## Bachelor of Science in Geomatics Major Code: 0387 and 7387 Effective Fall 2019

## (Still Effective 2020-2021)

Freshman

| Semester 1 | Cr |  | Semester 2 | Cr |  |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: |
| ENGL 100 | Ideas and Their Expressions I (WC) | 3 | ENGL 101 | Ideas and Their Expressions (WC) | 3 |
| MATH 131 | Calculus I (MLAR) | 4 | PHYS 225 | College Physics I (SR) | 3 |
| CM 100 | Intro to Technology | 3 | PHYS 235 | College Physics I Lab (SR) | 1 |
| GEOM 107 | Introduction to UAVs | $\mathbf{3}$ | MATH 132 | Calculus II (MLAR) | 4 |
| FRST 101 | College Success (SS) | 1 |  |  |  |
| Social / Behavioral Science Elective * (SBS) | 3 | African American Culture * (AA) | 3 |  |  |
|  |  |  |  |  |  |
| Semester Total | 17 | Semester Total |  |  |  |

Sophomore

| Semester 3 |  |  |  |  |  |  | Cr | Semester 4 | Cr |
| :--- | :--- | :---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Humanities / Fine Arts Elective* (HFA) | 3 | GEOM 271 | Land Survey Systems | 3 |  |  |  |  |  |
| PHYS 226 | College Physics II (SR) | 3 | GEOM 205 | Surveying II | 4 |  |  |  |  |
| PHYS 236 | College Physics II Lab (SR) | 1 |  |  |  |  |  |  |  |
| CM 214 | Surveying | 2 | ECT 101 | Microcomputer Applications | 3 |  |  |  |  |
| CM 224 | Surveying Lab | 1 | Global Awareness * (GL) | 3 |  |  |  |  |  |
| GEOM 310 | Geographic Information Systems | 3 | Technical Elective** | 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Semester Total | 13 | Semester Total | 16 |  |  |  |  |  |  |

Junior

|  | Semester 5 | Cr |  | Semester 6 | Cr |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: |
| GEOM 340 | Adjustment Computations I | 3 | GEOM 341 | Adjustment Computations II | 3 |
| GEOM 366 | Hydraulics and Piping Systems | 2 | GEOM 360 | Geodesy | 3 |
| GEOM 307 | Automated Surveying \& Mapping | 3 | GEOM 367 | Hydrology | 2 |
| GEOM 317 | Automated Surveying and Mapping Lab | 1 | GEOM 350 | Subdivision Design | 3 |
| MATH 450 | Linear Algebra and Matrix Theory | 3 | GEOM 320 | Introduction to Photogrammetry | 3 |
| Science Elective ** | 3 | Free Elective |  | 3 |  |
| Semester Total | 15 | Semester Total |  | 17 |  |

Senior

| Semester 7 | Cr | Semester 8 |  |  |  |  |  |  | Cr |
| :--- | :--- | :---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| GEOM 496 | Senior Project I (Capstone) | 1 | GEOM 499 | Senior Project II (Capstone) | 4 |  |  |  |  |
| GEOM 470 | Boundary and Legal Principles | 3 | GEOM 400 | Fund of Land Surveying Review | 1 |  |  |  |  |
| GEOM 460 | Satellite Positioning Systems | 3 | Technical Elective** | 3 |  |  |  |  |  |
| GEOM 471 | Professionalism and Ethics in <br> Geomatics | 1 | GEOM 465 | Advanced UAV Processes | 3 |  |  |  |  |
| GEOM 420 | Analytical Photogrammetry | 3 | Free Elective | 3 |  |  |  |  |  |
| Technical Elective** | 3 |  |  |  |  |  |  |  |  |
| Semester Total | 14 | Semester Total | 14 |  |  |  |  |  |  |

Approved June 2018
*General Education Requirements from Approved List: 3 hours of Humanities and Fine Arts (HFA), 3 hours of Social and Behavioral Sciences (SBS), 3 hours of African American Cultures (AA) and 3 hours of Global Awareness (GL). These will be selected from four different pools.
** Electives to be approved at program level

