Geography. B.S. *major* Geographic Information System Emphasis

Required Credits: 54 Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- BUAD 2231 Business Statistics I (3 credits) or PSY 3401 Basic Statistics for Research (4 credits) or STAT 2610 Applied Statistics (4 credits)
- ENGL 2150 Technical Writing (3 credits) or ENGL 3150 Writing In The Disciplines (3 credits)
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)
- GEOG 2400 Introduction to Planning (3 credits)
- GEOG 3231 Introduction to Geographic Information Systems (3 credits)
- GEOG 4190 Qualitative Methods in Geographic Research (3 credits)
- GEOG 4265 Spatial Analysis (3 credits)

II GEOGRAPHIC INFORMATION SYSTEM EMPHASIS

REQUIRED GIS COURSES COMPLETE THE FOLLOWING COURSES:

- GEOG 3226 Cartography (3 credits)
- GEOG 3232 Intermediate Geographic Information Systems (3 credits)
- GEOG 3255 Introduction to Remote Sensing (3 credits)
- GEOG 4275 Advanced Geographic Information Systems (3 credits)

PHYSICAL GEOGRAPHY ELECTIVE SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3125 Weather and Climate (3 credits)
- GEOG 3630 Conservation Biology (3 credits) or BIOL 3630 Conservation Biology (3 credits)
- GEOG 4130 Biogeography (3 credits)
- GEOG 4140 Landscape Ecology (3 credits)

HUMAN GEOGRAPHY ELECTIVE SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 2300 Economic Geography (3 credits)
- GEOG 3531 Political Geography (3 credits)
- GEOG 4120 Urban Geography (3 credits)
- GEOG 4210 The History and Development of Geographic Thought (3 credits)

REGIONAL GEOGRAPHY ELECTIVES SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)
- GEOG 3850 Geography of the Middle East (3 credits)
- GEOG 3860 Geography of Latin America and the Caribbean (3 credits)

COGNATE FIELD ELECTIVES SELECT 2 OF THE FOLLOWING COURSES:

• BUAD 4385 Data Modeling and Design (3 credits)

- CS 1309 Problem Solving and Computation (3 credits)
- CS 2270 Introduction to Web Programming (3 credits)
- CS 2321 Computer Science I (4 credits)
- CS 2322 Computer Science II (4 credits)
- CS 3270 Advanced Web Programming (3 credits)
- CS 3507 Introduction to Databases (3 credits)
- TADT 1460 2D Graphics And Laser Etching (3 credits)

III CAPSTONE PROJECT

SELECT 1 OF THE FOLLOWING COURSES:

- GEOG 4910 Directed Independent Study (4 credits)
- GEOG 4970 Internship (4 credits)
- GEOG 4990 Thesis (3 credits)

SUGGESTED SEMESTER SCHEDULE FOR GEOGRAPHY MAJORS, B.S. (GEOGRAPHIC INFORMATION SYSTEMS EMPHASIS)

The following is a list of Geography Major courses arranged by year. This suggested schedule is intended to help students plan their courses in an orderly fashion. Course names that are CAPITALIZED are required core courses. Some courses or course sequences may appear more than once. Geography majors and minors are strongly encouraged to meet with advisors in the Geography program prior to selecting courses as all courses are not offered each year. Given that the study of Geography is inherently interdisciplinary, all Geography students in this major are required to take courses outside of the Geography Curriculum. The 6 credits of Cognate electives include courses in Computer Science, Business Administration, and Technology and may be selected in any year, provided all prerequisites for those specific courses are met.

Freshman

- GEOG 1400 World Regional Geography (recommended)
- GEOG 2100 INTRODUCTION TO PHYSICAL GEOGRAPHY
- GEOG 2200 INTRODUCTION TO HUMAN GEOGRAPHY
- GEOG 2400 INTRODUCTION TO PLANNING
- GEOG 3231 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS
- Liberal Education requirements

Sophomore

- ENGL 3150 WRITING IN THE DISCIPLINES
- or ENGL 2150 TECHNICAL WRITING
- STAT 2610 APPLIED STATISTICS
- or BUAD 2231 BUSINESS STATISTICS
- or PSY 3401 BASIC STATISTICS FOR RESEARCH
- GEOG 3232 INTERMEDIATE GEOGRAPHIC INFORMATION
 SYSTEMS
- GEOG 3255 INTRODUCTION TO REMOTE SENSING
- Regional Geography Electives (select 1) GEOG 3410 Geography of North America GEOG 3800 Regional Geography GEOG 3810 Geography of Europe GEOG 3820 Geography of East, South, and Southeast Asia GEOG 3840 Geography of Africa GEOG 3850 Geography of the Middle East GEOG 3860 Geography of Latin America and the Caribbean
- Complete Liberal Education requirements

Junior

- GEOG 3125 Weather and Climate
- GEOG 3226 CARTOGRAPHY
- GEOG 3630 Conservation Biology
- GEOG 3XXX Any Remaining Regional Geography Course
- Human Geography Electives (select 1) GEOG 2300 Economic Geography



GEOG 3531 Political Geography GEOG 4120 Urban Geography GEOG 4210 The History and Development of Geographic Thought

Complete Cognate Field Electives

Senior

GEOG 4130 Biogeography
GEOG 4140 Landscape Ecology
GEOG 4190 QUALITATIVE METHODS IN GEOGRAPHIC RESEARCH

- GEOG 4265 SPATIAL ANALYSIS
- GEOG 4275 ADVANCED GEOGRAPHIC INFORMATION • SYSTEMS
- Capstone Project or Internship