

COASTAL ENGINEERING – 4 YEAR PLAN

FRESHMAN YEAR

Fall			Spring		
Course ID	Course Name	Hrs	Course ID	Course Name	Hrs
CHM 101	General Chemistry	4	PHY 201	General Physics I	4
MAT 161	Calculus w/ Analytic Geo I	4	MAT 162	Calculus w/ Analytic Geo II (CR)	4
EGN 101	Intro to Engineering/First Yr. Seminar	3	EGN 102	Intro to Coastal Engineering	3
ENG 101	College Writing & Reading I	3	XXX YYY	(Lower Div Sci Elective – OCN 150)	3
			PED 101	Physical Activity & Wellness	2
		Total			14
					Total
					16

SOPHOMORE YEAR

Fall			Spring		
Course ID	Course Name	Hrs	Course ID	Course Name	Hrs
MAT 261	Multivariate Calculus	4	MAT 361	Differential Equations	3
EGN 201	Engineering Statics	3	EGN 340	MATLAB for Engineering Analysis	3
ENG 201	College Writing & Reading II	3	EGN 301	Mechanics of Solids	3
HST 105/106	University Studies HST/LDN	3	PHY 202	General Physics II	4
WLC XXX	World Language (101 or 120)	3	WLC XXX	World Language (102 or 201)	3
		Total			16
					Total
					16

JUNIOR YEAR

Fall			Spring		
Course ID	Course Name	Hrs	Course ID	Course Name	Hrs
EGN 310	Fluid Mechanics for Engineers	3	EGN 410	Field Methods in Coastal Engineer	3
EGN 330	Coastal Wave Mechanics	3	EGN 320	Water Resources Engineering	3
XXX YYY	(Upper Div Sci Elective 1)	3	XXX YYY	(Upper Div Sci Elective 2)	3
AIL XXX	University Studies Aesthetic	3	AIL XXX	University Studies Aesthetic (WI)	3
ECN 221	Principles of Economics-Micro	3	PAR 115	Introduction to Ethics	3
XXXYYY	Free Elective	1			
		Total			16
					Total
					15

SENIOR YEAR

Fall			Spring		
Course ID	Course Name	Hrs	Course ID	Course Name	Hrs
EGN 311	Coastal Engineering & Fluids Lab	1	EGN 430	Coastal Structures	3
EGN 400	FE Exam Review (seminar)	1	EGN 495	Engineering Capstone	4
EGN 402	Dredging and Beach Nourishment	3	XXX YYY	Free Electives	6
EGN 420	Applied Coastal Modeling	3			
EGN 480	Nearshore Geomatics	3			
UHIB XXX	University Studies Human Institutions	3			
		Total			14
					Total
					13

University Studies (approx.33 hours)

ENG 101 (3)	Freshman Fall	Composition
EGN 201 (3)	Sophomore Fall	Composition
PED 101 (2)	Any (would work well Freshman Spring)	Lifetime Wellness
UNI 101 (1)	Freshman Fall	Partially fills First Year Seminar
WLC 101 /120 (3)	Any (would work well Sophomore Fall)	World Language and Culture
WLC 102 /201 (3)	Any (would work well Sophomore Spring)	World Language and Culture
AIL (3)	Any	Aesthetic, Interpretive, Literary
AIL (WI) (3)	Any	Aesthetic, Interpretive, Literary/Writing
HST 105/106* (3)	Any	Historical & Phil/ Living Diverse Nation
PAR 115* (3)	Any	Historical & Phil
ECN 221* (3)	Any	Understanding Human Institutions
UHIB (3)	Any	Understanding Human Institutions

*These particular courses are strongly recommended to fill the University Studies requirements by the CE Department.

University Studies embedded in the major (0 additional hours; fills 18 hours of major coursework)

MAT 161	Preferably freshman Fall	Mathematics and Statistics
EGN101/UNI	Freshman Fall	First Year Seminar
CHM 101	Preferably freshman Fall	Scientific Approaches
PHY 201	Preferably freshman Spring	Scientific Approaches
EGN 102	Freshman Spring	Living in a Global Society

Course (Hours)	Title	Pre/Co-Reqs	Notes for Courses taken prior to Fall 2021
CHM 101 (4)	General Chemistry	None	
MAT 161 (4)	Calc with Analytic Geometry I	Placement or MAT 112	
MAT 162 (4)	Cal with Analytic Geometry II	MAT 161	
MAT 261 (4)	Multivariable Calc	MAT 162	
MAT 361 (3)	Differential Equations	MAT 162	
PHY 201 (4)	General Physics I	MAT 161 (pre or co-req)	
PHY 202 (4)	General Physics II	MAT 162 (pre or co-req)	
EGN 101 (2)	Intro to Engineering	None	
EGN 102 (3)	Intro to Coastal Engineering		
EGN 201 (3)	Engineering Statics	PHY 201 (MAT 161 preferred)	
EGN 301	Mechanics of Solids	EGN 201	
EGN 310 (3)	Fluid Mechanics for Engineers	MAT 361	PHY 350 may be subbed
EGN 480 (3)	Nearshore Geomatics	EGN 340	GGY 281 may be subbed/ Will fill GGY 326 requirement
EGN 320 (3)	Water Resources Engineering	EGN 310	
EGN 311 (1)	Coastal Engineering and Fluids Lab	EGN 330 (pre or co-req)	*See Note below
EGN 330 (3)	Coastal Wave Mechanics	EGN 310 (co-req)	
EGN 340 (3)	MATLAB for Engineering Analysis	MAT 261	
EGN 400 (1)	Fundamentals of Engineering Review	EGN 301, 320, 340	*See Note below
EGN 402 (3)	Dredging and Beach Nourishment	EGN 330	
EGN 430 (3)	Coastal Structures	EGN 301, 330	
EGN 420 (3)	Applied Coastal Modeling	EGN 340, 480 (pre or co-req)	*See Note below
EGN 410 (3)	Field Methods in Coastal Engineering	EGN 330, 340	*See Note below
EGN 495 (4)	Engineering Capstone	Consent of Instructor	

3 hours 100-200 Level Science: OCN 150, GLY 101, CHM 102 or BIO 202 preferred (EVS 195, BIO 201, others by approval)

6 hours 300+ Level Sciences: PHY 475, 477, 480; CHM 377; MAT 365, 367; EVS 325, 364, OCN 350, BIO 478, 487 preferred (others, including DIS, may be approved by Department)

NOTE: For students entering the major prior to Fall 2021, their audits will need to be corrected as follows: EGN 202, 210, 401 and 496 will be waived and replaced by: EGN 311, 400, 420 and 410.

Notes regarding Students entering CE before Fall 2021, including those who changed their catalog years to 2019 (students who were originally planning to graduate in 2021 or 2022; entered Coastal from other majors with numerous previously earned hours)

Major Courses Required on their Degree Audits and Action Required so audits can clear for graduation:

CHM 101: No action required

MAT 161, 162, 261, 361: No action required

PHY 201, 202: No action required

PHY 350: will be replaced with EGN 310 after Spring 2021; so, students taking PHY 350 in Spring 2021 or earlier will not require action. But, those taking EGN 310 will need a sub form completed, subbing EGN 310 for PHY 350

EGN 101, 102, 201, 301, 320, 330, 402, 430, 495: No action required

EGN 202, 210, 401, 496: Need to be waived: Instead, students will be advised to take: EGN 311, 400, 420, 410 which will be subbed for these courses.

GGY 326: We will sub GGY 281 in spring 2021 or EGN 480 in future semesters for this requirement

Science Electives: Audits state that 12 hours are required. Subs will be needed to be made, allowing EGN 340 to count for one of the Upper Level Sci elective for all students, thus reducing the required hours to 9 total elective hours, as follows:

- 3 hrs Lower Level Science: OCN 150, CHM 102, GLY 101 or BIO 202 (preferred), but will sub EVS 195, BIO 201 or other STEM course per approval of department
 - 6 hrs. Upper Level Sciences: PHY 475, 477, 480; CHM 377; MAT 365, 367; EVS 325, 364, OCN 350, BIO 478, 487 (preferred), but will sub other STEM courses per approval of department, including DIS experience
-