

FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2022 – 2023

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

PRE-PROFESSIONAL ENGINEERING PROGRAM (2022-2023)

College of Engineering and Computer Science

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
- ___ HIS 2050 +Writing History

Note: Students must take four Writing-Across-the-Curriculum (WAC) courses, two of which must be taken from Foundations of Written Communication.

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

- ___ MAC 1105..... College Algebra
- ___ MAC 2311..... Calculus with Analytic Geometry 1 (4 credits) **(Required)**

Group B

- ___ MAC 2210..... Intro Calculus w/Applications (4 credits) **(Permit Only)**
- ___ MAC 2312..... Calculus with Analytic Geometry 2 (4 credits) **(Required)**

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

- ___ BSC 1010 & L ****
Biological Principles
(4 cr. Incl. Lab)
- ___ CHM 2045 & L **(Required) ******
General Chemistry 1
(4 cr. Incl. Lab) ‡
- ___ PHY 2048 & L **(Required) ******
General Physics 1
(4 or 5 credits incl. Lab) *

Group B

- For Non-Science Majors**-----
- ___ GLY 2010C & D ****
Physical Geol. (4 cr. incl. Lab)
 - ___ PHY 2049 & L ****
General Physics 2
(4 or 5 credits incl. Lab)

****** SEE SCIENCE REQUIREMENTS BY MAJOR ON PAGE 3**

(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.

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

- ___ AMH 2020 & D United States History Since 1877 ◊
- ___ ANT 2000 & D Introduction to Anthropology **(WAC)**
- ___ ECO 2013 Macroeconomic Principles §
- ___ POS 2041..... Government of the United States ◊
- ___ PSY 1012 Introduction to Psychology
- ___ SYG 1000 Sociological Perspectives

Group B

- ___ AMH 2010 & D United States History to 1877
- ___ CCI 2002..... Law, Crime & the Criminal Justice System ‡
- ___ DIG 2202 Digital Culture
- ___ ECO 2023 Microeconomic Principles §
- ___ ECP 2002 Contemporary Economic Issues
- ___ EEX 2091 Disability and Society
- ___ EVR 1110..... Climate Change: The Human Dimensions
- ___ EVR 2017..... Environment and Society
- ___ LIN 2001..... Introduction to Language **(online course)**
- ___ PAD 2081 Risk Resilience and Rising Seas ‡
- ___ PAD 2258 Changing Environment of Soc., Bus., & Gov't
- ___ SYG 2010 Social Problems
- ___ URP 2051 Designing the City

FOUNDATIONS IN GLOBAL CITIZENSHIP

(6 credit hours required)

Student must choose two (2) courses from among the following:

- ___ ANT 2410.....Culture and Society
- ___ EDF 2854Educated Citizen in Global Context
- ___ GEA 2000.....World Geography
- ___ INR 2002.....Introduction to World Politics
- ___ JST 2452Global Jewish Communities Ω
- ___ LAS 2000.....Intro to Caribbean & Latin American Studies
- ___ LIN 2607Global Perspectives on Language
- ___ MUH 2121Music in Global Society Ω
- ___ POT 2000.....Global Political Theory
- ___ SYP 2450.....Global Society
- ___ SOW 1005Global Perspectives of Social Services
- ___ SOW 1130Race and Cultural Inclusion in Social Work
- ___ WOH 2012 & D.....History of Civilization 1 **(WAC) ++**
- ___ WOH 2022.....History of Civilization 2
- ___ WST 2351Gender and Climate Change

\S Writing Across the Curriculum (WAC)/Gordon Rule

Students must take four (4) WAC courses. Must earn a "C" or better.

Required: ENC1101 & ENC1102 or allowable substitute.

We recommend two additional WAC courses come from these courses: ANT 2000, PHI 2010, WOH 2012, LIT 2010, LIT 2030, LIT 2040, LIT 2070 or LIT 2931. See advisor for additional details.

FOUNDATIONS OF HUMANITIES

(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

- ___ ARH 2000Art Appreciation
- ___ MUL 2010.....Music Appreciation
- ___ PHI 2010 & D.....Introduction to Philosophy **(WAC) ++**
- ___ THE 2000Theatre Appreciation

Group B

- ___ ARC 2208.....Culture & Architecture
- ___ DAN 2100Appreciation of Dance
- ___ FIL 2000 & D.....Film Appreciation
- ___ HUM 2471Racism and Anti-Racism
- ___ LIT 2010.....Interpretation of Fiction **(WAC) ++**
- ___ LIT 2030.....Interpretation of Poetry **(WAC) ++**
- ___ LIT 2040.....Interpretation of Drama **(WAC) ++**
- ___ LIT 2070.....Interpretation of Creative Nonfiction **(WAC) ++**
- ___ LIT 2100.....Introduction to World Literature
- ___ LIT 2931.....Special Topics in Literature **(WAC) ++ Ω**
- ___ SPC 2608Public Speaking \pm

Requirement Information

NOTE: All Engineering 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 in no more than two attempts:

- **Electrical, Ocean, Mechanical, Civil, Environmental, & Computer Engineering:** MAC 2311 & PHY 2048
- **Computer Science & Geomatics:** MAC 2311

Advising Information

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

Legend

- +** - ENC 1101 is a prerequisite.
- ++** - Two Foundations of Written Communications classes are required before taking this course.
- \S** - Sophomore standing (30 credits earned) is a requirement to take this course.
- ‡** - Co-requisite of College Algebra (MAC 1105) or a prerequisite of Introductory Chemistry (CHM 1025).
- \pm** - Starting Spring 2022
- Ω** - Starting Spring 2023
- \diamond** - See information box below regarding Civic Literacy Requirement
- WAC** - (WAC) Writing across the curriculum course.

STUDENTS ASSUME RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS

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

Civic Literacy Requirement

<https://www.fau.edu/ugstudies/civic-literacy-requirement/>

Beginning in Fall 2018, students entering a Florida public institution as a degree-seeking student for the first time needs to demonstrate civic literacy through either taking a certain course (AMH 2020 or POS 2041) or passing an assessment exam. Beginning in Summer 2021, Florida Legislature amended the statute and now requires students to complete **both** a civic literacy course (AMH 2020 or POS 2041) and an assessment exam.

MAJOR REQUIREMENTS

(All required major courses must earn a "C" or better)
Engineering students must stick to the core curriculum.

___ EGN 1002 & L Fundamentals of Engineering [**Must be taken freshman year**] (**NOT** required for Computer Science majors)

**** SCIENCE REQUIREMENTS BY MAJOR

(All science courses must earn a "C" or better)

Computer, Electrical, Mechanical, and Ocean Engineering:

- ___ CHM 2045 & L.....General Chemistry 1 (4 cr. w/Lab) ‡ (**only REQUIRED for MECHANICAL and OCEAN**)
- ___ PHY 2048 & LGeneral Physics 1 (4 or 5 cr. w/ Lab) * (**REQUIRED**)
- ___ PHY 2049 & LGeneral Physics 2 (4 or 5 cr. w/ Lab) (**REQUIRED**) or PHY 2044 & L...PHYSICS FOR ENGINEERS 2 (4 cr. w/ Lab)

Civil and Environmental Engineering:

- ___ CHM 2045 & L.....General Chemistry 1 (4 cr. w/Lab) ‡ (**REQUIRED**)
- ___ PHY 2048 & LGeneral Physics 1 (4 or 5 cr. w/ Lab) * (**REQUIRED**)

Civil Engineering must also choose 1 from Science 1:

- ___ BSC 1010 & L.....Biological Principles (4 credits including Lab)
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab) (**RECOMMENDED**)

And must also choose 1 from Science 2:

- ___ BSC 1010 & L.....Biological Principles (4 credits including Lab) **
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab) **
- ___ PHY 2049 & LGeneral Physics 2 (4 or 5 cr. w/ Lab) or PHY 2044 & L...PHYSICS FOR ENGINEERS 2 (4 cr. w/ Lab)
- ___ CHM 2046 & L.....General Chemistry 6 (4 cr. w/Lab) ‡

***May not be used to satisfy Science 2 if used to satisfy Science 1*

Environmental Engineering majors must also take:

- ___ CHM 2046 & L...General Chemistry 2 (4 cr. w/Lab) ‡ (**REQUIRED**)

And must also choose 1 from:

- ___ BSC 1010 & L.....Biological Principles (4 credits including Lab)
- ___ BSC 1011 & L.....Biodiversity (4 credits including Lab)

And must also choose 1 from:

- ___ GEO 2200C.....Intro to Physical Geography
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab)

Geomatics Engineering majors must take:

- ___ PHY 2048 & L.....General Physics 1 (4 or 5 cr. w/ Lab) * (**REQUIRED**)
- ___ GEO 2200C.....Intro to Physical Geography

And must also choose 1 from Science 1:

- ___ CHM 2045 & L.....General Chemistry 1 (4 cr. w/Lab) ‡
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab)

And must also choose 2 from Science 2:

- ___ ANT 2511 & L.....Intro to Biological Anthropology (4 credits w/Lab)
- ___ BSC 1010 & L.....Biological Principles (4 credits w/Lab)
- ___ BSC 1011 & L.....Biodiversity (4 credits w/Lab)
- ___ BSC 2085 & L.....Anatomy & Physiology 1 (4 credits including Lab)
- ___ CHM 2045 & L.....General Chemistry 1 (4 cr. w/Lab) ‡ **
- ___ CHM 2032 & L.....Chemistry for Health Sciences (4 cr. w/Lab)
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab) **
- ___ PHY 2053 & L.....College Physics 1 (4 credits w/ Lab)

***May not be used to satisfy Science 2 if used to satisfy Science 1*

Computer Science majors must choose 2 from the following:

- ___ CHM 2045 & L.....General Chemistry 1 (4 cr. w/Lab) ‡
- ___ BSC 1010 & L.....Biological Principles (4 credits including Lab)
- ___ GLY 2010C & D.....Physical Geology (4 cr. including Lab)
- ___ PHY 2048 & LGeneral Physics 1 (4 or 5 cr. w/ Lab)
- ___ PHY 2049 & LGeneral Physics 2 (4 or 5 cr. w/ Lab) or PHY 2044 & L..... PHYSICS FOR ENGINEERS 2 (4 cr. w/ Lab)