

Undergraduate Major Map

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

Fall Term 2023 Math placement is based on your Math Placement Score and classes are to be selected in consultation with an advisor. The College of Engineering and Computing requires placement into MAC 2311 to be accepted into the Civil Engineering program. If you do not place into MAC2311, see your advisor to discuss appropriate courses and major requirements.					Term GPA: 2 Term Hours: 15 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Major Prerequisites - Chemistry	CHM 1045	Gen Chemistry I	3	Also satisfies UCC Natural Science Group 1 course. (1) See endnotes	
Major Prerequisites - Chemistry	CHM 1045L	Gen Chem Lab I	1	Also satisfies UCC Natural Science Group 1 Lab course. (1) See endnotes	
UCC Communication	ENC 1101	Writing and Rhetoric I	3		
UCC First Year Experience	SLS 1501	First Year Exper	1		
UCC Mathematics Group One	MAC 2281	Calc I for Engineering	4	Also satisfies UCC Mathematics Group 1 course. (1) See endnotes	
UCC Humanities Group One			3	(1) See endnotes.	

Spring Term 2024					Term GPA: 2 Term Hours: 13 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
UCC Communication	ENC 1102	Writing and Rhetoric II	3		
UCC Mathematics Group Two	MAC 2282	Calc II for Engineering	4	Also satisfies UCC Mathematics Group 2 course. (1) See endnotes	
Major Prerequisites - Physics	PHY 2048	Physics W/Calculus I	4	Also satisfies UCC Natural Science Group 1 course. (1) See endnotes	
Major Prerequisites - Physics	PHY 2048L	General Phys Lab I	1	Also satisfies UCC Natural Science Group 1 Lab course. (1) See endnotes	
General Electives	CGN 2161	Career Orientation in Civil En	1		

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Summer Term 2024				Term GPA: 2
Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See endnotes				Term Hours: 7
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Major Prerequisites - Chemistry	CHM 1046	Gen Chemistry II	3	
Major Prerequisites - Chemistry	CHM 1046L	Gen Chem Lab II	1	
Engineering Drawing	EGN 1110C	Engineering Drawing	3	

Fall Term 2024				Term GPA: 2
PHY2049 Lab is not required for this program.				Term Hours: 14
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Engineering Sciences	CGN 2420	Computer Tools for Eng	3	
Engineering Sciences	EGN 3311	Statics	3	
Major Prerequisites - Physics	PHY 2049	Physics W/Calc II	4	
UCC Mathematics Group Two	MAC 2283	Calc III for Engineering	4	

Spring Term 2025				Term GPA: 2
				Term Hours: 13
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Engineering Sciences	EGN 3321	Dynamics	3	
Major Required	SUR 2101C	Surveying	3	
Major Prerequisites - Mathematics	MAP 2302	Differential Equat	3	
Major Prerequisites - Earth Science	GLY 1010	Physical Geology	3	Also satisfies UCC Natural Science Group 2 course. (1) See endnotes.
Major Prerequisites - Earth Science	GLY 1010L	Physical Geology Lab	1	Also satisfies UCC Natural Science Group 2 course. (1) See endnotes.

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Summer Term 2025 Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See endnotes. EGS1041 may be used to satisfy the Global Learning and UCC Social Science - Group Two requirement. (2) See endnotes					Term GPA: 2 Term Hours: 7 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
General Core	EGS 2030	Ethics/Legal Aspects	1		
UCC Social Science Group One			3	(1), (2) See endnotes - EGS1041 recommended to also satisfy Global Learning Foundations requirement.	
UCC Social Science Group Two			3	(1), (5) See endnotes. AMH2020 recommended to satisfy GRW requirement.	

Fall Term 2025 ENV3001 may be used to satisfy the Global Learning requirement. (2) See Endnotes					Term GPA: 2 Term Hours: 14 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Engineering Sciences	EGM 3520	Eng Mecha Of Materia	3		
Engineering Sciences	EGM 3520L	Materials Testing	1		
Major Prerequisites - Statistics			3	Can take either ESI 3325 or STA 3033	
Major Required	ENV 3001	Intro Enviro Engrng	3	Satisfies the GL Discipline Specific requirement. (2) See endnotes	
Major Required	ENV 3001L	Envir Lab I	1		
UCC Humanities - Group Two			3	(1), (5) See endnotes. ARC 2701 or WOH2001 recommended to satisfy GRW req.	

Spring Term 2026					Term GPA: 2 Term Hours: 13 Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes	
Engineering Sciences	CWR 3201	Fluid Mechanics	3		
Engineering Sciences	CWR 3201L	Fluid Mechanics Lab	1		
General Core	EGN 3613	Engineering Economy	3		
Major Required	CES 3100	Structural Analysis	3		
Major Required	TTE 4201	Transp Traffic Engr	3		

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Summer Term 2026				Term GPA: 2
				Term Hours: 6
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
UCC Arts			3	(1) See endnotes - SPC2608 Recommended
Major Required	CCE 4031	Proj Plan Civ Engr	3	

Fall Term 2026				Term GPA: 2
				Term Hours: 13
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Major Required	CEG 4011	Geotechnical Engr I	3	
Major Required	CEG 4011L	Geotechnical Test La	1	
Major Required	CES 4702	Reinforced Concrete	3	
Major Required	CWR 3540	Water Resources Eng.	3	
Major Electives			3	Check Catalog and/or PDA for courses that satisfy this requirement.

Spring Term 2027				Term GPA: 2
				Term Hours: 13
				Cum GPA: 2
Course Group	Course Required	Course Description	Credit Hours	Course Notes
Major Required	CGN 4802	C E Sr Design Proj	3	
Major Electives			3	Check Catalog and/or PDA for courses that satisfy this requirement.
Major Electives			3	Check Catalog and/or PDA for courses that satisfy this requirement.
CE Seminar or FE Exam	CGN 4980	Civil Engr Seminar	1	
Major Electives			3	Check Catalog and/or PDA for courses that satisfy this requirement.

Summer Term 2027				Term GPA: 2
Use this semester to catch up on coursework and/or satisfy the 9 credits summer requirement (if needed). (3) See Endnotes				Cum GPA: 2

General Requirements

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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, science, engineering courses and pre-requisites.

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