

A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is only one strategy. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Electives, and university requirements (see pg.2) are based on Catalog Year.

| Course Subject and Title | Cr. | Min. Grade | *GE, UU or UM | **Sem. Offered | Prerequisite | Co-Requisite |
|---|--------------|------------|---------------|----------------|---|--------------|
| Semester One | | | | | | |
| GE Objective 1: ENGL 1101 Writing and Rhetoric I | 3 | C- | GE | F, S, Su | Appropriate placement score | |
| MATH 1143: College Algebra | 3 | C- | | F, S | | |
| CET 1111: Beginning CAD | 3 | C- | | F, S | Minimum score of ALEKS 30 or equivalent | |
| CET 1112: Beginning Surveying | 3 | C- | | F, S | | MATH 1143 |
| CET 1115A: Materials Testing I OR | 4 | C- | | F | | |
| CET 1113: Civil and Geomatics Engineering Technology I | 2 | | | F, S | | |
| Total | 14-16 | | | | | |
| Semester Two | | | | | | |
| GE Objective 2: COMM 1101 Fundamentals of Oral Comm | 3 | C- | GE | F, S | | |
| MATH 1144: Trigonometry | 2 | C- | | F, S, Su | MATH 1143 | |
| CET 1121: Civil 3D Drafting | 3 | C- | | F, S | CET 1111 | |
| CET 1122: Intermediate Surveying and Spatial Analysis | 3 | C- | | F, S | CET 1112 | |
| CET 1125A: Materials Testing II OR | 4 | C- | | S | CET 1115A | |
| CET 1123: Civil and Geomatics Engineering Technology II | 2 | | | F, S | CET 1113 | |
| Total | 13-15 | | | | | |
| Semester Three | | | | | | |
| GE Objective 5: PHYS 1101/L Elements of Physics and Lab | 4 | C- | GE | F, S | MATH 1108 or equivalent | |
| CET 2216: Route Survey and GPS Fundamentals | 3 | C- | | F | CET 1122 | |
| CET 2228: Principles of GIS | 3 | C- | | F, S | CET 1122 | |
| CET 2232: Plan Reading and Worksite Safety | 3 | C- | | F, S | | |
| GEMT 2231: Survey Computations (if needed) | 3 | C- | | D | MATH 1143, MATH 1144, CET 1122 | |
| Total | 13-16 | | | | | |
| Semester Four | | | | | | |
| GE Objective 3: MATH 1153 Statistical Reasoning | 3 | C- | GE | F, S, Su | MATH 1108 | |
| GE Objective 6: ECON 1100 Economic Issues OR ECON 2201 Principles of Macroeconomics OR ECON 2202 Principles of Microeconomics | 3 | C- | GE | F, S, Su | | |
| CET 2226: Construction Surveying | 3 | C- | | F, S | CET 2216 | |
| CET 2243: Public Works | 3 | C- | | F, S | MATH 1143, MATH 1144 | |
| CET 2250: Unmanned Aerial Systems/Imagery Analysis | 3 | C- | | F, S | CET 1112 | |
| CET 2251: Introduction to Legal Descriptions | 1 | C- | | F, S | | |
| GEMT 3312: Public Surveying | 3 | C- | | F, S | MATH 1143, MATH 1144, CET 1122 | |
| Total | 19 | | | | | |
| Semester Five | | | | | | |
| GE Objective 1: ENGL 1102 Writing and Rhetoric II | 3 | C- | GE | F, S, Su | ENGL 1101 or ENGL1101P | |
| MATH 1170: Calculus I | 4 | C- | | F, S, Su | MATH 1144 or MATH 1147 | |
| GEMT 3311: Advanced Surveying | 3 | C- | | F | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 4430: GPS Principles and Applications | 3 | C- | | F | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 3313: Surveying Software Applications | 2 | C- | | F | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 3317: Subdivision Planning and Platting | 2 | C- | | F, S | MATH 1143, MATH 1144, CET 1122 | |
| Total | 17 | | | | | |
| Semester Six | | | | | | |
| GE Objective 7: US History and Culture | 3 | C- | GE | F, S, Su | | |
| MATH 1175: Calculus II | 4 | C- | | F, S, Su | MATH 1170 | |
| GEMT 3310: Boundary Control and Legal Principles | 3 | C- | | F, S | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 3314: Research and Evidence in Surveying | 3 | C- | | F, S | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 4411: Geodesy | 3 | C- | | S | MATH 1143, MATH 1144, CET 1122 | |

| | | | | | | |
|---|----|----|----|----------------|--|--|
| GEMT 4415: Survey Office Practice | 3 | C- | | S | MATH 1143, MATH 1144, CET 1122 | |
| Total | 19 | | | | | |
| Semester Seven | | | | | | |
| GE Objective 6: TGE 1150 Social Sciences in the Workplace (Recommended) | 3 | C- | GE | F, S | | |
| GE Objective 4: PHIL 1103 Introduction to Ethics | 3 | C- | GE | F, S, Su | | |
| ENGL 3307: Professional and Technical Writing | 3 | C- | | F, S | ENGL 1102 | |
| GEMT 4416: Surveying Project | 2 | C- | | D | Senior standing or permission | |
| GEMT 3319: Writing Legal Descriptions | 1 | C- | | F, S | MATH 1143, MATH 1144, CET 1122 | |
| GEMT 3315: Surveying Adjustments | 3 | C- | | S | MATH 1170, MATH 1153, CET 2226 | |
| GEMT 4432: Principles of Photogrammetry OR GEMT 4409: Remote Sensing | 3 | C- | | S D | MATH 1143, MATH 1144, CET 1122 Competency in computer operating systems | |
| Total | 18 | | | | | |
| Semester Eight | | | | | | |
| GE Objective 4: Min of 3 credits in fine arts or foreign | 3 | C- | GE | | | |
| GE Objective 5: Min of 3 credits not in PHYS | 3 | C- | GE | | | |
| GE Objective 9: Min of 3 credits that satisfies objective | 3 | C- | GE | | | |
| GEMT 4400: Essentials of Surveying | 2 | C- | | F, S | Senior standing and ACAD CERT completion or permission | |
| GEMT 4425: Principles of Cartography OR GEMT 4404: Advanced Geographic Information Systems OR GEMT 4427: Information Technology for GIS | 3 | C- | | S F, S S | MATH 1143, MATH 1144, CET 2228 GEOL 4403/L or permission GEOL 4403/L or permission | |
| Total | 14 | | | | | |
| *GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major **See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.) | | | | | | |

| 2023-2024 Major Requirements | | CR | GENERAL EDUCATION OBJECTIVES Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9 | 36 cr. min |
|---|--------------|----|--|------------------|
| MAJOR REQUIREMENTS | 93-94 | | 1. Written English (6 cr. min) ENGL 1101 | 3 |
| CET 1101: Beginning CAD | 3 | | ENGL 1102 | 3 |
| CET 1112: Beginning Surveying | 3 | | 2. Spoken English (3 cr. min) COMM 1101 | 3 |
| CET 1121: Civil 3D Drafting | 3 | | 3. Mathematics (3 cr. min) MATH 1153 | 3 |
| CET 1122: Intermediate Surveying and Spatial Analysis | 3 | | 4. Humanities, Fine Arts, Foreign Lang. (2 courses; 2 categories; 6 cr. min) | |
| CET 2216: Route Survey and GPS Fundamentals | 3 | | PHIL 1103 | 3 |
| CET 2226: Construction Surveying | 3 | | Fine Arts or Foreign Lang. | 3 |
| CET 2228: Principles of GIS | 3 | | 5. Natural Sciences (2 lectures-different course prefixes, 1 lab; 7 cr. min) | |
| CET 2232: Plan Reading and Worksite Safety | 3 | | PHYS 1101 | 3 |
| CET 2243: Public Works | 3 | | PHYS 1101L | 1 |
| CET 2250: Unmanned Aerial Systems/Imagery Analysis | 3 | | Elective that's not PHYS | 3 |
| CET 2251: Introduction to Legal Descriptions | 1 | | 6. Behavioral and Social Science (2 courses-different prefixes; 6 cr. min) | |
| ENGL 3307: Professional and Technical Writing | 3 | | ECON 1100, ECON 2201, or ECON 2202 | 3 |
| GEMT 3310: Boundary Control and Legal Principles | 3 | | Elective that's not ECON | 3 |
| GEMT 3311: Advanced Surveying | 3 | | One Course from EITHER Objective 7 OR 8 (1course; 3 cr. min) | |
| GEMT 3312: Public Land Surveying | 3 | | 7. Critical Thinking HIST 1118 | 3 |
| GEMT 3313: Surveying Software Applications | 2 | | 8. Information Literacy | |
| GEMT 3314: Research and Evidence in Surveying | 3 | | 9. Cultural Diversity (1 course; 3 cr. min) | |
| GEMT 3315: Surveying Adjustments | 3 | | Elective | 3 |
| GEMT 3317: Subdivision Planning and Platting | 2 | | General Education Elective to reach 36 cr. min. (if necessary) | |
| GEMT 3319: Writing Legal Descriptions | 1 | | | |
| GEMT 4400: Essentials of Surveying | 2 | | Total GE | 37 |
| GEMT 4411: Geodesy | 3 | | Undergraduate Catalog and GE Objectives by Catalog Year | |
| GEMT 4415: Survey Office Practice | 3 | | http://coursecat.isu.edu/undergraduate/programs/ | |
| GEMT 4416: Surveying Project | 3 | | | |
| GEMT 4430: GPS Principles and Applications | 3 | | | |
| MATH 1170: Calculus I | 3 | | | |
| MATH 1175: Calculus II | 3 | | MAP Credit Summary | CR |
| Choose ONE of the following: | 3 | | Major | 93-94 |
| GEMT 4425: Principles of Cartography | | | General Education | 37 |
| GEOL 4404: Advanced Geographic Information Systems | | | Upper Division Free Electives to reach 36 credits | 0 |
| GEOL 4427: Information Technology for GIS | | | Free Electives to reach 120 credits | 0 |
| Choose ONE of the following: | 3 | | TOTAL | 130-131 |
| GEMT 4432: Principles of Photogrammetry | | | | |
| GEOL 4409: Remote Sensing | | | | |
| Complete the following two courses: | 7-8 | | | |
| CET 1115A: Materials Testing I | 4 | | | |
| CET 1125A: Materials Testing II | 4 | | | |
| OR the following three courses: | | | Graduation Requirement Minimum Credit Checklist | Confirmed |
| | | | Minimum 36 cr. General Education Objectives (15 cr. AAS) | X |
| CET 1113: Civil and Geomatics Engineering Technology I | 2 | | Minimum 15 cr. Upper Division in Major (0 cr. Associate) | |
| CET 1123: Civil and Geomatics Engineering Technology II | 2 | | Minimum 36 cr. Upper Division Overall (0 cr. Associate) | |
| GEMT 2231: Survey Computations | 3 | | Minimum of 120 cr. Total (60 cr. Associate) | X |
| Complete the following two courses: | 5 | | | |
| MATH 1143: College Algebra | 3 | | MAP Completion Status (for internal use only) | |
| MATH 1144: Trigonometry | 2 | | | <i>Date</i> |
| OR the following course: | | | | |
| MATH 1147: College Algebra and Trigonometry | 5 | | CAA or COT: | PJ 06/01/2023 |
| Advising Notes | | | | |
| | | | Complete College American Momentum Year | |
| | | | Math and English course in first year-Specific GE MATH course identified | |
| | | | 9 credits in the Major area in first year | |
| | | | 15 credits each semester (or 30 in academic year) | |
| | | | Milestone courses | |