### Foundations of Written Communication
*(Gordon Rule Writing (GRW), 6 credits required)*

- ENC 1101 .............. College Writing I *(REQUIRED)*
- ENC 1102+ .......... College Writing II

**THE FOLLOWING COURSES CAN BE SUBSTITUTED FOR ENC 1102:**
- ANT 1471+ ............ Cultural Difference in a Globalized Society
- ENC 1930+ ............ University Honors Seminar in Writing *(Permit Only)*
- ENC 1939+ ............ Special Topic: College Writing II
- HIS 2934+ ............ Writing History
- NSP 1195+ ............ Being Cared For: Reflections from Other Side of Bed

*Students must take four (4) GRW Courses. Two (2) must be taken from Foundations of Written Communications.*

### Foundations of Mathematics & Quantitative Reasoning
*(Grade of “C” or higher required. 8 credits required)*

**PRETEST IS REQUIRED BEFORE TAKING YOUR FIRST MATH CLASS**

**NOTE:** Students must take at least one course with the prefix MAC or MGF from the list below

- MAC 2311 ......................... Calculus with Analytic Geometry I (4 cr)
- MAC 2312 ......................... Calculus with Analytic Geometry II (4 cr)

*Calculus requires a solid background in Algebra and Trigonometry. If you are not ready to take Calculus the following courses will provide the necessary background:*

- MAC 1105 ...................... College Algebra
- MAC 1114 ...................... Trigonometry
- MAC 1140 ...................... Precalculus Algebra
- MAC 1147 ...................... Precalculus Algebra & Trig (5 credits)

### Foundations of Science & the Natural World
*(8 credits required including Labs.)*

#### Chemistry *(Grade of “C” or higher required)*
- CHM 2045 & L .............. General Chemistry & Lab (4 cr) *(Incl. Lab)*
  - Pre-requisite or Co-req. of MAC 1105 – College Algebra
- EGN 2095 & L .............. Engineering Chemistry & Lab (4 cr) *(Online)*
  - Pre-requisite of MAC 1105 – College Algebra *(Recommended for Civil)*

*The following courses are acceptable for the Computer Science program in lieu of Chemistry:*

#### Biology Department *(Grade of “C” or higher required)*
- BSC 1010 & L & D ........ Biological Principles (4 cr) *(Incl Lab & Disc)*

#### Geology Department *(Grade of “C” or higher required)*
- GLY 2010C .................. Physical Geology & Lab (4 credits)

*The following courses are required for ALL engineering programs:*

#### Physics Department *(Grade of “C” or higher required)*
- PHY 2043 ...................... Physics for Engineers I (3 credits)
  - *(PHY 2048 (4 credits) is a substitute)*
- PHY 2048 L ...................... General Physics I Lab (1 credit)
  - Pre-requisite of MAC 2311 Calculus with Analytical Geometry I
STUDENTS ASSUME RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS
Course selections should be made in consultation with an advisor

Legend

+  - ENC 1101 is a prerequisite.
++ - Two Foundations of Written Communications classes are required before taking this class.
#  - Sophomore standing (30 credits earned) is required.
GRW - (WAC) Writing across the curriculum class.
D  - A discussion may be linked to the lecture. Students must register for the discussion in addition to the lecture.
L  - A lab is linked to the lecture. Students must register for the lab in addition to the lecture.
P/F  - A pass (P) or fail (F) option is available for this course. Engineering majors cannot take this course for Pass/Fail.
§  - We strongly recommend the two additional GRW courses come from Foundations of Global Citizenship and/or Foundations of Creative Expressions. Courses include: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, & LIT 2070. See advisor for additional details.

FOREIGN LANGUAGE (4-8 credits) – REQUIRED only for COMPUTER SCIENCE MAJOR
Students with more than one year of a foreign language in high school should enroll in the second half of the beginners foreign language class (ARA/CHI/FRE/GER/HBR/ITA/JPN/LAT/SPN 1121) or a higher level course. Proficiency for a first-level course can be earned by successfully completing a second-level course. For questions related to this requirement, consult an academic advisor. CLEP exam credits meet this requirement: see the catalog.

- NOTE: Native Speakers of a foreign language must consult the Languages, Linguistics, and Comparative Literature Department regarding this requirement.
- NOTE: Honors Seminars SHALL BE ACCEPTED AS MEETING THE GORDON RULE WRITING REQUIREMENT. See the University Advising Services Office for details.

FREE ELECTIVES: Engineering students DO NOT have any electives. Engineering students must stick to the core curriculum.

MAJOR REQUIREMENTS
(All required major courses must earn a “C” or better)

___ EGN 1002 & L  Fundamentals of Engineering [Must be taken freshman year] (NOT required for Computer Science majors)
___ SPC 2608  Public Speaking (Required for Computer Science & Geomatics majors ONLY)

REQUIREMENT INFORMATION

- NOTE: All Engineering and Computer Science students should take Physics I (PHY 2043 & PHY 2048L) with Calculus II (MAC 2312) in the same semester.
- NOTE: Students must receive a minimum grade of “C” and overall GPA of 2.5 or greater in a combination of the math and physics courses below. Calculation of the GPA will be based on the highest grade earned. Advance placement (AP) – a score of 5 is equivalent to an “A” and a score of 4 is equivalent to a “B”.

- Electrical and Computer Engineering: MAC 2311 and MAC 2312 = 2.5 GPA
  OR MAC 2311 and PHY 2043 or PHY 2048 = 2.5 GPA.
- Ocean, Mechanical, Civil, Environmental & Geomatics Engineering: MAC 2311 & PHY 2043 or PHY 2048 = 2.5 GPA.
- Computer Science: COP 2220 and MAC 1140/MAC 1114 = 2.5 GPA
  OR COP 2220 & MAC 1147 = 2.5 GPA.

Incoming Freshman and students transferring with less than 30 credits contact:
Madison McShane
University Advising Services
Phone: (561) 297-3064

Transfer students or students with more than 30 credits contact:
College of Engineering & Computer Science
Phone: (561) 297-2780
Toll Free: 888-792-6397