FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2020 – 2021

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

PRE-PROFESSIONAL ENGINEERING PROGRAM (2020-2021) 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:

English Department
___ ENC 1939 +.....Special Topic: College Writing
___ ENC 2452 +....Honors Composition for Science

History Department
___ 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.
PRETEST IS REQUIRED BEFORE TAKING YOUR FIRST MATH COURSE

Group A
___ MGF 1106......Math for Liberal Arts 1
___ MGF 1107......Math for Liberal Arts 2
___ MAC 1105......College Algebra
___ 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 1147......Precalculus Algebra & Trigonometry (4 credits)
___ MAC 2210......Intro Calculus w/Applications (4 credits) *(Permit Only)*
___ MAC 2233......Methods of Calculus
___ 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

Group B

Physics Department
___ PHY 2049 & L *(Required)*
General Physics 2
(4 or 5 credits incl. Lab) *

Group B

Physics Department
___ PHY 2048 & L *(Required)*
General Physics 1
(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.

**SEE SCIENCE REQUIREMENTS BY MAJOR ON PAGE 3**
### FOUNDATIONS IN GLOBAL CITIZENSHIP
(6 credit hours required)
Student must choose two (2) courses from among the following:

**Anthropology Department**
___ ANT 2410 .............. Culture and Society

**Curriculum, Culture & Education Department**
___ EDF 2854 .............. Educated Citizen in Global Context

**Geosciences Department**
___ GEA 2000 .............. World Geography

**Political Science Department**
___ INR 2002 ................ Introduction to World Politics

**Languages, Linguistics, & Comparative Literature Department**
___ LAS 2000 ................ Intro to Caribbean & Latin American Studies
___ LIN 2607 .............. Global Perspectives on Language

**Sociology Department**
___ SYP 2450 .............. Global Society

**Social Work Department**
___ SOW 1005 .............. Global Perspectives of Social Services

**History Department**
___ WOH 2012 & D ...... History of Civilization 1 (WAC) ++
___ WOH 2022 .............. History of Civilization 2

### 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**

**Visual Art & Art History Department**
___ ARH 2000 .............. Art Appreciation (P/F)

**Music Department**
___ MUL 2010 .............. Music Appreciation

**Philosophy Department**
___ PHI 2010 & D ...... Introduction to Philosophy (WAC) ++

**Theatre & Dance Department**
___ THE 2000 .............. Theatre Appreciation

**Group B**

**Architecture Department**
___ ARC 2208 .............. Culture & Architecture

**Theatre & Dance Department**
___ DAN 2100 .............. Appreciation of Dance

**School of Communication & Multimedia Studies**
___ FIL 2000 & D ........ Film Appreciation

**Languages, Linguistics, & Comparative Literature Department**
___ LIT 2100 .............. Introduction to World Literature

**English Department**
___ 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) ++

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**STUDENTS ASSUME RESPONSIBILITY FOR MEETING ALL GRADUATION REQUIREMENTS**

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

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**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.
* - MAC 2311 is a prerequisite for this course.
‡ - 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.

**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.

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

https://myfau.fau.edu

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**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.*
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)

____ PHY 2048 & L........ General Physics 1 (4 or 5 cr. w/ Lab) *(REQUIRED)
** PHY 2049 & L ........ General Physics 2 (4 or 5 cr. w/ Lab) *(REQUIRED) or PHY 2044 & L...PHYSICS FOR ENGINEERS 2 (4 cr. w/ Lab)

**** SCIENCE REQUIREMENTS BY MAJOR
(All science courses must earn a “C” or better)

Computer, Electrical, Mechanical, and Ocean Engineering:
____ CHM 2045 & L & D General Chemistry 1 (4 cr. w/Lab) *(REQUIRED)
____ PHY 2048 & L........ General Physics 1 (4 or 5 cr. w/ Lab) *(REQUIRED)
____ PHY 2049 & L........ General 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 & L....... General Physics 1 (4 or 5 cr. w/ Lab) *(REQUIRED)

Civil Engineering must also choose 1 from Science 1:
____ BSC 1010 & L & D...Biological Principles (4 credits including Lab & Discussion) 
____ GLY 2010C & D... …Physical Geology (4 cr. including Lab) (RECOMMENDED)

And must also choose 1 from Science 2:
____ BSC 1010 & L & D...Biological Principles (4 credits including Lab & Discussion) **
____ GLY 2010C & D ...Physical Geology (4 cr. including Lab) **
____ PHY 2049 & L....... General 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 & Lab...General Chemistry 2 (4 cr. w/Lab) *(REQUIRED)

And must also choose 1 from:
____ BSC 1010 & L & D...Biological Principles (4 credits including Lab & Discussion)
____ BSC 1011 & L & D...Biodiversity (4 credits including Lab & Discussion)

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...............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 & D...Biological Principles (4 credits w/Lab & Discussion)
____ BSC 1011 & L & D...Biodiversity (4 credits w/Lab & Discussion)
____ BSC 2085 & L.........Anatomy & Physiology 1 (4 credits including Lab & Discussion)
____ 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:
____ PHY 2048 & L....... General Physics 1 (4 or 5 cr. w/ Lab) *(REQUIRED)
____ PHY 2049 & L....... General Physics 2 (4 or 5 cr. w/ Lab) *(REQUIRED) or PHY 2044 & L....... PHYSICS FOR ENGINEERS 2 (4 cr. w/ Lab)

Computer Science majors must also choose 1 from:
____ CHM 2045 & L....... General Chemistry 1 (4 cr. w/Lab) ‡
____ BSC 1010 & L & D...Biological Principles (4 credits including Lab & Discussion)
____ GLY 2010C..............Physical Geology (4 cr. including Lab)
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 in no more than two attempts:

- **Electrical and Computer Engineering**: MAC 2311 & MAC 2312 or PHY 2048
- **Ocean, Mechanical, Civil, Environmental**: MAC 2311 & PHY 2048
- **Computer Science**: COP 2220 & MAC 1147 or COP 2220 & MAC 2210
- **Geomatics**: MAC 2311

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