

Bachelor of Science (BS) – Geographic Information Science

Catalog Year 2020

For Advising Purposes Only

GENERAL EDUCATION CORE

42 HOURS

COMMUNICATION – CODE 010 (6 HOURS)

ENG 1310, ENG 1320, HON 2301A, or HON 2301B

MATHEMATICS – CODE 020 (3 HOURS)

MATH 1315, MATH 1317, MATH 1319, MATH 1329, MATH 2321, MATH 2417, MATH 2471, HON 2302A, or HON 2302B

LIFE AND PHYSICAL SCIENCE – CODE 030 (6 HOURS)

Choose two: ANTH 2301+2101, BIO 1320, BIO 1321, BIO 1330, BIO 1331, CHEM 1310, CHEM 1330, CHEM 1335, CHEM 1341, CHEM 1342, GEO 1305, GEOL 1410, GEOL 1420, PHYS 1310, PHYS 1320, PHYS 1340, PHYS 1350, PHYS 1315, PHYS 1325, PHYS 1430, PHYS 2425, HON 2303A, HON 2303B, or HON 2303C

LANGUAGE, PHILOSOPHY, AND CULTURE – CODE 040 (3 HOURS)

PHIL 1305 (WI), PHIL 1320 (WI), HON 2304A, HON 2304B, or HON 2304C

CREATIVE ARTS – CODE 050 (3 HOURS)

ART 2313, DAN 2313, MU 2313, TH 2313, HON 2305A, HON 2305B, HON 2305C, or HON 2305D

AMERICAN HISTORY – CODE 060 (6 HOURS)

HIST 1310 (WI), HIST 2327 (WI), HIST 2381 (WI), HON 2306D, HON 2306E, or HON 2306F
 HIST 1320 (WI), HIST 2328 (WI), HIST 2382 (WI), HON 2306A, HON 2306B, or HON 2306C

POLITICAL SCIENCE – CODE 070 (6 HOURS)

POSI 2310, POSI 2320, HON 2307A, or HON 2307B

SOCIAL AND BEHAVIORAL SCIENCES – CODE 080 (3 HOURS)

ANTH 1312, CA 2351, ECO 2301, ECO 2314, PFW 1301, PSY 1300, SOCI 1310, or HON 2308A

TEXAS STATE AREA OPTION – CODE 090 (6 HOURS)

COMM 1310, HON 2309B, HON 2309F, HON 2309L, or HON 2309O
 ENG 2310, ENG 2320, ENG 2330, ENG 2340, ENG 2359, ENG 2360, HON 2309A, HON 2309C, HON 2309D, HON 2309E, HON 2309G, HON 2309H, HON 2309I, HON 2309J, HON 2309K, HON 2309M, HON 2309N, or HON 2309Q

Note: Honors course options are available to members of the Honors College. Visit www.txstate.edu/honors for more info. All Honors course options are Writing Intensive (WI).

All Sophomore English literature courses are Writing Intensive (WI).

(WI) - Writing Intensive course (if taken at Texas State)

ADDITIONAL BS REQUIREMENTS

6-14 HOURS

MODERN LANGUAGE* (8 HOURS)

Choose from: American Sign Language, Arabic, Chinese, French, German, Italian, Japanese, Latin, Portuguese, Russian, or Spanish

1410 1420

*If two years of foreign language were completed in high school, this requirement will be waived.

ADDITIONAL ENGLISH COURSE (3 HOURS)

Select one (must be different from core): ENG 2310, 2320, 2330, 2340, 2359, 2360, or 3303

ADDITIONAL COMPUTER SCIENCE OR MATH COURSE (3 HOURS)

Select one (must be different from core): CS 1308 (or higher), CIS 1323 (or higher), or MATH 1317 (or higher)

MINOR

18-29 HOURS

For a full list of minors, please visit the Undergraduate Catalog page at <http://mycatalog.txstate.edu/undergraduate/minors/>. Geology, Computer Science, Mathematics, or Business Administration minors are highly recommended to complement your Geographic Information Science major. Other minors may be appropriate depending upon your interests and career goals. Discuss other possible options with your academic advisor.

_____, _____, _____,
 _____, _____, _____,
 _____, _____, _____.

Note: A course cannot satisfy both major and minor requirements.

MINIMUM GRADUATION REQUIREMENTS

- 120 total hours
- 36 advanced hours
- 30 hours taken at Texas State
- 24 advanced hours taken at Texas State
- 12 advanced hours in major taken at Texas State
- 24 of the last 30 hours taken at Texas State
- 9 Writing Intensive (WI) hours taken at Texas State
- 2.25 Texas State GPA
- 2.50 Major GPA
- 2.00 Minor GPA

Note: Depending on major and minor combination, some students may need to take open electives to reach the required number of total and/or advanced hours.



DEPARTMENT OF GEOGRAPHY

Evans Liberal Arts (ELA) 130

512.245.0372

<http://www.geo.txstate.edu>

GEOUndergradProg@txstate.edu

GEOGRAPHIC INFORMATION SCIENCE MAJOR (36 HOURS)

REQUIRED GEOGRAPHY COURSES (14 HOURS)

- GEO 1309 Introduction to Cultural Geography
or GEO 1310 World Geography
- GEO 2410 Introduction to Physical Geography
(Prerequisite: MATH 1315 or above [except MATH 1316] with C or higher)
- GEO 2426 Fundamentals of GIS
(Prerequisite: MATH 1315 or above [except MATH 1316] with C or higher)
- GEO 3301 Research Methods in Geography
(Prerequisite: MATH 1315 or above [except MATH 1316] with C or higher)

GEOGRAPHIC INFORMATION SCIENCE CORE (12 HOURS)

- GEO 3411 Maps and Mapmaking
(Prerequisite: MATH 1315 or above [except MATH 1316] with C or higher)
- GEO 3416 Principles of Remote Sensing
(Prerequisite: MATH 1315 or above [except MATH 1316] with C or higher)
- GEO 3426 Advanced GIS
(Prerequisites: GEO 2426 and GEO 3301 with C or higher)

GEOGRAPHY ELECTIVES (11-12 HOURS)

Select **three** of the following courses:

- GEO 4411 Advanced Cartographic Design
(Prerequisite: GEO 3411 with C or higher)
- GEO 4412 Digital Image Processing and Machine Learning (WI)
(Prerequisites: GEO 3301 and GEO 3416 with C or higher)
- GEO 4420 GeoProgramming
(Prerequisite: GEO 3426 with a C or higher)
- GEO 4422 Web Mapping
(Prerequisite: GEO 3411 with C or higher)
- GEO 4424 GPS and GIS
(Prerequisite: GEO 3411 or GEO 3426 with C or higher)
- GEO 4427 GIS Consulting Practicum
(Prerequisite: GEO 3426 with a C or higher)
- GEO 4380 Internship in Geography
or GEO 4430 Field Methods
(Prerequisites: GEO 2410 and GEO 3303 with a C or higher)

Note: Students cannot take both GEO 4380 and 4430 to count toward 4000-level requirement.

Note: Students must make a grade of "C" or better in all Geography courses that are to be counted for credit toward their major.

To meet with an academic advisor, please contact:

COLLEGE OF LIBERAL ARTS ADVISING CENTER

Flowers Hall (FH) 322

512.245.1852

www.liberalarts.txstate.edu/advising

laadvising@txstate.edu