

GEOGRAPHY - 5-YEAR BACHELOR OF SCIENCE AND MASTER OF GEOSCIENCE IN GEOSCIENCE

Program Requirements

First Year

	Semester Credit Hours
Fall	
GEOG 201 Introduction to Human Geography	3
GEOG 215 Geospatial Cornerstone	1
Life and physical sciences ¹	4
Select one of the following:	
OCNG 251 The Blue Planet - Our Oceans & OCNG 252 and The Blue Planet - Our Oceans Laboratory	
GEOL 101 Principles of Geology & GEOL 102 and Principles of Geology Laboratory	
BIOL 111 Introductory Biology I	
CHEM 119 Fundamentals of Chemistry I	
PHYS 201 College Physics	
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)	3
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)	3
Human geography elective ²	3
Semester Credit Hours	17
Spring	
GEOG 203 Planet Earth	3
GEOG 213 Planet Earth Lab	1
MATH 140 Mathematics for Business and Social Sciences	3
Life and physical sciences ¹	4
Select one of the following:	
ATMO 201 Weather and Climate & ATMO 202 and Weather and Climate Laboratory	
GEOL 106 Historical Geology	
BIOL 112 Introductory Biology II	
CHEM 120 Fundamentals of Chemistry II	
PHYS 202 College Physics	
Human geography elective ²	3
General elective ⁴	3
Semester Credit Hours	17
Second Year	
Fall	
GEOG 232 Cartography and Visualization	3
MATH 142 Business Calculus	3

POLS 206 American National Government	3
STAT 303 Statistical Methods	3
General elective ⁴	4
Semester Credit Hours	16
Spring	
GEOG 390 Principles of Geographic Information Systems	4
POLS 207 State and Local Government	3
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts)	3
Physical geography elective ³	6
Semester Credit Hours	16
Third Year	
Fall	
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)	3
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture)	3
Geography elective ⁵	9
Semester Credit Hours	15
Spring	
Communication (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)	3
General elective ⁴	13
Semester Credit Hours	16
Fourth Year	
Fall	
GEOG 450 Field Geography	3
GEOG 651 Remote Sensing for Geographical Analysis	3
GEOG 659 Geodatabases	3
GEOS 669 Introduction to Processing Geoscience or OCNG 669 Data with R or Python for Geosciences	3
General elective ⁴	4
Semester Credit Hours	16
Spring	
GEOG 440 History and Nature of Geography	3
Graduate theme elective ⁶	6
General elective ⁴	7
Semester Credit Hours	16
Fifth Year	
Fall	
GEOG 665 GIS-Based Spatial Analysis and Modeling	3
GEOG 676 GIS Programming	3
Graduate theme elective ⁶	6
Semester Credit Hours	12
Spring	
GEOG 678 WebGIS	3

GEOS 676	Capstone Experience	6
Semester Credit Hours		9
Total Semester Credit Hours		150

¹ 8 hours required. Department requires that you take two in the same discipline to meet this requirement.

² Select from GEOG 301, GEOG 304, GEOG 305, GEOG 306, GEOG 309, GEOG 311, GEOG 320, GEOG 323, GEOG 325, GEOG 327, GEOG 330, GEOG 401, GEOG 406, GEOG 420, GEOG 430.

³ Select from GEOG 324, GEOG 331, GEOG 335, GEOG 360, GEOG 370/ MARS 370, GEOG 400, GEOG 434, GEOG 435, GEOG 442/GEOL 442.

⁴ Courses to be selected in consultation with advisor. Select any courses from 100-499 not used elsewhere. (Except AERS 100-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/aers/>); ASCC 100-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/ascc/>); ENGL 103; KINE 198, KINE 199; MATH 102-104, 131, 141-142, 150-151, 166, 171 (<http://catalog.tamu.edu/undergraduate/course-descriptions/math/>); MLSC 100-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/mlsc/>); NVSC 100-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/nvsc/>); SOMS 100-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/soms/>); STAT 211, STAT 302, STAT 303).

⁵ Choose from any 300 or 400-level geography course except GEOG 361, GEOG 391, GEOG 392, GEOG 461, GEOG 477, GEOG 478.

⁶ Select from GEOG 661, GEOG 662, GEOG 663, GEOG 677, GEOG 695; GEOL 617, GEOP 635. Up to 6 hours of graduate electives may be used towards the undergraduate degree's general elective.

Two courses in the bachelor of science degree plan must be Writing Intensive courses designated by the department in the schedule of classes. Also, International and Cultural Diversity (3 hours) and Cultural Discourse (3 hours) must be incorporated into the degree.

A maximum of 15 hours of graduate courses can be taken online, which is less than 50% of the required graduate degree hours.

The program includes a total of 156 hours, which up to 6 hours may be applied toward both the Bachelor of Science in Geography and the Master of Geoscience in Geoscience face-to-face program.