

ACADEMIC MAP

GEOGRAPHIC INFORMATION SCIENCE
Bachelor of Science



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SEMESTER 1 - FALL	CREDITS	COMPLETED
ENGL 1301 WRITING AND RHETORIC I	3	✓
HIST 1301 U.S. HISTORY TO 1865	3	
UNIV 1101 UNIVERSITY SEMINAR I	1	
MATH 2413 CALCULUS I	4	
GISC 1470 GEOSPATIAL SYSTEMS I	4	

TOTAL CREDITS: 15

2

SEMESTER 2 - SPRING	CREDITS	COMPLETED
COMM 1311 OR ENGL 1302 FOUNDATION OF COMMUNICATION OR WRITING AND RHETORIC II	3	
HIST 1302 U.S. HISTORY SINCE 1865	3	
UNIV 1102 UNIVERSITY SEMINAR II	1	
COSC 1435 OR COSC 1330 INTRODUCTION TO PROBLEM SOLVING WITH COMPUTERS I OR PROGRAMMING FOR SCIENTISTS, ENGINEERS, AND MATHEMATICIANS	4	
GISC 1336 DIGITAL DRAFTING AND DESIGN	3	
MATH OR SCIENCES COURSE	3	

TOTAL CREDITS: 17

YEAR 1

3

SEMESTER 3 - FALL	CREDITS	COMPLETED
UNIVERSITY CORE CURRICULUM	3	
UNIVERSITY CORE CURRICULUM	3	
GISC 2470 GEOSPATIAL PLANE MEASUREMENT I	4	
GISC 2438 GEOSPATIAL SOFTWARE SYSTEMS I	4	
PHYS 2425 UNIVERSITY PHYSICS I	4	

TOTAL CREDITS: 18

4

SEMESTER 4 - SPRING	CREDITS	COMPLETED
GISC 2250 FIELD CAMP I	2	
GISC 3412 GEOSPATIAL PLANE MEASUREMENT II	4	
GISC 2301 GEOSPATIAL SYSTEMS II	3	
MATH 2414 CALCULUS II	4	
MATH 3342 APPLIED PROBABILITY AND STATISTICS	3	

TOTAL CREDITS: 16

YEAR 2

5

SEMESTER 5 - FALL	CREDITS	COMPLETED
POLS 2305 U.S. GOVERNMENT AND POLITICS	3	
GISC 3325 GEODETIC SCIENCE	3	
GISC 3300 GEOSPATIAL MATHEMATICAL TECHNIQUES	3	
GISC 4318 CADASTRAL SYSTEMS	3	
PHYS 2426 UNIVERSITY PHYSICS II	4	

TOTAL CREDITS: 16

6

SEMESTER 6 - SPRING	CREDITS	COMPLETED
GISC 4350 FIELD CAMP II	3	
GISC 3420 GEOSPATIAL SOFTWARE SYSTEMS II	3	
GISC 3421 VISUALIZATION FOR GIS	3	
MATH OR SCIENCES COURSE	1	
GISC ELECTIVE	3	

TOTAL CREDITS: 17

YEAR 3

7

SEMESTER 7 - FALL	CREDITS	COMPLETED
POLS 2306 STATE AND LOCAL GOVERNMENT	3	
GISC 4335 GEOSPATIAL SYSTEMS III	3	
GISC 4431 REMOTE SENSING	4	
GISC 4315 SATELLITE POSITIONING	3	
UNIVERSITY CORE CURRICULUM	3	

TOTAL CREDITS: 16

8

SEMESTER 8 - SPRING	CREDITS	COMPLETED
GISC 4351 GEOSPATIAL SYSTEMS PROJECT	3	
GISC 4340 GEOSPATIAL COMPUTATIONS AND ADJUSTMENT	3	
GISC 4305 LEGAL ASPECTS OF SPATIAL INFORMATION	3	
GISC 4180 GEOSPATIAL SYSTEMS INTERNSHIP	1	
GISC 4371 HISTORY OF LAND OWNERSHIP	3	

TOTAL CREDITS: 13

YEAR 4

This is not an official degree plan. It is a guideline for planning your courses. To access a copy of this academic map please visit tamucc.edu/academics/planning/academic-advising/

128 CREDITS | FINISHED!



CAREER MAP

GEOGRAPHIC INFORMATION SCIENCE

Bachelor of Science



The Geographic Information Science Program prepares graduates with knowledge and skills for a variety of career paths related to the acquisition, analysis, and management of geospatial data and information. Career paths include pursuing advanced degrees and employment in the fields of Geomatics and Geospatial Information Systems. The Geographic Information Science Program provides broad-based expertise and cutting-edge skills that span the growing geospatial field and helps to alleviate the shortage of well-educated geospatial professionals. The program is intended for those seeking to become surveyors, engineers and other geospatial professionals with knowledge and skills in using and managing rapidly developing geospatial technologies. The program prepares graduates for careers in industry and/or science. Students are required to complete a Capstone Project related to one of the above areas of interest. The Capstone Project will be evaluated under the Geospatial Systems Project GISC 4351 Geospatial Systems Project (3 sch) course. Students who complete the program have a comprehensive understanding of these disciplines that empowers them to advance their careers in geospatial technologies or to continue their studies to further advance the science.

The Geographic Information Science degree programs enable students to apply computing, physical science, and mathematical principles (including multivariate calculus and differential equations) to design and build physical systems to model the Earth. Our students are educated to gather geospatial data via remote sensing and land surveying then convert this data, along with other geospatial data resources, into manageable digital maps and databases for display and analysis. A career in the geospatial industry is a student's opportunity to explore the world and utilize the latest computer technologies and sciences. In addition to many careers in the geospatial industry, all graduates are eligible to take the licensing examination for Surveyor in Training (SIT) and, ultimately, Registered Professional Land Surveyor (RPLS).

CONTACT INFORMATION

Career Counselor:

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Department Contact:

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ADDITIONAL SOURCES OF INFORMATION

1. Association for Information Science & Technology
2. Geospatial Information & Technology Association
3. Association for GIS Professionals

SKILLS/ATTRIBUTES

- Critical Thinking/Problem Solving
- Professionalism/Work Ethic
- Oral/Written Communications
- Teamwork/Collaboration
- Digital Technology

CAREER OPTIONS

- GIS Analyst
- Surveyors
- Mapping Technician

STUDENT ORGANIZATIONS

- Geospatial Information Science Student Organization
- Women in Geosciences
- Lambda Sigma
- SACNAS Chapter at Texas A&M University - Corpus Christi