

Undergraduate Major Map

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

Fall Term 2017

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

* CHM1045 & CHM1045L pre-requisite: Second year high school algebra or college algebra

Term GPA: 2.5
Term Hours: 18
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Major Required Science	CHM 1045	Gen Chemistry I	3	B-	
Major Required Science	CHM 1045L	Gen Chem Lab I	1		
Major Required Lower Level	BME 1008C	Intro to Biomed Eng	2		
UCC Communication	ENC 1101	Writing and Rhetoric I	3	C+	
Major Required Mathematics	MAC 2311	Calculus I	4	B-	Also satisfies UCC Mathematics - Group One. (1) See endnotes
UCC First Year Experience	SLS 1501	First Year Exper	1		
Major Required Science	BSC 1010	General Biology I	3		
Major Required Science	BSC 1010L	Gen Biology Lab I	1		

Spring Term 2018

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

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Major Required Science	CHM 1046	Gen Chemistry II	3	C+	
Major Required Science	CHM 1046L	Gen Chem Lab II	1		
UCC Communication	ENC 1102	Writing and Rhetoric II	3	C+	
Major Required Mathematics	MAC 2312	Calculus II	4	B-	Also satisfies UCC Mathematics - Group Two. (1) See endnotes
Major Required Science	PHY 2048	Physics W/Calculus I	4	C+	Also satisfies UCC Natural Science - Group One. (1) See endnotes
Major Required Science	PHY 2048L	General Phys Lab I	1		Also satisfies UCC Natural Science - Group One. (1) See endnotes
General Electives	BME 1054L	Intro to BME Computing	1	B	

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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: 2.5
Term Hours: 3
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Social Science Group One			3		

Fall Term 2018

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

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Major Required Science	CHM 2210	Organic Chem I	4	C+	Minimum B required for Pre-Med
Major Required Science	CHM 2210L	Org Chem Lab I	1		
Major Required Mathematics	MAC 2313	Multivariable Calc	4	C+	
Major Required Lower Level	PHY 2049L	General Phys Lab II	1		Also satisfies UCC Natural Science - Group Two. (1) See endnotes
Major Required Lower Level	PHY 2049	Physics W/Calc II	4	C+	Also satisfies UCC Natural Science - Group Two. (1) See endnotes
UCC Humanities Group One			3		May select course that meets the GRW requirement. (1), (4) See Endnotes

Spring Term 2019

Term GPA: 2.5
Term Hours: 15
Cum GPA: 3

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Major Required Lower Level	BME 2740	BME Simulation	3		
Major Required Mathematics	MAP 2302	Differential Equat	3	B-	
Engineering Math	EIN 3235	Eval Engr Data I	3	B-	Student may enroll in STA 3033 in order to fulfill this requirement
UCC Humanities - Group Two			3		May select course that meets the GRW requirement. (1), (4) See endnotes
REQUIRED ELECTIVES			3	C+	CHM2211 & CHM2211L with minimum B grades are required for Pre-Med

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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: 2.5
Term Hours: 3
Cum GPA: 3

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

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Social Science Group Two			3		

Fall Term 2019

Term GPA: 2.5
Term Hours: 14
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biomedical Engineering 3000 Level	BME 3403	Eng An Bio Sys I	3	B	
Biomedical Engineering 3000 Level	BME 3721	BME Data Eval Prin	3	C+	
Engineering Required	EEL 3110	Circuit Analysis	3	C+	
Engineering Required	EEL 3110L	Circuits Lab	1		
Engineering Required	EGM 3503	Applied Mechanics	4	C+	Student may enroll in EGN3311 and EGN3321 in order to fulfill this requirement

Spring Term 2020

Term GPA: 2.5
Term Hours: 14
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		
Biomedical Engineering 4000 Level	BME 4011	Clinical Rotations	1		
Engineering Required	BME 4503C	Medical Inst Design	4		
Biomedical Engineering 3000 Level	BME 3632	BME Transport	3		
REQUIRED ELECTIVES			3		BCH3033 or CHM4304 with a minimum B grade is required for Pre-Med

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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: 2.5
Term Hours: 3
Cum GPA: 2

SPC2608 may be used to satisfy UCC Arts requirement. (1) See endnotes

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Arts			3		

Fall Term 2020

Term GPA: 2.5
Term Hours: 11
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Biomedical Engineering 4000 Level	BME 4050L	BME Lab I	1		
Biomedical Engineering 4000 Level	BME 4100	Biomaterials	3		
Biomedical Engineering 4000 Level	BME 4800	Des Biomed Devices	3		
Senior Design Project	BME 4880	Design Proj Org	1		
REQUIRED ELECTIVES			3		Upper division biology course with minimum B grade is recommended for Pre-Med

Spring Term 2021

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		
Senior Design Project	BME 4908	Senior Design Proj	3		
Biomedical Engineering 4000 Level	BME 4930	Undergrad Seminar	0		
REQUIRED ELECTIVES			3		
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REQUIRED ELECTIVES			3		

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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: 2.5
Cum GPA: 2.25

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 please speak with your advisor or visit the below website for more information:
<http://undergrad.fiu.edu/advising/university-core-curriculum.html>

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.

(7) 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.

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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.