## MEMORANDUM

TO: University Undergraduate Programs Committee
FROM: Daniel Meeroff, Chair of the College of Engineering and Computer Science Undergraduate
Committee, Department of Civil, Environmental \& Geomatics Engineering
SUBJECT: Proposed Changes to the Geomatics Engineering curriculum
DATE: $\quad$ May 8, 2017

This memo presents proposed changes to the B.S. with major in Geomatics Engineering (BSGE) program to allow greater flexibility for articulation for transfer students in line with ABET accreditation requirements.


All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

## Coursework for Transfer Students

In order to minimize the time necessary to complete the Geomatics Engineering degree, transfer students entering the University with an A.A. degree should structure their programs to include the following:

| Topics | Credits (1) |  |
| :--- | :--- | :--- |
| English Composition | 6 | (two 3-credit courses) |

Proposed change:
Prerequisite Coursework for Transfer Students Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the Transfer Student Manual and below.

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

## Coursework for Transfer Students

In order to minimize the time necessary to complete the Geomatics Engineoring degree, transfor students ontering the University with an A.A. degree should structure their programs to include the following:

| Fopics | Credits (1) |
| :--- | :--- |
| English Composition | 6 | (two 3-credit courses)


| Social Science | 6 | (two 3-credit courses) |
| :--- | :--- | :--- |
| Humanities | 6 | (two 3-credit courses) |
| Complete Calculus Sequence | 12 | (three 4-credit courses) |
| Differential Equations | 3 | (one 3-credit course) |
| General Chemistry, with Lab | 4 | (one 4-credit course, <br> including lab) |
| Calculus-based Physics, with Labs | 8 | (two 4-credit courses, |
| (including labs) |  |  |
| Fundamentals <br> to Engineering (2) of/Introduction | 3 | (one 3-credit course) |

## Notes:

(1) The number of credits may vary by institution.
(2) An introductory course in engineering is preferred. However, substitutions may be allowed, provided they are part of a cohesive pre-engineering A.A. degree program.

| Social Science | 6 | (two 3-credit courses) |
| :--- | :--- | :--- |
| Humanities | 6 | (two 3-credit courses) |
| Gomplete Calculus Sequence | 12 | (three -4-credit courses) |
| Differential Equations | 3 | (one 3-credit course) |
| General Chemistry, with Lab | 4 | (one -4-credit course, <br> including lab) |
| Galculus-based Physics, with Labs | 8 | (two 4-credit courses; <br> including labs) |
| Fundamentals of/Introduction | 3 | (one 3-credit course) |
| to Engineering (2) |  |  |

## Notes:

(1) The number of credits may vary by institution.
(2) An introductory course in engineering is preferred. However, substitutions may be allowed, provided they are part of a cohesive pre-engineering A.A. degree program.

Existing catalog language:

| Basic Mathematics and Sciences |  |  |
| :---: | :---: | :---: |
| Calculus with Analytic Geometry 1 (1), <br> (4)\|(4) | MAC 2311 | 4 |
| Calculus with Analytic Geometry 2 (1), (4) | MAC 2312 | 4 |
| Calculus with Analytic Geometry 3 | MAC 2313 | 4 |
| Engineering Math 1 | MAP 3305 | 3 |
| Probability and Statistics for Engineers | STA 4032 | 3 |
| General Chemistry 1 (1) | CHM 2045 | 3 |
| General Chemistry 1 Lab (1) | CHM 2045L | 1 |
| General Physics for Engineers 1 (1) | PHY 2048 | 3 |
| General Physics 1 Lab | PHY 2048L | 1 |
| Physics for Engineers 2 (1), (5) | PHY 2044 | 3 |
| General Physics 2 Lab | PHY 2049L | 1 |
| Introduction to Physical Geography | GEO 2200C | 3 |
| Total |  | 33 |

## Proposed change:

| Basic Mathematics and Sciences |  |  |
| :--- | :--- | :--- |
| Calculus with Analytic Geometry 1 (1), (4) | MAC 2311 | 4 |
| Calculus with Analytic Geometry 2 (1), (4) | MAC 2312 | 4 |
| Calculus with Analytic Geometry 3 | MAC 2313 | 4 |
| Engineering Math 1 | MAP 3305 | 3 |
| Probability and Statistics for Engineers | STA 4032 | 3 |
| General Chemistry 1 (1) | CHM 2045 | 3 |
| General Chemistry 1 Lab (1) | CHM 2045L | 1 |
| General Physics for Engineers 1 (1) | PHY 2048 | 3 |
| General Physics 1 Lab | PHY 2048L | 1 |
| Physics for Engineers 2 (1), (5) | PHY 2044 | 3 |
| General Physics 2 Lab | PHY 2049L | 1 |
| Introduction to Physical Geography | GEO 2200C | 3 |
| Science or Math Elective(10) |  |  |
| Total | 4 |  |

(10) Consult an engineering advisor for a list of appropriate courses


