

Undergraduate Major Map

Catalog Year 2017
College / School Engineering
Major Environmental Engineering - BS
Track / Concentration
Career Path Four Year Freshman

Fall Term 2017

Math placement is based on ALEKS scores. The College of Engineering and Computing requires placement into MAC 2311 to be accepted into the Environmental Engineering program. If you do not place into MAC2311, see your advisor to discuss appropriate courses and major requirements.

Term GPA: 2
Term Hours: 15
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-------------------------------|-----------------|------------------------|--------------|--------------------|--|
| UCC First Year Experience | SLS 1501 | First Year Exper | 1 | | |
| UCC Communication | ENC 1101 | Writing and Rhetoric I | 3 | | |
| UCC Natural Science Group One | CHM 1045 | Gen Chemistry I | 3 | C+ | Also satisfies UCC Natural Science Group 1. (1) See Endnotes |
| UCC Natural Science Group One | CHM 1045L | Gen Chem Lab I | 1 | C+ | Also satisfies UCC Natural Science Group 1 Lab. (1) See Endnotes |
| UCC Mathematics Group One | MAC 2311 | Calculus I | 4 | | Also satisfies UCC Mathematics Group 1. (1) See Endnotes |
| UCC Social Science Group One | | | 3 | | (1) See Endnotes |

Spring Term 2018

Term GPA: 2
Term Hours: 16
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-------------------------------|-----------------|-------------------------|--------------|--------------------|--|
| Major Physical Sciences | CHM 1046 | Gen Chemistry II | 3 | C+ | |
| Major Physical Sciences | CHM 1046L | Gen Chem Lab II | 1 | C+ | |
| UCC Communication | ENC 1102 | Writing and Rhetoric II | 3 | | |
| UCC Mathematics Group Two | MAC 2312 | Calculus II | 4 | B | Also satisfies UCC Mathematics - Group Two course. (1) See Endnotes |
| UCC Natural Science Group One | PHY 2048 | Physics W/Calculus I | 4 | C+ | Also satisfies UCC Natural Science - Group One requirement. (1) See Endnotes |
| UCC Natural Science Group One | PHY 2048L | General Phys Lab I | 1 | C+ | Also satisfies UCC Natural Science - Group One lab requirement. (1) See Endnotes |

Undergraduate Major Map

Summer Term 2018

Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See Endnotes

Term GPA: 2
Term Hours: 7
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|---------------------|-----------------|--------------------|--------------|--------------------|--|
| Biological Sciences | BSC 1010 | General Biology I | 3 | | Also satisfies UCC Natural Science - Group One requirement. (1) See endnotes |
| Biological Sciences | BSC 1010L | Gen Biology Lab I | 1 | | Also satisfies UCC Natural Science - Group One lab requirement. (1) See endnotes |
| UCC Arts | | | 3 | | (1) See endnotes - SPC2608 recommended |

Fall Term 2018

PHY2049 Lab is not required for this program.

EGS1041 may be used to satisfy the Global Learning and UCC Social Science - Group Two requirement. (2) See Endnotes

Term GPA: 2
Term Hours: 15

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|---------------------------------|-----------------|----------------------|--------------|--------------------|---|
| UCC Mathematics Group Two | MAC 2313 | Multivariable Calc | 4 | C+ | |
| UCC Natural Science - Group Two | PHY 2049 | Physics W/Calc II | 4 | C+ | |
| Engineering Drawing | EGN 1110C | Engineering Drawing | 3 | | Course required if not previously taken. |
| General Core Required | EGS 2030 | Ethics/Legal Aspects | 1 | | |
| UCC Social Science Group Two | | | 3 | | (1), (2) See endnotes - EGS1041 recommended to also satisfy Global Learning Foundations requirement |

Spring Term 2019

ENV 3001 may be used to satisfy the Global Learning requirement. (2) See Endnotes

Term GPA: 2
Term Hours: 14
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-----------------------|-----------------|------------------------|--------------|--------------------|--|
| General Core Required | CGN 2420 | Computer Tools for Eng | 3 | | |
| Required Courses | ENV 3001 | Intro Enviro Engrng | 3 | | This course may be used to satisfy the Global Learning requirement. (2) See Endnotes |
| Required Courses | ENV 3001L | Envir Lab I | 1 | | |
| Major Mathematics | MAP 2302 | Differential Equat | 3 | | |
| General Electives | EGM 3503 | Applied Mechanics | 4 | | |

Undergraduate Major Map

Summer Term 2019

Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See Endnotes

Term GPA: 2
Term Hours: 4
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|----------------|-----------------|--------------------|--------------|--------------------|--|
| Earth Sciences | | | 3 | | Check Catalog and/or PDA for courses that satisfy this requirement. Can be used to satisfy UCC Natural Science Group 2 requirement. (1) See Endnotes |
| Earth Sciences | | | 1 | | Check Catalog and/or PDA for courses that satisfy this requirement. Can be used to satisfy UCC Natural Science Group 2 requirement. (1) See Endnotes |

Fall Term 2019

Term GPA: 2
Term Hours: 14
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|--------------------------|-----------------|------------------------------|--------------|--------------------|---|
| Engineering Sciences | CWR 3201 | Fluid Mechanics | 3 | | |
| Engineering Sciences | CWR 3201L | Fluid Mechanics Lab | 1 | | |
| Engineering Sciences | EGN 3343 | Thermodynamics I | 3 | | |
| Major Mathematics | STA 3033 | Prob & Stat For Cs | 3 | | |
| General Electives | ENV 3081 | Career Orientation and Pro M | 1 | | |
| UCC Humanities Group One | | | 3 | | Recommended: AMH 2020 Satisfies GRW (1) (5) See Endnotes |

Spring Term 2020

Term GPA: 2
Term Hours: 15
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-----------------------|-----------------|------------------------|--------------|--------------------|--------------|
| Required Courses | CWR 3540 | Water Resources Eng. | 3 | | |
| Required Courses | ENV 4513 | Chem Env Eng | 3 | | |
| General Core Required | ENC 3213 | Prof and Tech Writing | 3 | | |
| Required Courses | ENV 4351 | Solid Haz Waste Mangmt | 3 | | |
| Required Courses | ENV 4551 | Wastewater Trtmt Eng | 3 | | |

Undergraduate Major Map

Summer Term 2020

Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See Endnotes

Term GPA: 2
Term Hours: 7
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|----------------------------|-----------------|--------------------|--------------|--------------------|--|
| Biological Sciences | | | 3 | | Check Catalog and/or PDA for courses that satisfy this requirement |
| Biological Sciences | | | 1 | | Check Catalog and/or PDA for courses that satisfy this requirement |
| UCC Humanities - Group Two | | | 3 | | Recommended: ARC 2701 or WOH 2001 Satisfies GRW (1) (5) See Endnotes |

Fall Term 2020

Term GPA: 2
Term Hours: 13
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-----------------------|-----------------|---------------------|--------------|--------------------|--|
| Required Courses | ENV 4005L | ENV Lab II | 1 | | |
| Required Courses | ENV 4401 | Water Supply Engrg | 3 | | |
| General Core Required | EGN 3613 | Engineering Economy | 3 | | |
| Suggested Electives | | | 3 | | Check Catalog and/or PDA for courses that satisfy this requirement |
| Suggested Electives | | | 3 | | Check Catalog and/or PDA for courses that satisfy this requirement |

Spring Term 2021

Term GPA: 2
Term Hours: 10
Cum GPA: 2

| Course Group | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|---------------------|-----------------|---------------------------|--------------|--------------------|---|
| Required Courses | ENV 4101 | Air Pollution Engr | 3 | | |
| Suggested Electives | | | 3 | | Check Catalog and/or PDA for courses that satisfy this requirement. |
| EnvE Seminar | ENV 4960 | Environmental Eng Seminar | 1 | | |
| Required Courses | ENV 4891 | ENV Senior Design | 3 | | |

Summer Term 2021

Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See Endnotes

Term GPA: 2
Cum GPA: 2

General Requirements

Undergraduate Major Map

Critical Indicator is the minimum grade indicated in specific courses to demonstrate proficiency and progress in major. Earning less than the minimum grade is a trigger for a conversation with advisor

GENERAL UNIVERSITY REQUIREMENTS

See your Panther Degree Audit (PDA) for a real-time update on your academic career progress and additional information on University and major requirements at <http://my.fiu.edu>

(1) UCC: Students must meet the University Core Curriculum (UCC) requirements. For a full list of UCC courses, see <http://undergrad.fiu.edu/advising/university-core-curriculum.html> or speak with your advisor. Students requesting to be transient must receive permission from the Dean of Undergraduate Education.

(2) Global Learning: Freshmen entering FIU Summer B 2010 or later must take at least two Global Learning (GL) designated courses at FIU. See <http://goglobal.fiu.edu>. Courses must be:

- 1 GL foundation course, which must be taken from the University Core Curriculum (UCC).

- 1 GL discipline-specific course (3000/4000 level)

(3) Summer Hours Requirement: All students entering FIU or any university within the State University System (SUS) of Florida with fewer than 60 credit hours are required to earn at least nine credit hours prior to graduation by attending one or more summer terms at a university in the SUS.

(4) Gordon Rule: All Gordon Rule courses (i.e., UCC Communication, UCC Mathematics, and Gordon Rule with Writing (GRW) courses) must be completed with a minimum grade of "C". This requirement must be fulfilled within the first 60 credits. Students are required to complete at least two Gordon Rule with Writing (GRW) designated courses.

(5) Foreign Language Requirement for Graduation (FLENT/FLEX): A student who did not complete two years of the same foreign language in high school or at a post-secondary institution must successfully complete 8-10 credit hours of instruction in one foreign language prior to graduation. Exceptions include appropriate CLEP, AP, IB, TOEFL, or transfer credit. Contact your advisor for more information.

(6) UCC Mathematics: Math courses are categorized into either Group One or Group Two. One math course from each group is required unless the first math taken is from Group Two and has an immediate prerequisite in Group One. In this case, students will take two Math courses from Group Two. However, one of the two Math courses must have a MAC, MGF, or MTG prefix.

This document only lists SELECTED requirements. See your Panther Degree Audit for a full list of UCC and major requirements at <http://my.fiu.edu>.

College of Engineering and Computer Science: Selected Major Requirements

Grades: A minimum grade of 'C' is required in all writing courses, physics, chemistry, biology, and mathematics courses. A minimum grade of 'C' is required of all Environmental Engineering courses and prerequisite courses. This document only lists SELECTED requirements. See your Panther Degree Audit for a full list of College of Engineering and major requirements at <http://my.fiu.edu>.

* Choose 1 Earth Science Elective with corresponding lab (e.g. GLY 1010 + GLY 1010L; GLY 3039 + GLY 3039L). See Catalog or Panther Degree Audit for a full list of options.

** Choose 1 Biology Elective with corresponding lab (e.g. EVR 3013 + EVR 3013L; MCB 2000, MCB 2000L). See Catalog or Panther Degree Audit for full list of options.

*** Choose 3 Technical Electives (e.g. CEG4011, CGN 4321). See Catalog or Panther Degree Audit for full list of options.