

## Undergraduate Major Map

**Catalog Year** 2020  
**College / School** Engineering  
**Major** Electrical Engineering - BS  
**Track / Concentration**  
**Career Path** Two Year Transfer

### Fall Term 2020

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

\* TO DECLARE YOUR MAJOR IN ENGINEERING YOU MUST BE 'CALCULUS I PASSED'. FOR DETAILED INFORMATION GO TO: <https://cec.fiu.edu/advising/admission-policy/>

IN ORDER TO ADVANCE SWIFTLY, GRADUATE ON TIME AND AVOID EXCESS CREDIT SURCHARGES TRANSFER STUDENTS ARE STRONGLY ENCOURAGED TO COMPLETE ALL LOWER-LEVEL PRE-REQUISITES FOR THE PROGRAM \*\*\*PRIOR\*\*\* TO TRANSFERRING TO FIU. THE LOWER LEVEL PRE-REQUISITE COURSES INCLUDE: MAC 2281, MAC 2282, MAC 2283, PHY 2048, PHY 2049, PHY 2049L, (BSC 2010/BSC 2010L \*\*\*OR\*\*\* CHM 1045/CHM 1045L) EEL 2880, SPC 2608. THE PLAN BELOW ASSUMES THE ABOVE COURSES HAVE BEEN COMPLETED BEFORE TRANSFERRING.

| Course Group             | Course Required | Course Description      | Credit Hours | Critical Indicator | Course Notes   |
|--------------------------|-----------------|-------------------------|--------------|--------------------|--|
| Mathematics and Sciences | MAP 2302        | Differential Equat      | 3            | C                  | Prerequisite: MAC 2282 or MAC 2312   |
| ECE Courses              | EEL 3110        | Circuit Analysis        | 3            | C                  | Prerequisites: MAC 2282 or MAC 2312, PHY 2049, PHY 2049L, EGN 1002 Corequisites: EEL 2880, MAP 2302, EEL 3110L |
| ECE Courses              | EEL 3110L       | Circuits Lab            | 1            | C                  | Prerequisites: MAC 2282 or MAC 2312, PHY 2049, PHY 2049L, EGN 1002 Corequisites: EEL 2880, MAP 2302, EEL 3110L |
| ECE Courses              | EEL 3712        | Logic Design I          | 3            | C                  | Corequisites: EEL 3110, EEL 3110L, EEL 3712L   |
| ECE Courses              | EEL 3712L       | Logic Design I Lab      | 1            | C                  | Corequisites: EEL 3110, EEL 3110L, EEL 3712  |
| ECE Courses              | EEL 3120        | Intro to Linear Systems | 3            |                    | Prerequisites: MAC 2312, PHY 2049, PHY 2049L, EGN 1002   |

### Spring Term 2021

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

| Course Group                             | Course Required | Course Description  | Credit Hours | Critical Indicator | Course Notes  |
|--|-----------------|---------------------|--------------|--------------------|---|
| Additional Required Engineerin           | ESI 3215        | Eval Engr Data I    | 3            |                    | Prerequisite: MAC 2281 or MAC 2312                        |
| ECE Courses                              | EEL 3135        | Signals And Systems | 3            |                    | Prerequisite: EEL 3120; Co-requisite: MAP 2302.           |
| Electrical Engineering (EE) Program Core | EEE 3303        | Electronics I       | 3            | C                  | Prerequisites: EEL 3110, EEL 3110L Corequisite: EEE 3303L |
| Electrical Engineering (EE) Program Core | EEE 3303L       | Electronics I Lab   | 1            | C                  | Prerequisites: EEL 3110, EEL 3110L Corequisite: EEE 3303  |
| Electrical Engineering (EE) Program Core | EEL 4410        | Fields & Waves      | 3            | C                  | Prerequisites: EEL 3110, EEL 3110L, MAC 2313              |

## Undergraduate Major Map

### Summer Term 2021

**Term Hours:** 9  
**Cum GPA:** 2

(\*) For list of approved electives see advisor or back of flowchart for your major.

| Course Group                         | Course Required | Course Description  | Credit Hours | Critical Indicator | Course Notes |
|--------------------------------------|-----------------|---------------------|--------------|--------------------|--------------|
| Additional Required Engineerin       | EGN 3613        | Engineering Economy | 3            |                    |              |
| Concentration Elective Total Credits |                 |                     | 3            |                    | (*)          |
| Concentration Elective Total Credits |                 |                     | 3            |                    | (*)          |

### Fall Term 2021

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

(\*) For list of approved electives see advisor or back of flowchart for your major.

| Course Group                         | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|--------------------------------------|-----------------|--------------------|--------------|--------------------|--------------|
| Concentration Elective Total Credits |                 |                    | 3            |                    | (*)          |
| Concentration Elective Total Credits |                 |                    | 3            |                    | (*)          |
| Concentration Elective Total Credits |                 |                    | 3            |                    | (*)          |
| Concentration Elective Total Credits |                 |                    | 3            |                    | (*)          |
| Concentration Elective Total Credits |                 |                    | 3            |                    | (*)          |

## Undergraduate Major Map

| <b>Spring Term 2022</b>   |                 |                    |              |                    | <b>Term Hours:</b> 14   |
|---|-----------------|--------------------|--------------|--------------------|---|
| (*) For list of approved electives see advisor or back of flowchart for your major. |                 |                    |              |                    | <b>Cum GPA:</b> 2   |
| Course Group  | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes  |
| Senior Design   | EEL 4920        | Senior Design I    | 2            |                    | Prerequisite: 100 Electrical Engineering Major Credits (Including All EE Core Courses Must be Complete). See Advisor for Permission. Satisfies GL Discipline Specific Requirement |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)<br>(*)  |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)   |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)   |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)   |

| <b>Summer Term 2022</b>   |                 |                    |              |                    | <b>Term Hours:</b> 11                |
|---|-----------------|--------------------|--------------|--------------------|--------------------------------------|
| (*) For list of approved electives see advisor or back of flowchart for your major. |                 |                    |              |                    | <b>Cum GPA:</b> 2                    |
| Course Group  | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes                         |
| Senior Design   | EEL 4921C       | Senior Design II   | 2            |                    | Prerequisite: EEL 4920 (C or better) |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)                                  |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)                                  |
| Concentration Elective Total Credits  |                 |                    | 3            |                    | (*)                                  |

### General Requirements

\*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)

## Undergraduate Major Map

---

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<sub>+</sub>. 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.

Grades: Students must earn a minimum grade of `C<sub>+</sub> in all math, physics, and chemistry.

For specific grade requirements, prerequisites, and course offerings please consult your academic advisor.

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>