

# FLORIDA ATLANTIC UNIVERSITY

*All courses are three (3) credits unless otherwise indicated. Course selections should be made in consultation with an academic advisor.*

## PRE-PROFESSIONAL ENGINEERING PROGRAM

**(2011-2012)**

**College of Engineering & Computer Science**

### FOUNDATIONS OF WRITTEN COMMUNICATION (Gordon Rule Writing (GRW), 6 credits required)

- \_\_\_ **ENC 1101** ..... College Writing I (**REQUIRED**)
- CHOOSE ONE (1) COURSE FROM THE FOLLOWING SIX (6) COURSES**
- \_\_\_ ENC 1102+ ..... College Writing II
- \_\_\_ ENC 1939+ ..... Special Topic: College Writing II
- \_\_\_ ANT 1471+ ..... Cultural Difference in a Globalized Society
- \_\_\_ NSP 1195+ ..... Being Cared For: Reflections from the other side
- \_\_\_ ENC 2452+◇ ..... Advanced composition for Science
- \_\_\_ ENC 1930+ ..... University Honors Seminar in Writing (**Permit Only**)

**After completing the above, two additional (GRW) classes are required from two different departments. Choices are available in: Foundations in Global Citizenship and/or Foundations of Creative Expression.**

### FOUNDATIONS OF SOCIETY & HUMAN BEHAVIOR

**(6 credits required, select 2 courses from 2 different departments)**

#### Anthropology Department

- \_\_\_ ANT 2000 & D ..... Introduction to Anthropology

#### Economics Department

- \_\_\_ ECO 2013# ..... Macroeconomic Principles
- \_\_\_ ECO 2023# ..... Microeconomic Principles
- \_\_\_ ECP 2002 ..... Contemporary Economic Issues

#### Exceptional Student Education Department

- \_\_\_ EEX 2091 ..... Disability and Society

#### Political Science Department

- \_\_\_ POS 2041 ..... Government of the United States

#### Psychology Department

- \_\_\_ PSY 1012 ..... General Psychology

#### Public Administration Department

- \_\_\_ PAD 2258 ..... Changing Env. of Soc., Bus., & Government

#### Sociology Department

- \_\_\_ SYG 1000 ..... Sociological Perspectives
- \_\_\_ SYG 2010 ..... Social Problems

#### Geosciences Department

- \_\_\_ EVR 2017 ..... Environment and Society

#### Urban & Regional Planning Department

- \_\_\_ URP 2051 ..... Designing the City

### FOUNDATIONS OF SCIENCE & THE NATURAL WORLD (8 credits required including Labs.)

#### Chemistry \* (Grade of "C" or higher required)

- \_\_\_ EGN 2095 & L ..... Engineering Chemistry & Lab (4 credits)
- Pre-requisite of MAC 1105 – College Algebra

**\* The following courses are acceptable in 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 2010 & L ..... 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)

#### AND

- \_\_\_ PHY 2048 L ..... General Physics I Lab (1 credit)
- Pre-requisite of MAC 2281 - Calculus I for Engineers I or  
MAC 2311 Calculus with Analytical Geometry I

### 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 2281 ..... Calculus for Engineers I (4 credits) (1)
- \_\_\_ MAC 2282 ..... Calculus for Engineers II (4 credits) (2)
- (1) MAC 2311 and MAC 2253 are substitutes.  
(2) MAC 2312 and MAC 2254 are substitutes

**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 IN GLOBAL CITIZENSHIP

**(6 credits required. At least 1 course from Global Perspectives)**

----- WESTERN IDENTITIES: -----

#### Sociology Department

- \_\_\_ SYD 2790 ..... Race, Class, Gender, and Sexuality

#### Philosophy Department

- \_\_\_ PHI 2010 & D++ ..... Introduction to Philosophy (GRW)

#### History Department (EG majors cannot take P/F option)

- \_\_\_ AMH 2010 (P/F) ..... United States History to 1877
- \_\_\_ AMH 2020 (P/F) ..... United States History Since 1877

#### Languages, Linguistics, & Comparative Literature Department

- \_\_\_ LAS 2000 ..... Intro to Caribbean & Latin American Studies

----- GLOBAL PERSPECTIVES (1 course required): -----

#### Anthropology Department

- \_\_\_ ANT 2410 ..... Culture and Society

#### Geography Department

- \_\_\_ GEA 2000 & D ..... World Geography

#### History Department

- \_\_\_ WOH 2012 & D++ ..... History of Civilization I (GRW)
- \_\_\_ WOH 2022 ..... History of Civilization II

#### Sociology Department

- \_\_\_ SYP 2450 ..... Global Society

#### Political Science Department

- \_\_\_ INR 2002 ..... Introduction to World Politics

#### Languages, Linguistics, & Comparative Literature Department

- \_\_\_ LIN 2607 ..... Global Perspectives on Language

#### Education Department

- \_\_\_ EDF 2854 ..... Educated Citizen in Global Context

#### Social Work Department

- \_\_\_ SOW 1005 ..... Global Perspectives on Social Services

### FOUNDATIONS OF CREATIVE EXPRESSION

**(6 credits req., select 2 courses from 2 different departments)**

#### Architecture Department

- \_\_\_ ARC 2208 ..... Culture & Architecture

#### Visual Art & Art History Dept. (EG majors cannot take P/F option)

- \_\_\_ ARH 2000 (P/F) ..... Art Appreciation

#### School of Communication & Multimedia Studies

- \_\_\_ FIL 2000 & D ..... Film Appreciation

#### English Department

- \_\_\_ LIT 2010++ ..... Interpretation of Fiction (GRW)
- \_\_\_ LIT 2030++ ..... Interpretation of Poetry (GRW)
- \_\_\_ LIT 2040++ ..... Interpretation of Drama (GRW)

#### Languages, Linguistics, & Comparative Literature Department

- \_\_\_ LIT 2100 & D ..... Global Great Books

#### Music Department

- \_\_\_ MUL 2010 ..... History & Appreciation of Music

#### Theater & Dance Department

- \_\_\_ DAN 2100 ..... Appreciation of Dance
- \_\_\_ THE 2000 ..... Appreciation of Theater

## 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 is 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.

### **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 (FOL/FRE/GER/GRE/GRK/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.

**CLAS:** College Level Academic Skills (CLAS) requirements need to be met prior to graduation. See the university catalog for additional information.

**NOTE:** Honors Seminars **SHALL BE ACCEPTED AS MEETING THE GORDON RULE WRITING REQUIREMENT.** See the Freshman Academic Advising Services Office for details.

**NOTE:** See the catalog for specific requirements, course descriptions, and additional information. The requirements for some Intellectual Foundations Program and other courses may be satisfied by passing the appropriate AP or CLEP exam. Check with your advisor. There is a University Requirement of 45 credits minimum course work from a 4-year degree granting institution. Pre-professional Engineering majors are required to **(1) get a “C” or better in written communication, math and science courses, (2) complete the pre-professional program with a GPA of at least 2.5. No major course may be taken pass/fail. All course selections should be made in consultation with an advisor.** For Pre-professional program details see next page.

**NOTE:** With an advisor’s approval students may take certain courses in their intended major. All prerequisites and co-requisites must be met in order to take the courses. In addition department permit may also be required for some courses. Please consult with an academic advisor regarding the courses.

**Incoming Freshmen and students transferring with less than 30 credits** please contact Manjula Neelakanta [mneelak@fau.edu](mailto:mneelak@fau.edu) in Freshman Academic Advising Services (561-297-2015)

**Transfer students with more than 30 credits** please contact the pre-professional advisor, Tayler Kung [tkung@fau.edu](mailto:tkung@fau.edu) (561-297-3408)

### College Requirement

#### **Not required for Computer Science Majors.**

\_\_\_ EGN 1002 – Fundamentals of Engineering (3 credits), must be taken in freshman year and earn a “C” or better.

## Pre-Professional Engineering Program

Student success is one of the Engineering College's highest priorities. Together with entering students, we will do everything possible to assist in successful completion of our programs. Students will be better prepared to succeed in upper division engineering courses by first completing the College's pre-professional program.

Starting in spring 2011, entering freshmen and all transfer students will be admitted as pre-engineering students and must complete the College's Pre-professional program requirements before applying to the engineering program of their choice.

Pre-Professional Program		
College Writing 1	ENC 1101	3
College Writing 2	ENC 1102	3
Calculus for Engineers 1 (1)	MAC 2281	4
Calculus for Engineers 2 (2)	MAC 2282	4
Engineering Chemistry (3)	EGN 2095	3
Engineering Chemistry Lab (3)	EGN 2095L	1
Physics for Engineers 1 (4)	PHY 2043	3
General Physics 1 Lab	PHY 2048L	1

### Notes:

- (1) MAC 2311 and MAC 2253 are substitutes.
- (2) MAC 2312 and MAC 2254 are substitutes.
- (3) The following courses are acceptable in the Computer Science program:  
BSC 1010 and BSC 1010L, GLY 2010 and GLY 2010L.
- (4) PHY 2048 (4 credits) is a substitute.

**Students must receive a minimum grade of "C" and overall GPA of 2.5 or greater in the above courses in order to be admitted to their engineering major of choice** while also meeting university requirements. **Calculation of the GPA will be based on the highest grade received in each pre-professional course.** Advanced placement credit will be given for the appropriate course(s) but will not be used in the calculation of GPA. Students may repeat a course two times. Failure to receive a passing grade in the third attempt is grounds for denial of admission to an engineering or computer science program.

The entry level mathematics requirement for the pre-professional program is Calculus 1. Students who are placed in lower level mathematics courses based on their ALEKS test scores and who need to maintain full-time status may have problems finding courses that are accepted in an engineering or computer science program in future semesters. This may delay their entry into a particular engineering or computer science program.

Engineering Student Services (561-297-2780) is available to assist students in selection of a major field of study.

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**Transfer students with more than 30 credits** please contact the pre-professional advisor, Tayler Kung (561-297-3408)