

**MAJOR - AGRICULTURAL SCIENCES
CONCENTRATION— APPLIED GEOSPATIAL INFORMATION SYSTEMS
ACADEMIC MAP: DEGREE BS (120 CREDIT HOURS)**

This degree map is a semester-by-semester course schedule for students majoring in [Agricultural Sciences with a concentration in Applied Geospatial Information Systems](#). The milestones listed to the right of each semester are designed to keep a student on track to graduate in four years. The schedule serves as a general guideline to help build a full schedule each semester. Milestones are courses and special requirements necessary for timely progress to complete a major. When one or more milestones are missed, students should consult with an academic advisor to determine if another degree path would be more suitable.

The concentration in Applied Geospatial Information Systems (GIS) within the Bachelor Degree of Agricultural Sciences program prepares students to meet the rapidly increasing need for highly qualified graduates in the application and use of GIS for the agricultural, natural resource, and environmental sectors of employment marketplace. The program combines technological and conceptual approach to general GIS education, followed by an applied approach within divergent field of study.

Students majoring in Applied GIS must gain upper division status before enrolling in upper division courses (3000 & 4000 levels). Students may be admitted to the upper division after completing at least 60-degree level lower division credits (as set out in the curriculum) with a minimum cumulative grade point average (GPA) of 2.0. It is the responsibility of the student to submit a formal petition to the department. A departmental committee will review such petition to ensure that all criteria have been met. Minimum grade of C is required for all major courses. Students who incur a probationary status are to repeat failed courses, or courses in which 'D's were earned, during the semester immediately following that in which the grades were earned. The College has a special program to assist students who are on probation. Please contact the Academic Coordinator for details.

Tennessee State University recognizes that students have diverse learning, life, and professional experiences. The University provides opportunities for students to earn college credit toward the degree through a number of assessment options that evaluate their learning experiences. These paths are grouped under the category "Prior Learning Assessment" (PLA). Various means of earning PLA credit at TSU are the following: Advance Placement Program, American Council of Education (ACE) Military Credit, American Council on Education (ACE) other Assessed Credit, College Level Exam Program (CLEP), DSST Credit by Examination Program (includes DANTES Examination), Institutional Course Challenge Exams (Departmental Exams), International Baccalaureate Credit, Other Military Service, Portfolio Assessment. To learn more about PLA contact your academic advisor or the Office of Student Support Services for Adult and Distance Learners (615) 963-7001.

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Department Web Address: http://www.tnstate.edu/agriculturalprograms/degrees/applied_gis.aspx

Fall Schedule		Milestones
Semester 1	Hrs.	Semester 1
ENGL 1010	3	Pre-Requisite Course: Must be taken before ENGL 1020, and HIST 2010, HIST 2020, HIST 2030, HIST 2050 or HIST 2700; Minimum grade "C" Required
Natural Sciences*	4	
MATH 1110	3	
UNIV 1000 **	1	
COMM 2200	3	
AGSC 1410	3	Pre-Requisite Course: Required for all Animal Science Courses; Minimum Grade of "C" Required
Total Hours	17	

*Natural Science- Students must have 8 semester hours which includes the appropriate lab. The recommended courses are: BIOL 1010/1011, CHEM 1030/1031

An Orientation course taken at another University does **NOT meet this requirement. Students with less than 60 credit hours must take UNIV 1000 at TSU.

Spring Schedule		Milestones
Semester 2	Hrs.	Semester 2
ENGL 1020	3	Pre-Requisite Course: Must be taken before taking HIST 2010, HIST 2020, HIST 2030, HIST 2050 or HIST 2700; Minimum grade "C" Required
Natural Science*	4	
ART 1010	3	
AGSC 1200	3	Pre-Requisite Course: Required for all Plant Science Courses; Minimum Grade of "C" Required
Total Hours	13	

**Natural Science- Students must have 8 semester hours which includes the appropriate lab. The recommended courses are: BIOL 1020/1021, CHEM 1040/1041.

Fall Schedule		Milestones
Semester 3	Hrs.	Semester 3
AGSC 2200	4	Minimum Grade of "C" required
HIST 2010*	3	
Social Behavioral Science**	3	
AGSC 2010	3	Minimum Grade of "C" Required
AGSC 2040	3	Pre-requisite Course: Must be taken before AGSC 2510; Minimum Grade of "C" Required
Total Hours	16	

*The Department recommends HIST 2010; however, HIST 2030, HIST 2050, HIST 2060 or HIST 2700 satisfy this requirement.

**The following courses can meet the Social Science elective AFAS 2010, ANTH 2300, ECON, 2010, GEOG 1010, HPSS 1510, POLI 1010 PSYC 2010, WMST 2000, and URBS 2010.

Spring Schedule		Milestones
Semester 4	Hrs.	Semester 4
ENGL 2010*	3	
Humanities**	3	
HIST 2020***	3	
Social Behavioral Science****	3	Minimum Grade of "C" Required
AGSC 2510	4	Pre-Requisite Course: Must be taken before: AGSC 3550, AGSC 3560 AGSC 3580, AGSC 3590, AGSC 3600, AGSC 4510, AGSC 4520, AGSC 4540, and AGSC 4560; Minimum Grade of "C" Required
Total Hours	16	Petition for Upper Division Status

*The department recommends the courses cited above; however, courses within the range of ENGL 2012 through ENGL 2322 will meet this requirement.

**Students must take a 3 credit hour course from the following list of approved general education Humanities courses: AREN 2310, ART, 1010, HIST 1000, THTR 1020, MUSC 1010, PHIL 1030, or RELS 2010.

***The Department recommends HIST 2010; however, HIST 2030, HIST 2050, HIST 2060 or HIST 2700 satisfy this requirement.

****The following courses can meet the Social Science elective AFAS 2010, ANTH 2300, ECON, 2010, GEOG 1010, HPSS 1510, POLI 1010 PSYC 2010, WMST 2000, and URBS 2010. Students must remember not to duplicate a course option from a previous semester.

Fall Schedule		Milestones
Semester 5	Hrs.	Semester 5
AGSC 3350	3	Minimum Grade of "C" Required
AGSC 3550	3	Pre-Requisite Course: Must be taken before AGSC 3590, AGSC 4510, AGSC 4520, AGSC 4550, AGSC 4560; Minimum Grade of "C" Required
AGSC 3560	3	Pre-Requisite Course: Must be taken before AGSC 4520, AGSC 4550, and AGSC 4560; Minimum Grade of "C" Required
AGSC 3570	3	Minimum Grade of "C" Required
SOCIAL/BEHAVIORAL	3	Minimum Grade of "C" Required
Total Hours	15	

*The following courses can meet the Social Science elective AFAS 2010, ANTH 2300, ECON, 2010, GEOG 1010, HPSS 1510, POLI 1010 PSYC 2010, WMST 2000, and URBS 2010. Students must remember not to duplicate a course option from a previous semester.

Spring Schedule		Milestones
Semester 6	Hrs.	Semester 6
AGSC 3340	3	Minimum Grade of "C" Required
AGSC 3580	3	Minimum Grade of "C" Required
AGSC 3590	3	Minimum Grade of "C" Required
AGSC 3600	3	Minimum Grade of "C" Required
AGSC ELECTIVE*	4	Minimum Grade of "C" Required
Total Hours	16	

*AGSC electives are as follows: AGSC 3230, AGSC 4220, or AGSC 4230.

Fall Schedule		Milestones
Semester 7	Hrs.	Semester 7
AGSC 4230	4	Minimum Grade of "C" Required
AGSC 4500	3	Minimum Grade of "C" Required
AGSC 4510	3	Minimum Grade of "C" Required <i>Prerequisite: AGSC 2510; AGSC 3550</i>
AGSC 4520	3	Minimum Grade of "C" Required <i>Prerequisite: AGSC 2510; AGSC 3550 and AGSC 3560</i>
AGSC 4710	1	
Total Hours	14	

Spring Schedule	Hrs.	Milestones
Semester 8		Semester 8
		Take Exit Exam and Apply for Graduation
AGSC 4530	3	Minimum Grade of "C" Required
AGSC 4540	3	Minimum Grade of "C" Required
AGSC 4550	3	Minimum Grade of "C" Required
AGSC 4560*	3	Practicum
AGSC 4720	1	
Total Hours	13	

*Students will be assigned and be required to solve a specific real-world problem by the Instructor to test their knowledge and skill of GIS.

Employment Information:

According to the United States Department of Labor, the market for geospatial technologies is growing by almost 35 percent a year, creating favorable career opportunities for those with GIS skills. The multidisciplinary nature of Applied Geospatial Information Systems (GIS) program opens doors into almost all areas of specialization for graduates with a solid background in GIS technology and application. The Applied GIS program helps student develop deep GIS expertise that can be beneficial in a variety of roles, particularly in GIS and sustainability management including becoming a GIS specialist.

Representative Job Titles Related to this Concentration:

GIS Analyst, GIS Coordinator, GIS Specialist, GIS Technician, Technical Support Specialist.

Representative Employers:

USDA, USGS, USEPA City Municipality, other government and utilities sectors at national, state, and local levels, private GIS and Consulting industries.

International study is available for all TSU students and may include opportunities for internships or taking course work towards various minors. International study may have an impact on the MAP; therefore, it is important to consult with the academic advisor for this major before participating in an international Program opportunity. Students interested in study abroad opportunities should contact the Office of International Programs and consult with their academic advisor.

This map is not intended to be a contract; either expressed or implied, between the University and the students, but represents a flexible program of the current curriculum which may be altered from time to time to carry out the academic objectives of the University. TSU specifically reserves the right to change, delete or add to any MAP at any time within the student's period of study at the University.