PRE-PROFESSIONAL ENGINEERING PROGRAM (2016-2017)

Foundations of Written Communication

(6 credit hours required – Writing Across the Curriculum - WAC)
Grade of “C” or higher is required in each course
ENC 1101 College Writing I (Required)
ENC 1102 College Writing II

The following courses below may be substituted for ENC 1102:

- ENC 1939 Special Topic: College Writing
- ENC 1930 University Honors Seminar in Writing

Foundations of Science & the Natural World

(6 credit hours required - One of the courses must have a lab)
Student must take 2 of the following courses; 1 must be from group A.
The second course may be from group A or group B.

Group A

- Biology Department
  - BSC 1005 & L
  - Life Science (3 cr. incl. Lab)
  - BSC 2085 & L
  - Anatomy & Physiology 1 (4 cr. Incl. Lab) *
- Chemistry Department
  - CHM 1020C
  - Contemporary Chemical Issues
- Geosciences Department
  - ESC 2000 Blue Planet (online)
  - EVR 1001
  - Env. Science and Sustainability
- Physics Department
  - AST 2002
  - Intro. to Astronomy (P/F)

Group B

- Biology Department
  - BSC 1010 & L & D
  - Biological Principles (4 cr. Incl. Lab & Dis)
- Chemistry Department
  - CHM 2045 & L (Required) ***
  - General Chemistry 1 (4 cr. Incl. Lab) §
- Physics Department
  - PHY 2048 & L (Required) ***
  - General Physics 1 (4 or 5 credits incl. Lab) **
  - PHY 2053
  - College Physics 1 (4 credits)

*** See science requirements by major on page 3

Foundations of Mathematics & Quantitative Reasoning

(6 credit hours required – Grade of “C” or higher is required)
Student must take 2 of the following courses; 1 must be from group A.
The second course may be from group A or group B.

Group A

- MGF 1105 Math for Liberal Arts
- MGF 1107 Math for Liberal Arts
- MAC 1105 College Algebra
- STA 2023 Introductory Statistics
- MAC 2311 Calculus with Analytic Geometry 1 (4 credits) (Required)
or any mathematics course for which one of the above courses is the direct prerequisite

Group B

- MAC 1140 Precalculus Algebra
- MAC 1141 Trigonometry
- MAC 1147 Precalculus Algebra & Trigonometry (5 credits)
- MAC 2233 Methods of Calculus
- MAC 2312 Calculus with Analytic Geometry 2 (4 credits) (Required)

Philosophy Department

- PHI 2102 Logic

Note: Students must take at least one course with the prefix MAC or MGF.

Foundations of Society & Human Behavior

(6 credit hours required)
Student must take 2 of the following courses; 1 must be from group A.
The second course may be from group A or group B.

Group A

- History Department
  - AMH 2020 United States History Since 1877 (P/F)
- Anthropology Department
  - ANT 2000 & D Introduction to Anthropology
- Economics Department
  - ECO 2013 Macroeconomic Principles §
- Political Science Department
  - POS 2041 Government of the United States
- Psychology Department
  - PSY 1012 Introduction to Psychology
- Sociology Department
  - SYG 1000 Sociological Perspectives
- Exceptional Student Education Department
  - EEX 2901 Disability and Society
- Geosciences Department
  - EVR 2017 Environment and Society
- Public Administration Department
  - PAD 2258 Changing Environment of Soc., Bus., & Gov’t
- Sociology Department
  - SYD 2790 Race, Class, Gender, and Sexuality
  - SYG 1010 Social Problems
- Urban & Regional Planning Department
  - URP 2051 Designing the City

* 2016 – 2017
Students assume responsibility for meeting all graduation requirements

Course selections should be made in consultation with an academic advisor.

Legend

+  - ENC 1101 is a prerequisite.
++ - Two Foundations of Written Communications classes are required before taking this course.
§ - Sophomore standing (30 credits earned) is a requirement to take this course.
* - Nursing majors are required to take this course in their first semester.
** - MAC 2311 is a prerequisite for this course. If a lab is needed, then take General Physics 1 Lab (PHY 2048 Lab).
*** - MAC 1105 and MAC 1114 are prerequisites for this course. If a lab is needed, then take General Physics 1 Lab (PHY 2048 Lab).
† - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
WAC - (WAC) Writing across the curriculum course.

§ Writing Across the Curriculum (WAC)/Gordon Rule
Students must attain grades of “C” or higher. 12 credits of writing (WAC) and 6 credits of mathematics are required.

Please note:
Students must take four (4) WAC courses. Two (2) courses are to be taken from Foundations of Written Communication. We strongly recommend the two additional WAC courses come from these courses: PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040 and LIT 2070. See advisor for additional details.

(D) = Discussion, (L) = Lab
Courses indicating a (D) or (L) are linked with a lecture, a lab, and/or a discussion. If you select one of these courses, you must register for the lecture, lab, and/or discussion. You must attend the lecture, lab, and/or discussion.

Elective Credits
The number of elective credits allowed varies by major. Please consult with an academic advisor to determine the number of elective credits required for your major. Certain majors do not allow any electives.

P/F
Certain designated undergraduate courses may be taken for a letter grade of pass (P) or fail (F). Students must indicate the grade option preferred when registering; otherwise, a letter grade will be given. The maximum credit available to any student on the P/F option is one course per term with a maximum of 12 credits during a student’s entire course of study. This option is not available for courses in the student’s major, for students on probation, or for Engineering majors.

http://myfau.fau.edu

Go to MyFAU to:
Check e-mail
See FAU Announcements
FAU Self-Service:
Course schedules
Registration (drop/add classes) and withdrawals
Student records and financial aid
Tuition payments
The University Course Catalog
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 WAC/GRW REQUIREMENT.

See the University Advising Services Office for details.

Engineering students must stick to the core curriculum.

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

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGN 1002 &amp; L</td>
<td>Fundamentals of Engineering</td>
<td><a href="#">Must be taken freshman year</a> <strong>(NOT required for Computer Science majors)</strong></td>
</tr>
<tr>
<td>SPC 2608</td>
<td>Public Speaking</td>
<td><strong>(Required for Computer Science ONLY)</strong></td>
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**SCIENCE REQUIREMENTS BY MAJOR**
(All required science courses must earn a “C” or better)

<table>
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<tr>
<th>Civil, Electrical, Geomatics, Mechanical, Ocean, and Computer Engineering:</th>
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<tr>
<td>CHM 2045 &amp; L</td>
<td>General Chemistry 1 (4 cr. w/Lab)</td>
<td>‡ (REQUIRED)</td>
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<tr>
<td>PHY 2048 &amp; L</td>
<td>General Physics 1 (4 or 5 cr. w/Lab)</td>
<td>** (REQUIRED)</td>
</tr>
<tr>
<td>PHY 2049 &amp; L</td>
<td>General Physics 2 (4 or 5 cr. w/Lab)</td>
<td>** (REQUIRED) or PHY 2044 &amp; L</td>
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**Civil Engineering majors must also choose 1 from:**

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<td>BSC 1010 &amp; L &amp; D</td>
<td>Biological Principles</td>
<td>(4 credits including Lab &amp; Discussion)</td>
</tr>
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<td>GLY 2010C</td>
<td>Physical Geology</td>
<td>(RECOMMENDED)</td>
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**Computer Science:**

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**REQUIREMENT INFORMATION**

- **NOTE:** All Engineering and Computer Science students should take Physics I (PHY 2048 & PHY 2048L) with Calculus II (MAC 2312) in the same semester.
- **NOTE:** Students must receive a minimum grade of “C” in the courses below:

  - **Electrical and Computer Engineering:** MAC 2311 & MAC 2312 & PHY 2043 or PHY 2048
  - **Ocean, Mechanical, Civil, Environmental & Geomatics Engineering:** MAC 2311 & PHY 2043 or PHY 2048
  - **Computer Science:** COP 2220 & MAC 1140 & MAC 1114 or COP 2220 & MAC 1147
  - **Geomatics:** SUR2101 & SUR 2101 Lab and MAC 1140 and MAC 1114 or MAC 1147

**Incoming Freshman and students transferring with less than 30 credits contact:**

University Advising Services  
Phone: (561) 297-3064  
Email address: advisingservices@fau.edu

**Transfer students or students with more than 30 credits contact:**

College of Engineering & Computer Science  
Phone: (561) 297-2780  
Email address: engineering-advising@fau.edu