

UNCW Environmental Science & NC State Environmental Engineering 3+2 Double Major Curriculum

NC State Department Resource: <https://www.ccee.ncsu.edu/academics/undergraduate-programs/>

NC State Catalog: <http://catalog.ncsu.edu/undergraduate/engineering/civil-construction-environmental/environmental-engineering-bs/>

UNCW Department Resource: <https://uncw.edu/evs/>

First Year: UNC Wilmington					
Fall Semester		Credits	Spring Semester		Credits
CHM 101	General Chemistry I	3	CHM 102	General Chemistry II	3
CHML 101	General Chemistry Lab I	1	CHML 102	General Chemistry Lab II	1
EGN 101	Introduction to Engineering (GEP-IP)*	2	ECN 221	Microeconomics (US-HIB; GEP-SS)*	3
ENG 101	College Writing & Reading I	3	ENG 201	College Writing & Reading II	3
MAT 161	Calculus with Analytical Geometry I	4	EVS 195	Introduction to Environmental Science	3
UNI 102	First Year Seminar - Engineering (US-FYS)*	1	EVSL 195	Introduction to Environmental Science Lab	1
WPA 101	Wellness & Physical Activity	1	MAT 162	Calculus with Analytical Geometry II	4
WPAL 101	Wellness & Physical Activity Lab	1			
Semester Total:			Semester Total:		18
Second Year: UNC Wilmington					
Fall Semester		Credits	Spring Semester		Credits
EVS 205	Global Environmental Issues (US-LIGS)	3	BIO 201	Principles of Biology - Cells	4
GGY 130	Intro to Physical Geography (or GLY/L 120)	4	CSC ***	Python Programming (112 or 131)*	3
GGY 281	Introduction to GIS (EVS Elective)	3	EVS ***	EVS Elective (300/400 level)	3
MAT 261	Multivariate Calculus	4	MAT 361	Differential Equations	3
*** 201	Foreign Language (US-WLC)*	3	*** ***	Ethics Elective (US-HPA; GEP-Hum)*	3
Semester Total:			Semester Total:		16
Third Year: UNC Wilmington					
Fall Semester		Credits	Spring Semester		Credits
ENG 393	Writing in the Scientific Disciplines	3	COM 101	Public Speaking (GEP-AB)*	3
EVS 325	Environmental Economics (EVS Elic; GEP-IP)*	3	EVS 364	Natural Resource Policy (EVS Elic; GEP-SS)*	3
EVS 4**	Advanced Field Methods (440/441)	3	EVS 495	EVS Seminar	3
PHY 201	General Physics I	4	E 115	Introduction to Computing Environments (DE)*	1
HI ***	History Elective (US-HPA; GEP-Hum, GK)*	3	MAE 206	Engineering Statics (DE)*	3
			PHY 202	General Physics II	4
Semester Total:			Semester Total:		17
Third Year Summer: NC State University					
Summer I or II Semester		Credits	Summer I or II Semester		Credits
CE 282	Hydraulics	3			
Semester Total:			Semester Total:		0
Fourth Year: NC State University					
Fall Semester		Credits	Spring Semester		Credits
CE 250	Introduction to Sustainable Infrastructure	3	CE 339	Civil Engineering Systems	3
CE 373	Fundamentals of Environmental Engineering	3	CE 381	Hydraulics Systems Measurements Lab	1
CHE 205	Chemical Process Principles	4	CE 383	Hydrology & Urban Water Systems	3
MAE 201	Engineering Thermodynamics I	3	CHM ***	Earth Systems Chemistry Elective*	3
ST 370	Probability & Statistics for Engineers	3	ENG ***	Lit. Elective (US-A, LIDN; GEP-Hum, USD)*	3
			SOC ***	Sociology Elective (US-HIB; GEP-SS)*	3
Semester Total:			Semester Total:		16
Fifth Year: NC State University					
Fall Semester		Credits	Spring Semester		Credits
CE 378	Environmental Chemistry & Microbiology	4	CE 477	Principles of Solid Waste Engineering	3
CE 476	Air Pollution Control (or 479 Air Quality)	3	CE 481	Environmental Engineering Project	3
CE 484	Water Supply & Waste Water Systems	3	*** ***	ENE Elective II*	3
CE 488	Water Resources Engineering (EVS Elective)	3	*** ***	ENE Elective III*	3
*** ***	ENE Elective I*	3	*** ***	Elective (US-A)*	3
Semester Total:			Semester Total:		15

***Notes**

Distance Education (DE): Indicated courses will be taken through NC State's Distance Education Program.

NC State General Education Program (GEP) Graduation Requirements: <http://catalog.ncsu.edu/undergraduate/gep-category-requirements/>

UNCW University Studies (US) Graduation Requirements: <https://uncw.edu/uc/advising/unistudies.html>

Electives: Ideally, elective courses should double/triple count to satisfy multiple categories of US/GEP requirements. Consult the academic advisor for more information.

EGN 101: Transfers to NC State as E 102 and counts as a GEP-Interdisciplinary Perspectives course.

UNI 102: Transfers to NC State as E 101. UNI 102 taken in tandem with EGN 101 satisfies UNCW's UNI 101 First Year Seminar course required for all first semester freshmen.

CHM 102: UNCW requires that CHM 102 be taken with the lab resulting in 4 credit hours. ENE requires only 3 credits for their equivalent Chemistry II course.

Python is the preferred computer programming language of ENE at NCSU. CSC 131, Python for CSC majors, or a section of CSC 112, programming for non-CSC majors, taught in Python is acceptable.

EVS Field Methods: Consult the acting EVS department chair for approved course selections.

EVS Electives: EVS requires 12 hours of 300-400 level courses to be approved by the EVS advisor. One course may be at the 200 level. Many ENE courses count as EVS Electives.

Engineering Statics: CE 214 is the preferred Engineering Mechanics (Statics) course, however MAE 206 will substitute.

CE 382: Hydraulics is a prerequisite for CE 342. Soils and CE 383: Hydrology, two important CE Area Intro Elective options. Students may want to consider taking CE 382 in the summer preceding the Junior year.

ST 370: Fulfills the EVS Statistics requirement in place of STT 215: Introduction to Statistics

Electives: See NC State Catalog for list of approved Electives. It is imperative to review the Plan of Study documents in consultation with the ENE advisor to research and plan for all ENE Elective courses.