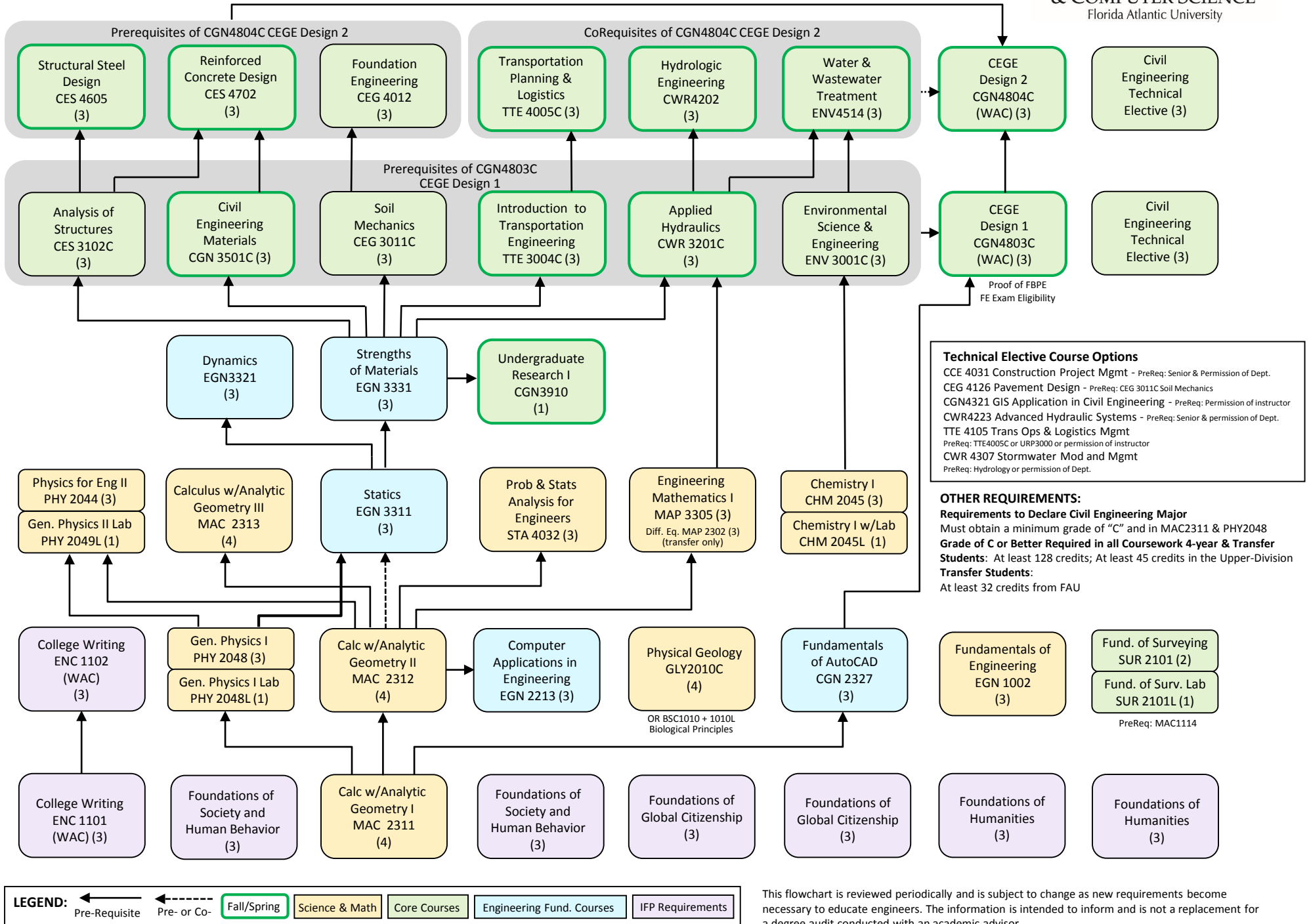


Bachelor of Science in Civil Engineering

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This flowchart is reviewed periodically and is subject to change as new requirements become necessary to educate engineers. The information is intended to inform and is not a replacement for a degree audit conducted with an academic advisor.

FLORIDA ATLANTIC UNIVERSITY – INTELLECTUAL FOUNDATION PROGRAM 2015 – 2016

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

PRE-PROFESSIONAL ENGINEERING PROGRAM (2015-2016)

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 1930+ University Honors Seminar in Writing (**Permit Only**)

___ ENC 1939+ Special Topic: College Writing

___ ENC 2452+ Honors Composition for Science

Anthropology Department

___ ANT 1471+ Cultural Difference in a Globalized Society

History Department

___ HIS 2050+ Writing History: The American Revolution

Nursing Department (Department Permission Required)

___ NSP 1195+ Being Cared For: Reflections from Other Side of Bed

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

FOUNDATIONS OF SCIENCE & THE NATURAL WORLD

(6 credit hours required - **One of the courses must have a lab**)

Student must take two of the following courses, one must be from group A.

The second course may be from group A or group B.

Grade of “C” or higher is required

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

Group A

Biology Department

___ BSC 1005 & L Life Science (3 credits including Lab)

___ BSC 1010 & L & D .. Biological Principles (4 credits including Lab & Dis)

___ BSC 2085 & L Anatomy & Physiology 1 (4 credits including Lab) *

Chemistry Department

___ CHM 1020C Contemporary Chemical Issues

___ **CHM 2045 & L General Chemistry 1 (4 cr. w/Lab) ‡ (REQUIRED)**

Geosciences Department

___ ESC 2000 Blue Planet (**online course**)

Physics Department

___ AST 2002 Introduction to Astronomy (**P/F**)

___ **PHY 2048 & L General Physics 1 (5 cr. w/ Lab) ** (REQUIRED)**

___ PHY 2053 College Physics 1 (4 credits) ***

Group B

Anthropology Department

___ ANT 2511 & L Intro to Biological Anthropology (4 cr. Incl. Lab)

Biology Department

___ BSC 1011 & L & D .. Biodiversity (4 cr. including Lab & Discussion)

Chemistry Department

___ CHM 2032 & L Chem. for Health Sciences (4 cr. including Lab)

___ CHM 2083 Chemistry in Modern Life (**P/F**)

Engineering Dean Department

___ ETG 2831 Nature: Inter. of Sci., Eng., & the Humanities

Geosciences Department

___ GLY 2010C Physical Geology (4 cr. including Lab)

___ GLY 2100 History of Earth and Life

___ MET 2010 & D Weather and Climate

Physics Department

___ **PHY 2049 & L General Physics 2 (5 cr. w/ Lab) (REQUIRED)**

___ PSC 2121 Physical Science

FOUNDATIONS OF MATHEMATICS & QUANTITATIVE REASONING

(6 credit hours required – Grade of “C” or higher is required)

Student must take two of the following courses, one 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

___ STA 2023 Introductory Statistics

___ **MAC 2311 Calc. w/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 1114 Trigonometry

___ MAC 1147 Precalculus Algebra & Trigonometry (5 credits)

___ MAC 2233 Methods of Calculus

___ **MAC 2312 Calc. w/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 two of the following courses, one must be from group A.

The second course may be from group A or group B.

Group A

History Department

___ AMH 2010 United States History Since 1877 (**P/F**)

Anthropology Department

___ ANT 2000 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

Group B

History Department

___ AMH 2020 United States History to 1877 (**P/F**)

Economics Department

___ ECO 2023 Microeconomic Principles §

___ ECP 2002 Contemporary Economic Issues

Exceptional Student Education Department

___ EEX 2091 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 2010 Social Problems

Urban & Regional Planning Department

___ URP 2051 Designing the City

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 (**online course**)

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 two of the following courses, one must be from group A.

The second course may be from group A or group B.

Group A

Visual Art & Art History Department

___ ARH 2000Art Appreciation (**P/F**)

Music Department

___ MUL 2010.....Music Appreciation

Philosophy Department

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

Theatre & Dance Department

___ THE 2000Theatre Appreciation

Group B

Architecture Department

___ ARC 2208.....Culture & Architecture

Theatre & Dance Department

___ DAN 2100Appreciation 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**) ++

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.

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**)

SCIENCE REQUIREMENTS BY MAJOR

(All required science courses must earn a “C” or better)

Civil, Electrical, Geomatics, Mechanical, Ocean, and Computer Engineering:

- ___ CHM 2045 & LGeneral Chemistry 1 (4 cr. w/Lab) ‡ (**REQUIRED**)
- ___ PHY 2048 & LGeneral Physics 1 (5 cr. w/ Lab) ** (**REQUIRED**)
- ___ PHY 2049 & LGeneral Physics 2 (5 cr. w/ Lab) (**REQUIRED**)

Civil Engineering majors must also choose 1 from:

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

Computer Science:

- ___ PHY 2048 & LGeneral Physics 1 (5 cr. w/ Lab) ** (**REQUIRED**)
- ___ PHY 2049 & LGeneral Physics 2 (5 cr. w/ Lab) (**REQUIRED**)

Computer Science majors must also choose 1 from:

- ___ CHM 2045 & LGeneral 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” 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 & MAC 2312 = 2.5 GPA **or** MAC 2311 & 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 & 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:

Nicole Raymond
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
Email address: engineering-advising@fau.edu