

UNIVERSITY STUDIES - BS, GEOGRAPHIC INFORMATION SCIENCE AND TECHNOLOGY CONCENTRATION

Program Requirements

| Code | Title | Semester Credit Hours |
|--|---|-----------------------|
| GEOG 390 | Principles of Geographic Information Systems | 4 |
| GEOG 361 | Remote Sensing in Geosciences | 4 |
| GEOG 352/ GEOL 352 | GNSS in the Geosciences | 3 |
| GEOG 475 | Advanced Topics in GIS (Geographic Information Systems) | 4 |
| Select from the following: | | 6-8 |
| CSCE 111 | Introduction to Computer Science Concepts and Programming | |
| ESSM 459 | Programming for Spatial Data Applications | |
| GEOG 232 | Cartography and Visualization | |
| GEOG 312 | Data Analysis in Geography | |
| GEOG 392 | GIS Programming | |
| GEOG 398 | Interpretation of Aerial Photographs | |
| GEOG 461 | Digital Image Processing in the Geosciences | |
| GEOG 461 | Digital Image Processing in the Geosciences | |
| GEOG 475 | Advanced Topics in GIS (Geographic Information Systems) | |
| GEOG 479 | Principles of Geocomputation | |
| University and College Requirements | | |
| GEOG 213 | Planet Earth Lab | 1 |
| MATH 140 | Mathematics for Business and Social Sciences | 3 |
| MATH 142 | Business Calculus | 3 |
| POLS 206 | American National Government | 3 |
| POLS 207 | State and Local Government | 3 |
| Life and Physical Sciences elective | | 8 |
| Select one of the following: ¹ | | |
| ATMO 201 | Weather and Climate & ATMO 20:and Weather and Climate & OCNG 25:Laboratory & OCNG 25:and Oceanography and Oceanography Laboratory | |
| BIOL 101 | Botany & BIOL 107 and Zoology | |
| BIOL 111 | Introductory Biology I & BIOL 112 and Introductory Biology II | |
| CHEM 119 | Fundamentals of Chemistry I & CHEM 120and Fundamentals of Chemistry II | |

| | |
|---|------------|
| GEOL 101 Principles of Geology & GEOL 102and Principles of Geology & GEOL 106Laboratory and Historical Geology | |
| PHYS 201 College Physics & PHYS 202and College Physics | |
| American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) | 6 |
| Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication) | 6 |
| Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) | 3 |
| Cultural discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/) ² | |
| International and cultural diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) ² | |
| Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) | 3 |
| Social and behavioral sciences (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#social-behavioral-sciences) | 3 |
| Minor 1 | 15-18 |
| Minor 2 | 15-18 |
| General electives | 26 |
| Total Semester Credit Hours | 120 |

¹ Department requires that you take 8 hours of Life & Physical Sciences in the same discipline to meet this requirement.

² A graduation requirement includes 3 hours of International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) course and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>). A course satisfying a University Core category, a college/department requirement, or a general elective may be used to satisfy this requirement.