

Undergraduate Major Map

Catalog Year 2018
College / School Engineering
Major Computer Engineering - BS
Track / Concentration
Career Path Four Year Freshman

Fall Term 2018

* TO DECLARE YOUR MAJOR IN ENGINEERING YOU MUST BE 'CALCULUS I READY'.

* FOR DETAILED INFORMATION GO TO:

<https://cec.fiu.edu/advising/admission-policy/>

* CHM 1045/L pre-requisite: Second year high school algebra or college algebra.

Term GPA: 2.25

Term Hours: 15

Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Communication	ENC 1101	Writing and Rhetoric I	3		
Mathematics and Sciences	MAC 2311	Calculus I	4	C	(1) UCC Mathematics Group 1 Course. Pre-requisite(s): MAC 1140 and MAC 1114 or MAC 1147
UCC First Year Experience	SLS 1501	First Year Exper	1		
Mathematics and Sciences	CHM 1045	Gen Chemistry I	3	C	(1) UCC Natural Science Group 1. Pre-requisite: MAC 1105. Co-requisite: CHM 1045L
Mathematics and Sciences	CHM 1045L	Gen Chem Lab I	1		(1) UCC Natural Science Group 1. Pre-requisite: MAC 1105. Co-requisite: CHM 1045
UCC Humanities Group One			3		Recommended: HUM 1020 (1) See Endnotes

Spring Term 2019

PHY2048L (Physics w/ Calculus I Laboratory) is not required for Computer Engineering

Term GPA: 2.25

Term Hours: 16

Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Engineering Orientation	EGN 1002	Engineering Orient	2		
UCC Communication	ENC 1102	Writing and Rhetoric II	3		Prerequisite: ENC 1101
Mathematics and Sciences	MAC 2312	Calculus II	4	C	1.) Satisfies UCC Mathematics Group 2 Course requirement. Prerequisite: MAC 2311
Mathematics and Sciences	PHY 2048	Physics W/Calculus I	4	C+	Prerequisite for Engineering Majors: MAC 2311
UCC Social Science Group Two	EGS 1041	Tech, Humans and Soc	3		May use UCC Social Science Group 2 courses to satisfy the Global Learning requirement. (2) See Endnotes

Undergraduate Major Map

Summer Term 2019

*EGN 1110C is an Engineering deficiency course. Any student who took a computer aided technical drafting course in high school can submit a high school transcript in order to have this requirement considered as completed.

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

Term GPA: 2.25
Term Hours: 3
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Arts	SPC 2608	Public Speaking	3		Satisfies UCC Arts course requirement and Major requirements
CAD Requirement			0		Recommended: EGN 1110C

Fall Term 2019

Term GPA: 2.25
Term Hours: 15
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
UCC Social Science Group One			3		Recommended: AMH2020 Satisfies GRW Requirement (1) See Endnotes
Mathematics and Sciences	MAC 2313	Multivariable Calc	4	C+	Prerequisite: MAC 2312
ECE Courses	EEL 2880	Engr Software Tech	3	C+	
Mathematics and Sciences	PHY 2049	Physics W/Calc II	4	C	Prerequisite: PHY 2048 Corequisites: PHY 2049L & MAC 2312 (1) UCC Natural Science Group 2
Mathematics and Sciences	PHY 2049L	General Phys Lab II	1		Prerequisite: PHY 2048 Corequisites: PHY 2049 & MAC 2312 (1) UCC Natural Science Group 2

Spring Term 2020

Term GPA: 2.25
Term Hours: 14
Cum GPA: 2

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

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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: 2.25
Term Hours: 6
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Additional Required Engineerin	EIN 3235	Eval Engr Data I	3		Prerequisite: MAC 2312
UCC Humanities - Group Two			3		Recommended: WOH 2001 (1) See Endnotes

Fall Term 2020

Term GPA: 2.25
Term Hours: 15
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Computer Engineering (CpE) Program Core	EEL 3160	Comp Appl Elect Engr	3		Prerequisite: EEL 2880
ECE Courses	EEL 3135	Signals And Systems	3		Prerequisites: EEL 3120, MAP 2302
Computer Engineering (CpE) Program Core	EEL 4709C	Computer Design	3		Prerequisites: EIN 3235, EEL 3712, EEL 3712L
Data System Software	MAD 2104	Discrete Mathematics	3		ECE Department recommends you take this course after EEL 3712. Prerequisite: MAC 1147
Additional Required Engineerin	EGN 3613	Engineering Economy	3		

Spring Term 2021

*See advisor for approved concentration elective list

Term GPA: 2.25
Term Hours: 15
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			3		*
Embedded Systems	EEL 4730	Programming Embedded Systms	3		Prerequisite: EEL 2880
ECE Courses	EEL 4740	Embedded System	3		Prerequisite: EEL 4709C
Concentration Elective Total Credits			3		*

Undergraduate Major Map

Summer Term 2021

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

Term GPA: 2.25
Cum GPA: 2

Fall Term 2021

*See advisor for approved concentration elective list

Term GPA: 2.25
Term Hours: 15
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Senior Design	EEL 4920	Senior Design I	2		Satisfies GL Discipline Specific requirement. Prerequisites: 100 Electrical Engineering Major Credits (including all EE Core Courses must be Completed). See your advisor for permission.
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			4		*
Concentration Elective Total Credits			3		*

Spring Term 2022

*See advisor for approved concentration elective list

Term GPA: 2.25
Term Hours: 14
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Critical Indicator	Course Notes
Senior Design	EEL 4921C	Senior Design II	2		Satisfies GL Discipline Specific Requirement. Prerequisites: EEL 4920 (see advisor for permission)
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			3		*
Concentration Elective Total Credits			3		*

Undergraduate Major Map

Summer Term 2022

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

Term GPA: 2.25
Cum GPA: 2

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) 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.

Grades: Students must earn a minimum grade of "C" in all math, physics, and chemistry. Students must earn a minimum of a "C-" in all major courses and maintain a minimum of a 2.0 cumulative GPA. Note: EEL 4920 & EEL 4921C are taken during the student's last two semesters. EEL 4921C must be registered the semester right after taking EEL 4920.

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>