**B.S. Land Surveying (121 credits)**

A dual enrollment program with the Department of Geography & Planning and St. Cloud Technical & Community College

Stewart Hall 359 | (320) 308-3160 | geog@stcloudstate.edu
Eric Fuller, Program Director

### First Semester (Fall)
- LSCE 1510° Civil Drafting Methods (3 cr.)
- LSCE 1530° Survey Fundamentals (5 cr.)
- MATH 1300° [4] College Algebra (3 cr.)
- CMST 192 [1] Introduction to Communication Studies (3 cr.)
- ASTR 120 [3,8, D] Archaeoastronomy (3cr.)

Total Semester Credits: 17

### Second Semester (Spring)
- LSCE 1502° Surveying Principles I (3 cr.)
- LSCE 1506° Advanced Survey (5 cr.)
- LSCE 1514° Civil CADD I (3 cr.)
- LSCE 1527° Technical Computations II (3 cr.)
- MATH 132° [4] College Trigonometry (3 cr.)

Total Semester Credits: 17

### Third Semester (Fall)
- LSCE 2502° Control & Digital Surveys (5 cr.)
- LSCE 2514° Civil CADD II (3 cr.)
- MATH 211 [3] Survey of Calculus I (3 cr.)
- ENGL 191 [1] Introduction to Rhetorical and Analytical Writing (4 cr.)

Total Semester Credits: 15

### Fourth Semester (Spring)
- LSCE 2507° Construction Design & Survey Principle (3 cr.)
- LSCE 2510° Survey Principles II (3 cr.)
- LSCE 2514° Civil CADD II (3 cr.)
- LSCE 2540° LSCE Internship (2 cr.)
- BIOL 101 [3,10] Environment & Society (3 cr.)
- GEOG 216 Principles of Geographic Information Science (3 cr.)

Total Semester Credits: 17

### Fifth Semester (Fall)
- GEOG 335 Land Surveying (3 cr.)
- GEOG 316 Geographic Information Systems (3 cr.)
- GEOG 350 Introduction to Remote Sensing (3 cr.)
- CMTY 222 [5, 7, D] Diversity in the American Experience (3 cr.)

Total Semester Credits: 15

### Sixth Semester (Spring)
- GEOG 336 Control and Geodetic Surveying (3 cr.)
- GEOG 455 Urban Site Development (3 cr.)
- GEOG 270 [6, 8] Introduction to Cultural Geography (3 cr.)
- STAT 239 Statistical Methods I for Natural Sciences (3 cr.)
- PHIL 212 [6, 9] Moral Problems & Theories (3cr.)

Total Semester Credits: 15

### Summer
- GEOG 444 Internship: Practical Geography (1 cr.)

Total Semester Credits: 1

### Seventh Semester (Fall)
- GEOG 365/462° UAS and Geospatial Analysis/Concepts in Spatial Analysis (3 cr.)
- GEOG 406 Thematic Cartography (3 cr.)
- GEOG 433 Cadastral Surveying (3 cr.)
- GEOG 436 GPS/GIS Integration (3 cr.)
- GEOG 438 Geodesy and Survey Adjustments (3 cr.)

Total Semester Credits: 12

### Eighth Semester (Spring)
- GEOG 416 Techniques in GIS (3 cr.)
- GEOG 435 Boundary Law (3 cr.)
- GEOG 439 Surveying Seminar (3 cr.)
- ASTR 107 [2, 3] Concepts of Stars and the Universe (3 cr.)

Total Semester Credits: 12

*LSCE courses to be completed at St. Cloud Technical & Community College.*

**Course not required for major, but highly recommended due to nature of material covered.**

*[D] Denotes Diversity courses

[1-10] Denotes goal area course number(s)

Total Degree Credits at Semester Completion: 34

Updated 9/16/19
Program Notes:

1. All St. Cloud State University students must complete a minimum of 120 credits to graduate.
2. All St. Cloud State University students must have at least 40 credits of 300/400 level courses to graduate.
3. All St. Cloud State University students must complete a minimum of 40 credits of Liberal Education courses AND meet the requirements of all 10 goal areas. Each student’s situation is different with regard to Liberal Education.