Undergraduate Major Map

Catalog Year	2023
College / School	Engineering
Major	Computer Engineering - BS
Track / Concentration	
Career Path	Four Year Freshman

Fall Term 2023

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

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

Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Communication	ENC 1101	Writing and Rhetoric I	3	
Additional Courses	MAC 2281	Calc I for Engineering	4	(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	
CHM1045 or BSC2010			3	Select CHM 1045 or BSC 2010 (3); UCC Natural Science Group 1. Co-requisite of CHM 1045: CHM 1045L; Co-requisite of BSC 2010: BSC 2010L. Pre-requisite ov CHM 1045: MAC 1105.
CHM1045L or BSC2010L			1	Select CHM 1045L or BSC 2010L (1) UCC Natural Science Group 1. Co-requisite of CHM 1045L: CHM 1045; Co-requisite of BSC 2010L: BSC 2010
UCC Humanities Group One			3	Recommended: HUM 1020 (1) See Endnotes

Spring Term 2024

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	Course Notes
Engineering Orientation	EGN 1002	Engineering Orient	2	
UCC Communication	ENC 1102	Writing and Rhetoric II	3	Prerequisite: ENC 1101
Additional Courses	MAC 2282	Calc II for Engineering	4	(1) Satisfies UCC Mathematics Group 2 Course requirement. Prerequisite: MAC 2281 or 2311
Mathematics and Sciences	PHY 2048	Physics W/Calculus I	4	Prerequisite for Engineering Majors: MAC 2281 or 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 2024

Use this semester to catch up on coursework and/or satisfy the 9 credit summer attendance requirement, move ahead in the curriculum to graduate and time.. (3) See Endnotes

Term GPA: 2.25
Term Hours: 6
Cum GPA: 2

Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Arts	SPC 2608	Public Speaking	3	Satisfies UCC Arts course requirement and Major requirements
ECE Courses	EEL 2880	C Prog Emb Sys	3	

Fall Term 2024

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

Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Social Science Group One			3	Recommended: AMH2020 - Satisfies GRW, GLF and CIVICS Requirement. (1) See Endnotes
Additional Courses	MAC 2283	Calc III for Engineering	4	Prerequisite: MAC 2282 or MAC 2312
STA 3111 or STA 3033 are acceptable substitutes for ESI 3215	ESI 3215	Eval Engr Data I	3	Prerequisite: MAC 2282 or MAC 2312
Mathematics and Sciences	PHY 2049	Physics W/Calc II	4	Prerequisite: PHY 2048 Corequisites: PHY 2049L & MAC 2282. (1) UCC Natural Science Group 2
Mathematics and Sciences	PHY 2049L	General Phys Lab II	1	Prerequisite: PHY 2048 Corequisites: PHY 2049 & MAC 2282 (1) UCC Natural Science Group 2

Spring Term 2025

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

Course Group	Course Required	Course Description	Credit Hours	Course Notes
ECE Courses	EEL 3110C	Circuit Analysis and Lab	3	Prerequisites: MAC 2282, PHY 2049, PHY 2049L, EGN 1002. Corequisites: EEL 2880, MAP 2302, EEL 3110L.
ECE Courses	EEL 3110L	Circuits Lab	1	Prerequisites: MAC 2282, 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	Prerequisite: MAC 2282 or MAC 2312
ECE Courses	EEL 3120	Intro to Linear Systems	3	Prerequisites: MAC 2282, PHY 2049, PHY 2049L, EGN 1002

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Undergraduate Major Map

Summer Term 2025		Term GPA:	2.25
Use this semester to catch up on coursework and/or satisfy the 9 credit summer attendance requirement, move ahead in the curriculum to graduate and time.. (3) See Endnotes		Term Hours: 6 Cum GPA: 2	

Course Group	Course Required	Course Description	Credit Hours	Course Notes
Computer Engineering (CpE) Program Core	EEL 3370	C++ Prog Emb Sys	3	Prerequisite: EEL 2880
UCC Humanities - Group Two			3	Recommended: WOH 2001 (1) See Endnotes.

Fall Term 2025	Term GPA:	2.25
	Term Hours:	15
	Cum GPA:	2

Course Group	Course Required	Course Description	Credit Hours	Course Notes
Computer Engineering (CpE) Program Core	EEL 4730	Programming Embedded Systms	3	Prerequisite: EEL 2880
Computer Engineering (CpE) Program Core	EEL 4709C	Computer Design	3	Prerequisites: EIN 3235, EEL 3712, EEL 3712L
MAD 2104 or COT 3100	COT 3100	Discrete Structures	3	Alternattve option: MAD 2104. ECE Department recommends you take this course after EEL 3712.
Additional Required Engineerin	EGN 3613	Engineering Economy	3	
ECE Courses	EEL 3135	Signals And Systems	3	Prerequisite: EEL 3120; Co-requisite: MAP 2302.

Undergraduate Major Map

Spring Term 2026 (*) For list of approved electives see advisor or back of flowchart for your major.				**Term GPA:** 2.25 **Term Hours:** 13 **Cum GPA:** 2

Course Group	Course Required	Course Description	Credit Hours	Course Notes
Concentration Elective Total Credits			3	(*)
Concentration Elective Total Credits			3	(*)
Computer Engineering (CpE) Program Core	EEL 4740	Embedded System	3	Prerequisite: EEL 4709C
Concentration Elective Total Credits			4	(*)

Summer Term 2026 Use this semester to catch up on coursework and/or satisfy the 9 credit summer attendance requirement, move ahead in the curriculum to graduate and time.. (3) See Endnotes	**Term GPA:** 2.25 **Cum GPA:** 2

Fall Term 2026 (*) For list of approved electives see advisor or back of flowchart for your major.				**Term GPA:** 2.25 **Term Hours:** 14 **Cum GPA:** 2

Course Group	Course Required	Course Description	Credit Hours	Course Notes
Senior Design	EEL 4920	Senior Design I	2	Prerequisite: 100 Computer Engineering Major Credits (Including All CpE Core Courses Must be Complete). See Advisor for Permission. Satisfies GL Discipline Specific Requirement.
Concentration Elective Total Credits			3	(*)
Concentration Elective Total Credits			3	(*)
Concentration Elective Total Credits			3	(*)
Concentration Elective Total Credits			3	(*)

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Undergraduate Major Map

Spring Term 2027 (*) For list of approved electives see advisor or back of flowchart for your major.				**Term GPA:** 2.25 **Term Hours:** 14 **Cum GPA:** 2
Course Group	**Course Required**	**Course Description**	**Credit Hours**	**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	(*)

Summer Term 2027 Use this semester to catch up on coursework and/or satisfy the 9 credit summer attendance requirement, move ahead in the curriculum to graduate and time.. (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.

Undergraduate Major Map

(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, chemistry, biology.
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