

A Major Academic Plan (MAP) illustrates one efficient path toward completing a degree in four years and includes only required courses and credits. A list of Major, General Education, and Elective credits, as well as a summary of required credit categories, are shown on page two. **Individual MAP customization by each student is expected.**

Catalog Year 2016-2017

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Surveying & Geomatics Engineering Tech | Credit Hours | Min. Grade | \*Attribute | \*\*When Offered | Pre & Co-requisites | |
| Semester One | | | | | |
| GE Objective 1: ENGL 1101 English Composition | 3 | C- | GE | F, S |  | |
| CET 0111/GEMT 1111: Drawing with CADD | 3 | C- |  | F |  | |
| CET 0112/GEMT 1112: Beginning Surveying | 5 | C- |  | F |  | |
| MATH 1108: Intermediate Algebra | 3 | C- |  | F, S |  | |
| Total | 14 |  |  |  |  | |
| Semester Two |  |  |  |  |  | |
| GE Objective 1: ENGL 1102 | 3 | C- | GE | S |  | |
| CET 0121/GEMT 1121: Civil Engineering Technology Drafting | 3 | C- |  | S | CET 0111/GEMT 1111 | |
| CET 0122/GEMT 1122: Intermediate Surveying | 5 | C- |  | S | CET 0112/GEMT 1112 | |
| CET 0110 & CET 0120: Applied Math I & II -or-  MATH 1147: Precalculus | 4 or 5 | C- |  | S | See advisor  MATH 1108 | |
| Total | 15 |  |  |  |  | |
| Semester Three | | | | | |
| GE Objective 3: MATH 1170 Calculus I –or-  RCET 0264 Introductory Calculus | 4  4 | C-  C- |  | F, S  F, S | MATH 1144 or 1147  RCET 0142 or equivalent | |
| GE Objective 4: PHIL 1103 Intro to Ethics | 3 | C- |  | F, S |  | |
| GE Objective 5: PHYS 1101/L Element of Physics & Lab | 4 | C- |  | F, S | MATH 1108 or equivalent | |
| CET 0216/GEMT 2216: Route Survey and Design | 5 | C- |  | F | CET 0122/GEMT 1122 | |
| GEMT 3319: Writing Legal Descriptions | 1 | C- |  | F | Permission of Instructor | |
| Total | 17 |  |  |  |  | |
| Semester Four |  |  |  |  |  | |
| GE Objective 2: COMM 1101, Principles of Speech | 3 | D- |  | F, S |  | |
| MATH 1175: Calculus II or  GE Objective 3: RCET 1372, Calculus for Advanced Electronics | 4  4 | C-  C- |  | F, S | MATH 1170  See advisor | |
| GE Objective 3: MATH 1153, Introduction to Statistics | 3 | C- |  | F, S | MATH 1108 | |
| CET 0226/GEMT 2226: Construction Surveying | 5 | C- |  | F, S | CET 0216/GEMT 2216 | |
| Total | 17 |  |  |  |  | |
| Semester Five |  |  |  |  |  | |
| GE Objective 7: HIST 1118, US History and Culture | 3 | D- | GE | F, S |  | |
| GEOL 4403/L, Principles of Geographic Info Systems & Lab or  GEMT 4413 or  HIST 4489 | 3 | C- |  | D |  | |
| GEMT 3311: Advanced Surveying | 3 | C- |  | F | CET 0226/GEMT 2226 or instructor permission | |
| GEMT 3312: Public Land Surveys | 3 | C- |  | F | CET 0226/GEMT 2226 | |
| GEMT 3313: Surveying Software Applications | 3 | C- |  | F | CET 0226/GEMT 2226 or instructor permission | |
| GEMT 3317: Subdivision Planning and Platting | 2 | C- |  | F | GEMT 2226, GEMT 3313 | |
| Total | 17 |  |  |  |  | |
| Semester Six |  |  |  |  |  | |
| GE Objective 6: ECON 1100 Economic Issues or  ECON 2201 Principles of Macroeconomics or  ECON 2202 Principles of Microeconomics | 3 | D- | GE | F, S |  | |
| GEMT 3310: Surveying Law and Boundary Surveying | 3 | C- |  | S | GEMT Jr status or instructor permission | |
| GEMT 3314: Research and Evidence in Surveying | 3 | C- |  | S | CET 0226/GEMT 2226 | |
| GEMT 4411: Geodesy | 3 | C- |  | S | GEMT 3311 or instructor permission | |
| GEMT 4415: Survey Office Practice | 3 | C- |  | S | Sr status or instructor permission | |
| Total | 15 |  |  |  |  | |
| Semester Seven |  |  |  |  |  | |
| GE Objective 6: Choose one class (Not ECON) | 3 | D- | GE | F, S |  | |
| ENGL 3307: Professional and Technical Writing | 3 | D- |  | F, S | 45 credits & ENGL 1102 | |
| GEMT 4416: Surveying Project | 3 | C- |  | D | Sr status or instructor permission | |
| GEMT 4430: GPS Principles and Application | 3 | C- |  | F | CET 0226/GEMT 2226 or instructor permission | |
| GEMT 4425: Principles of Cartography or  HIST 4490: Cartography: History and Design or  GEOL 4404: Advanced Geographic Information System | 3 | C- |  | S  D  S | GEMT Jr status or instructor permission  GEOL 4403 & L or instructor permission | |
| Total | 15 |  |  |  |  | |
| Semester Eight |  |  |  |  |  | |
| GE Objective 4: Min of 3 credits (Fine Arts or Foreign Language) | 3 | D- | GE |  |  | |
| GE Objective 5: Choose one class that satisfies this objective | 3 | D- | GE |  |  | |
| GE Objective 9: Choose one class that satisfies this objective | 3 | D- | GE |  |  | |
| GEMT 3315: Surveying Adjustments and Coordinate Systems | 3 | C- |  | S | CET 0225/GEMT 2225, MATH 1153 & 1170 | |
| GEMT 4432: Principles of Photogrammetry or  GEOL 4409: Remote Sensing | 3 | C- |  | S  S | CET 0226/GEMT2226 or instructor permission  Computer operation systems competency | |
| Total | 15 |  |  |  |  | |
| \*Key for Attribute: U=Upper division GE=General Education Objective  \*\*Key for When Offered: F=Fall S=Spring Su=Summer D=contact department (more…) | | | | | |

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| **2016-2017 Major Requirements** | **CR** | **2016-2017 GENERAL EDUCATION OBJECTIVES**  **Satisfy Objectives 1,2,3, 4, 5, 6, 7 or 8, 9** | | **37 cr. min** | |
| **MAJOR REQUIREMENTS** |  | 1. Written English ENGL 1101 & 1102 | | 6 | |
| CET 0111/GEMT 1111: Drawing with CADD | 3 | 2. Oral Communication (3 cr. min) COMM 1101 | | 3 | |
| CET 0112/GEMT 1112: Beginning Surveying | 5 | 3. Mathematics MATH 1153 | | 3 | |
| CET 0121/GEMT 1121: Civil Engineering Technology Drafting | 3 | 4. Humanistic & Artistic Ways of Knowing PHIL 1103 + one other | | 6 | |
| CET 0122/GEMT 1122: Intermediate Surveying | 5 | 5. Scientific Ways of Knowing PHYS 1101/L + one other | | 7 | |
| CET 0216/GEMT 2216: Route Survey and Design | 5 | 6. Social & Behavior Ways of Knowing ECON 1100, 2201, or  2202 + one other | | 6 | |
| GEMT 3319: Writing Legal Descriptions | 1 |
| CET 0226/GEMT 2226: Construction Surveying | 5 | 7. Critical Thinking HIST 1118 | | 3 | |
| GEOL 4403/L, Principles of Geographic Info Systems & Lab or  GEMT 4413 or  HIST 4489 | 3 | 9. Cultural Diversity (choose one course) | | 3 | |
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| GEMT 3311: Advanced Surveying | 3 |  | |  | |
| GEMT 3312: Public Land Surveys | 3 |  | |  | |
| GEMT 3313: Surveying Software Applications | 3 |  | |  | |
| GEMT 3317: Subdivision Planning and Platting | 2 |  | |  | |
| GEMT 3310: Surveying Law and Boundary Surveying | 3 | **TOTAL** | | **37** | |
| GEMT 3314: Research and Evidence in Surveying | 3 |  | | | |
| GEMT 4411: Geodesy | 3 |  | |  | |
| GEMT 4415: Survey Office Practice | 3 |  | |  | |
| GEMT 4416: Surveying Project | 3 |  | |  | |
| GEMT 4430: GPS Principles and Application | 3 |  | | | |
| GEMT 4425: Principles of Cartography or  HIST 4490: Cartography: History and Design or  GEOL 4404: Advanced Geographic Information System | 3 |  | |  | |
|  | |  | |
|  | |  | |
| GEMT 3315: Surveying Adjustments and Coordinate Systems | 3 |  | |  | |
| GEMT 4432: Principles of Photogrammetry or  GEOL 4409: Remote Sensing | 3 |  | | | |
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|  |  | GE Objectives Courses:  (University Catalog 2016-2017) | | | |
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|  |  | **MAP Credit Summary** | | | **CR** |
|  |  | Major | | | 68 |
|  |  | General Education | | | 37 |
|  |  | Other Courses ENGL 3307 MATH 1108, 1147, 1170, 1175 | | | 16 |
|  |  | TOTAL | | | 121 |
|  |  |  | | |  |
| **TOTAL** | **68** |  | | |  |
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| **Advising Notes** | |  | | |  |
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|  | | **Graduation Requirement Minimum Credit Checklist** | **YES** | | NO |
|  | | Min. of 15 credits of General Education Objectives |  | |  |
|  | | Min. of 60 credits |  | |  |
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