

## Undergraduate Major Map

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

### Fall Term 2020

\* TO DECLARE YOUR MAJOR IN BIOMEDICAL ENGINEERING YOU SATISFY THE FOLLOWING REQUIREMENTS:

-C or better in the following courses: MAC 2311 or MAC 2281, BSC 2010/L, PHY 2048/L, & CHM 1045/L

-2.5 combined GPA in all degree applicable math & science courses taken

-2.5 overall GPA

\* This 2-Year Plan assumes student has satisfied UCC 1000-2000 level requirements (i.e. via AA), most if not all Math & Science (MAC2311, MAC2312, MAC2313, MAP2302, BSC1010, BSC1010L, PHY2048, PHY2048L, PHY2049, PHY2049L, CHM1045, CHM1045L, CHM1046, and CHM1046L)

Term GPA: 2.5  
Term Hours: 17  
Cum GPA: 2

| Course Group           | Course Required | Course Description     | Credit Hours | Critical Indicator | Course Notes   |
|------------------------|-----------------|------------------------|--------------|--------------------|--|
| Engineering Required   | EGM 3503        | Applied Mechanics      | 4            |                    | Student may enroll in (EGN3311 & EGN3321) in order to fulfill this requirement |
| Engineering Required   | EEL 3110        | Circuit Analysis       | 3            |                    |  |
| Engineering Required   | EEL 3110L       | Circuits Lab           | 1            |                    |  |
| Engineering Math       | ESI 3215        | Eval Engr Data I       | 3            | B-                 | Student may enroll in STA3033 in order to fulfill this requirement             |
| General Electives      | BME 1054L       | Intro to BME Computing | 1            |                    |  |
| Major Required Science | CHM 2210        | Organc Chem I          | 4            | C                  | Minimum B required for Pre-Med   |
| Major Required Science | CHM 2210L       | Org Chem Lab I         | 1            |                    |  |

## Undergraduate Major Map

| Spring Term 2021                  |                 |                     |              |                    | Term GPA: 2.5   |
|-----------------------------------|-----------------|---------------------|--------------|--------------------|---|
|                                   |                 |                     |              |                    | Term Hours: 18  |
|                                   |                 |                     |              |                    | Cum GPA: 2  |
| Course Group                      | Course Required | Course Description  | Credit Hours | Critical Indicator | Course Notes  |
| BME Electives                     |                 |                     | 3            |                    | BCH3033 or CHM4304 with a minimum B grade is required for Pre-Med |
| Biomedical Engineering 3000 Level | BME 3721        | BME Data Eval Prin  | 3            | C+                 |   |
| Major Required Lower Level        | BME 2740        | BME Simulation      | 3            |                    |   |
| Major Required Lower Level        | BME 1008C       | Intro to Biomed Eng | 2            |                    |   |
| Engineering Required              | BME 4503C       | Medical Inst Design | 4            |                    |   |
| BME Electives                     |                 |                     | 3            |                    | CHM2211 & CHM2211L with minimum B grades are required for Pre-Med |

| Summer Term 2021                  |                 |                    |              |                    | Term GPA: 2.5   |
|-----------------------------------|-----------------|--------------------|--------------|--------------------|---|
|                                   |                 |                    |              |                    | Term Hours: 6   |
|                                   |                 |                    |              |                    | Cum GPA: 2  |
| Course Group                      | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes  |
| Biomedical Engineering 3000 Level | BME 3404        | Eng An Bio Sys II  | 3            |                    |   |
| BME Electives                     |                 |                    | 3            |                    | Upper division biology course with minimum B grade is recommended for Pre-Med |

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### Fall Term 2021

BME 4800 may be used to satisfy upper division Global Learning requirement. Please see your advisor. (2) See Endnotes

**Term GPA:** 2.5  
**Term Hours:** 15  
**Cum GPA:** 2

| Course Group                      | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-----------------------------------|-----------------|--------------------|--------------|--------------------|--------------|
| Biomedical Engineering 3000 Level | BME 3404        | Eng An Bio Sys II  | 3            | B                  |              |
| Biomedical Engineering 3000 Level | BME 3632        | BME Transport      | 3            |                    |              |
| Biomedical Engineering 4000 Level | BME 4100        | Biomaterials       | 3            | B                  |              |
| Biomedical Engineering 4000 Level | BME 4011        | Clinical Rotations | 1            |                    |              |
| Biomedical Engineering 4000 Level | BME 4800C       | Des Biomed Devices | 3            |                    |              |
| Biomedical Engineering 4000 Level | BME 4050L       | BME Lab I          | 1            |                    |              |
| Senior Design Project             | BME 4880        | Design Proj Org    | 1            |                    |              |

### Spring Term 2022

BME 4908 may be used to satisfy upper division Global Learning requirement. Please see your advisor. (2) See Endnotes

**Term GPA:** 2.5  
**Term Hours:** 13  
**Cum GPA:** 2

| Course Group                      | Course Required | Course Description | Credit Hours | Critical Indicator | Course Notes |
|-----------------------------------|-----------------|--------------------|--------------|--------------------|--------------|
| Biomedical Engineering 4000 Level | BME 4051L       | BME Lab II         | 1            |                    |              |
| Biomedical Engineering 4000 Level | BME 4930        | Undergrad Seminar  | 0            |                    |              |
| Senior Design Project             | BME 4908        | Senior Design Proj | 3            |                    |              |
| REQUIRED ELECTIVES                |                 |                    | 3            | C                  |              |
| REQUIRED ELECTIVES                |                 |                    | 3            | C                  |              |
| REQUIRED ELECTIVES                |                 |                    | 3            | C                  |              |

### General Requirements

\* The 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 the academic advisor.

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### GENERAL UNIVERSITY REQUIREMENTS

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> or see your academic advisor.

(1) Transfer students are assumed to have completed an Associates of Arts Degree from a Florida Public Institution or completed 60 credits and the University Core Curriculum Requirements. Those not meeting the above criteria will be required to meet the University's University Core Curriculum (UCC) requirements. In addition, the following courses are required of incoming transfer students:

(2) Global Learning Requirement for Transfers: Transfers entering FIU Fall 2011 or later are required to take two Global Learning courses.

Those transfer students who meet UCC requirements prior to entering FIU (e.g. those with an AA from a Florida public institution) must take:

2 Global Learning Courses, at least one of which must be a Discipline-Specific course. See advisor for list of approved Discipline-Specific courses within the major.

Those transfer students who do not meet UCC requirements prior to entering FIU must take:

1 Global Learning Foundations (University Core Curriculum) Course

1 Global Learning Discipline-Specific Course. See advisor for list of approved Discipline-Specific courses within the major.

Transfer courses may not be used to meet this FIU requirement. All Global Learning courses must be taken at FIU. For a list of Global learning courses: <http://goglobal.fiu.edu>

(3) Foreign Language Requirement for Graduation: Any student who did not complete two years of the same foreign language in high school or at a post-secondary institution must either place out of this requirement with an appropriate score on the CLEP exam, or must successfully complete 8-10 credit hours of instruction in one foreign language prior to graduation.

(4) College of Engineering/BME Department: Selected Requirements

Grades: Students must earn a minimum grade of "C" in all math, biology, physics, and chemistry courses. Students must earn a minimum of a "D-" in all major courses and maintain a minimum of a 2.0 cumulative GPA. Note: BME students must maintain a minimum Common Pre-requisite GPA of 2.5 in all of the MAC, BSC, PHY, and CHM courses listed.

For specific grade requirements, pre-requisites, and course offerings please consult your academic advisor.