their approved committee.
Thesis guidelines are available from the Graduate School’s Thesis/Dissertation webpage, or from Newton Gresham Library’s Thesis & Dissertation website.

Thesis Advisor

A student pursuing a thesis option is to choose a graduate faculty member from the Department of Environmental and Geosciences at SHSU as a Major Advisor (see Appendix for Advisor – Student Agreement form), by the end of the second semester, to guide him or her in their thesis work. The Major Advisor will serve as the chairperson of their Thesis Advisory Committee and will be responsible for advising and guiding the student on research efforts. Per University policy, the Major Advisor must have Master’s level graduate faculty status or higher. Should the student’s Major Advisor change, a revised Advisor-Student Agreement form (see Appendix) should be submitted to the Graduate Coordinator.

Thesis Initiation Sheet

Students who are enrolled in their first thesis-writing course (including proposal, prospectus, and praxis) must download, complete, and submit a Thesis Initiation Sheet (see Appendix).

Thesis Advisory Committee

With the assistance of the Thesis Advisor, the student will select a minimum of two other faculty members from the Department of Environmental and Geosciences at SHSU to establish their Thesis Advisory Committee. Exceptions to this policy may be granted upon petition to the Graduate Committee. The Graduate Committee may allow one of the three Advisory Committee members to be outside the Department of Environmental and Geosciences at SHSU; however, that person must be able to contribute significantly to the thesis project. Exceptions will be granted on a case by case basis and the decision of the Graduate Committee is final. A fourth member of the Advisory Committee may be selected if desired; this faculty member may be outside of the department or University. If the Committee member is outside of the University, that member must be approved by the Dean of Graduate Studies (see the Graduate School website to complete a form to request approval). The Advisory Committee should be selected by the end of the second regular semester and no later than the third regular semester. It is the role of the Thesis Advisory Committee, working in concert with the student, to establish an appropriate sequence of work and plan of research to attain the student’s thesis goals. It is the responsibility of the student to meet with his/her thesis advisory committee on a regular basis and keep them updated on the progress.

An Advisor-Student agreement (see Appendix) must be on file as soon a thesis advisory committee has been established.
The department in consultation with the library has decided that students pursuing the thesis track will follow the **Chicago Manual of Style** for citations when writing their prospectus and thesis. Prominent geography journals follow the Chicago Manual of Style. Here is a link to the Chicago Manual of Style: [http://www.chicagomanualofstyle.org/home.html](http://www.chicagomanualofstyle.org/home.html) for further reference.

**Prospectus.**

The candidate, in consultation with their thesis advisor/chair of the thesis committee, will select a subject of investigation and determine the availability of the required sources, facilities, materials, and equipment for the research and the writing of the thesis. The student will prepare a thesis prospectus which will specify the thesis topic, detail the purpose of the proposed investigation, describe the proposed method(s) of investigation, indicate the relationship of study to relevant research and findings of scholars in the student's area of concentration, and provide a commentary on source materials and/or facilities available for the successful completion of the research.

A student must present their prospectus *at the latest* by the beginning of their **third regular semester**.

The prospectus shall be submitted to the thesis committee on successful presentation. After the committee has approved and signed the prospectus, it is submitted to the academic dean for final approval. Any subsequent changes in the topic or the proposed method of investigation must be approved in writing by the thesis committee and submitted for approval to the appropriate academic dean.

In order to earn a grade of CR (Credit) in GEOG 6398 -Thesis I, a student must successfully present and defend a thesis prospectus. Until then a grade of IP will be awarded.

See Appendix for Thesis Prospectus Approval form.

**Continuous Enrollment Requirement.**

Per University policy, once a student enrolls in a thesis course (GEOG 6398 or GEOG 6099), the student must continue to enroll in a thesis course each semester until the student graduates. For example, once a student enrolls in GEOG 6398, the student must either re-enroll in GEOG 6398 or enroll in GEOG 6099 the following semester, which would typically be the semester of expected graduation. Once a student has completed all of the thesis courses required for the degree, they may satisfy the continuous enrollment policy by enrolling in a 1-credit hour section of the thesis course.

It is advisable that a student should not register for any thesis courses until after the prospectus is approved, especially given that students must follow the continuous enrollment policy.
Thesis Route Sheet: The Office of Graduate Studies—in collaboration with the Registrar’s Office, the Library, and the IT—has created an electronic thesis route sheet for graduate students who complete theses and dissertations. This electronic route sheet is generated by the student and will appear in the emails of thesis/dissertation directors and co-directors, prompting them for approval. Simply click the button by approve and the electronic route sheet will move along in the chain of approvals. Here is a link to the form on the Office of Graduate Studies web page: http://www.shsu.edu/dept/graduate-studies/theses-and-dissertations.html.

As a general rule, a reasonably final draft of the thesis must be submitted to the student’s Advisory Committee no later than two weeks prior to the scheduled public defense in order to allow the committee ample time to read and edit the thesis.

A Report of Thesis Examination (see Appendix) should be filled out by the student after the thesis defense and submitted to the Dean’s office. The student should bring the form to the defense. A copy of this form should also be filed with the Graduate Coordinator.

Students participating in Commencement Ceremonies must arrange for a cap and gown at the University Bookstore at least 2 months before expected graduation.
**Time Table of Procedures and Processes** *(This is a tentative time table and may be customized for every student. Hence, every student will have variations depending on the needs and interests of each individual student).*

**First regular (i.e. fall or spring) semester:**

1) Enroll in GEOG 5361/GEOG 5362 (Traditional track) OR GEOG 5310/5364/5314 (Professional track) (if offered, otherwise wait until the following semester).
2) Sign and submit Graduate Student contract to the Graduate Coordinator.

**Second regular semester:**

1) After the completion of 6 graduate credit hours, all non-regular admission students must apply for regular admission and must have removed all conditional requirements.
2) Submit Degree Plan; specify choice of thesis or non-thesis plan.
   a. Submit Advisory Committee Agreement form. (see Appendix for forms).
   b. Submit Thesis Initiation Sheet
4) Work toward completion of the Prospectus (see Appendix for Prospectus Approval Form).
5) **Before the start of the third regular semester,** a thesis prospectus must be approved by the Thesis Advisory Committee, Department Chair, and Academic Dean (see Appendix – Thesis Prospectus Approval form). The approved thesis prospectus must be filed with the department.

**Third regular semester:**

1) Successfully complete Comprehensive Exam over graduate course work. The Comprehensive Exam must be completed during the third semester. After the exam, a **Report of Comprehensive Examination** form (see Appendix) must be submitted to the Graduate Coordinator.
2) Continue research and coursework for appropriate degree plan.

**Fourth - Sixth regular semesters:**

Continue research and coursework for appropriate degree plan.
Appendix

Forms and Checklists
# Tentative Graduate Course Rotation

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Semester Offered</th>
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<tbody>
<tr>
<td>GEOG 5361</td>
<td>Geographic Information</td>
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<tr>
<td>GEOG 5363</td>
<td>Internet GIS</td>
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<tr>
<td>GEOG 5364</td>
<td>Spatial Analysis</td>
<td></td>
</tr>
<tr>
<td>GEOG 5366</td>
<td>Cartography and Visualization</td>
<td>FALL</td>
</tr>
<tr>
<td>GEOG 5367</td>
<td>GIS Programming</td>
<td></td>
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<tr>
<td>GEOG 5310</td>
<td>GIS Project Management</td>
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<tr>
<td>GEOG 6398</td>
<td>Thesis I</td>
<td></td>
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<tr>
<td>GEOG 6099</td>
<td>Thesis II</td>
<td></td>
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<tr>
<td>GEOG 5311</td>
<td>GIS in Law Enforcement</td>
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<tr>
<td>GEOG 5314</td>
<td>GIS for Professionals</td>
<td>SPRING</td>
</tr>
<tr>
<td>GEOG 5315</td>
<td>Spatial Database</td>
<td></td>
</tr>
<tr>
<td>GEOG 5362</td>
<td>GIS Principles and Applications</td>
<td></td>
</tr>
<tr>
<td>GEOG 5365</td>
<td>Digital Image Processing</td>
<td></td>
</tr>
<tr>
<td>GEOG 5371</td>
<td>Geographic Information Systems in Energy-Related Fields</td>
<td></td>
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<tr>
<td>GEOG 5373</td>
<td>Introduction to GPS, LiDAR and Radar</td>
<td></td>
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<tr>
<td>GEOG 5374</td>
<td>Advanced GIS Analysis</td>
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<tr>
<td>GEOG 6398</td>
<td>Thesis I</td>
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<tr>
<td>GEOG 6099</td>
<td>Thesis II</td>
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<tr>
<td>GEOG 5312</td>
<td>GIS ModelBuilder</td>
<td>Summer</td>
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<tr>
<td>GEOG 5313</td>
<td>Ethics in GIS</td>
<td></td>
</tr>
<tr>
<td>GEOG 5369</td>
<td>GIS Internship</td>
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</table>
GRADUATE COURSE DESCRIPTION

GEOG 5361. Geographic Information
This course introduces the principles of the structure and function of Geographic Information Systems. This includes raster and vector data structures, coordinate systems, projections and georeferencing, data capture and editing, creation and management of attribute data, basic and advanced spatial analysis, accuracy and availability of geospatial data, dissemination of output as maps, reports and over the Internet and hardware, software and technology integration issues. Credit 3.
Prerequisite: GEOG 2464.

GEOG 5362. GIS Principles and Applications
Develops hands on skills using industry standard GIS software by putting in practice GIS fundamentals and theories learned in GEOG 5361. GIS applications in a wide variety of areas such as local governments, urban infrastructure management, natural resource management, geologic analysis, marketing will be explored. Credit 3.

GEOG 5363. Internet GIS
Students are introduced to the principles and practices of interactive web-mapping and GIS data distribution across the Internet. Students learn to develop, customize, and publish GIS applications and geoprocessing tasks and share information through web services using ArcGIS Server and ArcGIS Online. Credit 3.

GEOG 5364. Spatial Analysis
Students are introduced to the fundamental knowledge and techniques of spatial analysis. Students learn how to effectively use various spatial data to solve real-world problems. Topics covered may include spatial data structure, multiple layer operations, point pattern analysis, and network analysis. Credit 3.

GEOG 5365. Digital Image Processing
This course emphasizes on the general principles of digital image processing to extract information from remotely sensed data. The remotely sensed data to be investigated include Landsat ETM, SPOT, hyperspectral Images and many others. Throughout the course, emphasis would be placed on image processing, image analysis, image classification, and integrating information extracted from remotely sensed data into a GIS. The digital image processing techniques to be covered include: image acquisition, image enhancement, image restoration, color image processing, image segmentation, image compression, image recognition, image quality assessment and statistical evaluation and change detection. Students will learn to use an industry standard digital image processing software- ERDAS Imagine. Credit 3.

GEOG 5366. Cartography and Visualization
Students develop theoretical understanding and technical proficiency in the art, science, and techniques used in modern automated cartography and visualization. Emphasis is placed on different mapping techniques and surface rendering. Extensive computer lab exercises are required. Credit 3.

GEOG 5367. GIS Programming
Students learn to use Python programming to develop customized GIS applications. Students
become familiar with the fundamental concepts in object-oriented programming and develop programming skills. *Credit 3.*
Prerequisite: GEOG 5361, GEOG 5362

**GEOG 5369. Internship in GIS**
Students will work in an approved setting to obtain applied experience in the use of GIS. Students must be supervised by a member of the graduate faculty, who will determine whether the nature and amount of the work performed satisfies the requirements for graduate credit. *Credit 3.*
Prerequisite: GEOG 5361.

**GEOG 5371. Energy GIS**
Students focus on the use and application of GIS and related geospatial technologies within a variety of energy related fields. Technological applications within pipeline routing, reservoir mapping, evaluation and visualization, and environmental assessmen serve as the primary foci. Geospatial aspects of oil and gas production and distribution also are explored, as will GIS mapping and the management of GIS facilities. *Credit 3.*

**GEOG 5373. Intro to GPS, LiDAR, & Radar**
Students focus on the concepts and applications of Global Positioning Systems (GPS), Light Detection and Ranging (LiDAR), and Radar systems. Topics may include accuracy assessment and appropriate use of LiDAR, Radar, and GPS data products. Students master the skills needed to use these data products in different applications such as topographic mapping, flood inundation studies, vegetation analysis, and 3D modeling. Course components may include lectures, labs, and field work. *Credit 3.*
Prerequisites: GEOG 5361

**GEOG 5374. Advanced GIS Analysis**
This is an advanced level GIS analysis course. It teaches students systematically what a typical GIS analysis project should include and be implemented. Topics include defining problem, preparing data, choosing analytical methods, performing statistical analysis, and interpreting and evaluating results. Students will learn how to build and modify geoprocessing models using ArcGIS ModelBuilder and create spatial regression models. *Credit 3.*
Prerequisites: GEOG 5364

**GEOG 5310. GIS Project Management**
Management strategies for GIS are examined by presenting GIS as an integrated system of people, computer hardware, software, applications, and data. The course may include design of implementation plans as case studies to explore various techniques associated with each step of this process. *Credit 3.*
Prerequisite: GEOG 5361.

**GEOG 5311. GIS and Law Enforcement**
The primary foci of this course are the application of geospatial technologies in law enforcement and national security. Course topics may include the characteristics of geospatial intelligence and crime incident data, the use of GPS imagery, and the application of other geospatial technologies. Students use methods of spatial analysis to study a variety of public safety phenomena, such as heat mapping, change detection, and geographic profiling. *Credit 3.*
GEOG 5312. GIS ModelBuilder
This course focuses on theories, topics and concepts that provide students a strong understanding of ModelBuilder, a program designed to create automated routines and workflows within a GIS environment. Through the development of skills and techniques with ModelBuilder, students learn how to create, use, and share interactive models within the ArcGIS platform. They will also learn how to document models so others can use them for their own intended purposes. Credit 3. Prerequisite: GEOG 5362.

GEOG 5313. Ethics in GIS
Students learn and examine the ethical guidelines for professionals who use GIS and geospatial technologies. Topics include the ethical issues that arise during data collection, data use, and data display, as well as the obligations of GIS professionals to society, employers, colleagues, and the profession. Credit 3.

GEOG 5314. GIS for Professionals
Students solve problems by visualizing, querying, creating, editing, analyzing, and presenting geospatial data in both 2D and 3D environments using ArcGIS mapping applications and/or similar applications. Credit 3.

GEOG 5315. Spatial Database
Students examine and apply the theoretical and practical aspects of a spatial database. Specifically, students create, use, edit, and manage spatial and attribute data in a spatial database and define domains, subtypes, and relationship classes. The focus is on the successful design, implementation, and management of a spatial database. Credit 3.

GEOG 5075. Special Problems in Geography
This course is designed for graduate students who are capable of independent study of some particular geospatial research topic. Registration is permitted only upon approval of both the departmental faculty member with whom the student will be working and the graduate program coordinator. Students are required to submit a Permission form (See appendix) to enroll in GEOG 5075. Credit 1-3.

GEOG 6261. Seminar in Applied GIS Research Methods
This course provides an introduction to scientific research methods in Geography and Environmental Studies. Topics covered include fundamental research concepts, scientific communication, data collection, physical measurements, behavioral observation and archives, explicit reports (survey, interviews, and tests), experimental and nonexperimental designs, sampling, statistical data analysis, data display, reliability and validity, and ethics in scientific research. This course is required for graduate students taking the thesis option.

GEOG 6398. Thesis I
The student will begin working on a thesis involving research and study of the applications of GIS and related technologies. Prerequisite Consent of graduate supervisor. Credit 3.

GEOG 6399. Thesis II
The student will complete a thesis involving research and study of the applications of GIS and related technologies. The work involved includes research on the approved thesis topic, preparation of a draft and a final thesis. Prerequisite GEOG 6398 or consent of graduate
supervisor. Credit 3.
ADVISORY COMMITTEE AGREEMENT

I, ____________________________, do hereby submit the names of the following faculty as advisory committee members. I attest that I have met and discussed with each of them my degree plan and they have agreed to serve on my committee.

Student's Signature: ______________________________________________

Sam ID: ______________________  Major: ____________________________
Printed
Name: ________________________________________________________

<table>
<thead>
<tr>
<th>Committee Member Printed Name</th>
<th>Signature</th>
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<tbody>
<tr>
<td>(Committee Chair)</td>
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<td>(Committee Member)</td>
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<td>(Committee Member)</td>
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</tbody>
</table>

Expected Graduation Date: __________________________

Date Received: ______________  Graduate Advisor  Signature: ______________

Office Use Only

All committee members have appropriate graduate faculty status?

Yes  No

Date Approved: ______________  Dean's Signature: ______________
Thesis Prospectus Approval

Submitted to the College of: ___________________________________________

Candidate: __________________________________________________________

Degree in Progress: __________________________________________________

Proposed topic: ______________________________________________________

______________________________________________________________

*Attach copy of prospectus to this form

Thesis committee approval: ___________________________ __________

(Major advisor) (Date)

_________________________ __________

_________________________ __________

Department Chair: ____________________________________________ __________

Graduate Coordinator: ____________________________________________ __________

Final Approval by Dean, COSET: ________________________________ __________
Comprehensive Examination Committee Form

(Submit to the Graduate Coordinator by Beginning of Third Semester in Program)

Name: ___________________________ Date: ___________________

Student ID#: ______________________

Do you have a degree plan on file? Yes ________ No ________

List your proposed Examination Committee members (please print names):

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

Date of Comprehensive Exam: _____________________________

Student Signature: ___________________________ Date: ________________

Graduate Coordinator Signature: ___________________________ Date: ________________
REGISTRAR’S OFFICE
SAM HOUSTON STATE UNIVERSITY
Huntsville, Texas

Report of Comprehensive Examination

A(n) ______________________________ comprehensive examination was
(oral/written/written and oral)
administered to ________________________, Sam ID: ______________
a candidate for the degree of ________________________, on ________________,
20____, in Room __________ of the __________________________ Building. The
Student was examined on the following three areas of concentration and earned marks as
indicated. The student may earn a mark of “High Pass”, “Pass”, or “Fail” on each area:

<table>
<thead>
<tr>
<th>Areas</th>
<th>Marks</th>
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<td>4</td>
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<td>5</td>
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</tbody>
</table>

A re-examination is ______________________ on area(s)
(unnecessary/necessary/requested)

_________________________________, ____________________________, and

_________________________________,

THE EXAMINING COMMITTEE:

Chairman ________________ Date ________________

__________________________ Date ________________

__________________________ Date ________________

Dean, COSET ________________ Date ________________
COLLEGE OF SCIENCE & ENGINEERING TECHNOLOGY
SAM HOUSTON STATE UNIVERSITY
Huntsville, Texas

Report of Thesis Examination

_________________________________________, SAM ID: __________________________

a candidate for the degree of ________________________________________________

was examined on the thesis project entitled ________________________________________

____________________________________________________________________________

____________________________________________________________________________

on __________________, 20____, in Room ________ of the ________________________

building. The members of the thesis committee certify that the student ________________

(passed/failed).

THE THESIS COMMITTEE

__________________________________________  Committee Chair

Date                                                                                     

__________________________________________  Committee Member

Date                                                                                     

__________________________________________  Committee Member

Date                                                                                     

__________________________________________  Dean, College of Science &

Engineering Technology
Request for Permission to Enroll in GEOG 5075

I _______________________________ am requesting permission to enroll in GEOG ________ for ________
(name) GEOG 5075 (1,2,3) ________ hours of credit for the ________ semester, _________. Dr. ____________________________ will be my
(fall, spring, summer) (year) (name)
Supervising Instructor (SI).

I understand the following terms of the agreement, as well as the academic requirements listed below: (Please write your initials in the blank to the left of the requirements to indicate that you have read and understand these requirements):

_____ 1. I must obtain approval from my Supervising Instructor (SI), and the GIS Graduate Program Coordinator (GGPC), before I can enroll in the course.

_____ 2. The proposal must be submitted to the SI, and GGPC far enough in advance of the start of the semester in which the course is to be taken to allow time for review by the relevant parties.

_____ 3. The research proposal should clearly explain: a) the purpose and nature of the project; b) the time frame for conducting the research; c) the type of data that will be obtained and analyzed, and how it will be obtained; and d) the final form in which the project will be submitted (paper, poster, database, map, etc.) If human subjects are involved (e.g., if I want to collect survey data), I understand that I must also obtain permission from the university’s Institutional Review Board. *This normally takes a minimum of a few weeks.

_____ 4. The research project must be of appropriate academic rigor for this course. (This will be determined by the SI, GGPC, and the GIS Graduate committee).

_____ 5. I understand that the final project must meet professional academic standards; i.e., it must be of the quality necessary for one or more of the following types of professional activities: publication in a professional journal; presentation at a research symposium as a poster or paper; use by faculty members in their research; etc... (I understand that this project is NOT a book report – it is an independent study research project.)

_____ 6. The project needs to be submitted in final form to the SI no later than 10 days prior to the end of the semester and on the date established by the SI.
On the back of this page is a checklist of steps which must be completed before enrolling in the course, as well as a list of the specifics of the projects as agreed to by the SI and GGPC. Signature lines are provided, as needed, for the student, SI, and GGPC respectively.

**Checklist and Signature Page**

1. Proposal received by the SI. ___________________________ Date ____________

2a. As agreed upon by the student and the SI, the final project will be in the form of: (check one or more as necessary)
   ___ a. paper
   ___ b. poster
   ___ c. map
   ___ d. database
   ___ e. other (please specify)

2b. Student will present the results:
   ___ a. at a conference (SWAAG, AAG, etc...)
   ___ b. to the SHSU Environmental and Geosciences Faculty
   ___ c. to geography students at SHSU
   ___ d. at an SHSU graduate research symposium on campus
   ___ e. only to the SI
   ___ f. other (please specify)

2c. The project must be submitted to the SI by the following date: ________________

   Student’s signature ___________________________ Date ____________

   SI’s signature ___________________________ Date ____________

3. Proposal received by GGPC. ___________________________ Date ____________

4. Proposal has been **accepted/rejected** (circle one) by GGPC and GIS Graduate committee members.
   GGPC ___________________________ Date ____________
1. If the section of the course in which the student will enroll is not offered under the SI’s name, please have the Instructor of Record (IOR) responsible for entering the student’s grade *sign and date* this form in the space below as acknowledgment that he/she will serve as the IOR for grade entry. 

Date ____________

Comments/Suggestions by GGPC and GIS Graduate committee for improvement of the proposal: _
Sam Houston State University

A Member of the Texas State University System

OFFICE OF GRADUATE STUDIES

Thesis and Dissertation Initiation Sheet

Please complete the entirety of this form and submit to the Office of Graduate Studies by mail, email, or direct drop off during regular university hours.

Email: gradstudies@shsu.edu
Phone: (936) 291-2408
Main campus: ABIV, Office 431

Mail: Office of Graduate Studies
Sam Houston State University
Box 2541
Huntsville, TX 77341-2541

Student Information

University ID#: ___________________________ Expected Graduation Date: ____________
First name: _______________________________ Middle name or initial: __________________
Last name: _______________________________
### College and Program Information

[ ] Thesis  [ ] Dissertation

<table>
<thead>
<tr>
<th>Thesis / Dissertation Director</th>
<th>Thesis / Dissertation Co-Director (if applicable)</th>
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<tbody>
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List all other committee members:

<table>
<thead>
<tr>
<th>College:</th>
<th>Department:</th>
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Please provide a brief summary of your research question:

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**Note:** The Thesis Initiation sheet can also be found in two locations on the Graduate Studies’ website:

- Graduate Studies >> Faculty and Staff Resources >> Faculty & Staff Forms: [http://www.shsu.edu/dept/graduate-studies/faculty-staff-resources.html](http://www.shsu.edu/dept/graduate-studies/faculty-staff-resources.html)
- Graduate Studies >> Graduate Student Toolkit >> Student Forms: [http://www.shsu.edu/dept/graduate-studies/grad-toolkit.html](http://www.shsu.edu/dept/graduate-studies/grad-toolkit.html)
Checklist for graduate students

(to be kept in student file)

Name ____________________________

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
<th>Signature</th>
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<tbody>
<tr>
<td>1. Obtain copy of Departmental Graduate Handbook</td>
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<tr>
<td>2. Sign and submit Graduate Student contract</td>
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<td>3. Meet with Graduate Coordinator for course selection</td>
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<td>4. Degree Plan selected</td>
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<td>5. If doing thesis, thesis advisor selected</td>
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<td>6. Thesis Advisory Committee established</td>
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<td>7. Prospectus approved, presented and submitted to Dean’s office</td>
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<td>8. Comprehensive exam scheduled</td>
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<td>9. Comprehensive exam completed</td>
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<tr>
<td>10. File degree application for graduation</td>
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