





CCD to CU-Boulder Transfer Advising Guide for Environmental Engineering (B.S.)

College of Engineering and Applied Science Environmental Engineering Department Website

Program Overview:

Environmental engineers play a vital role in maintaining the quality of both human environmental systems and the natural environment. Environmental engineering encompasses the scientific assessment and development of engineering solutions to environmental problems affecting the biosphere, land, water, and air quality.

Admission Requirements:

Please see this website for more information regarding CU Engineering admission criteria

CCD Course Summary: (the following courses will apply directly to the degree)

*BOLD denotes admission requirement courses

Mathematics:

MAT 201*	Calculus 1	(5 credits)
MAT 202*	Calculus 2	(5 credits)
MAT 204	Calculus 3 w/Engineering Applications	(5 credits)
MAT 266	Differential Equations/Linear Algebra	(4 credits)

Science:

CHE 111*	General Chemistry 1	(5 credits)
CHE 112	General Chemistry 2	(5 credits)
PHY 211	Calc-based Physics 1	(5 credits)
PHY 212	Calc-based Physics 2	(5 credits)

^PHY 211 will also count for admission requirement in place of CHE 111

<u>Additional Science & Engineering Courses:</u>

GEY 111 Physical Geology (technical elective) (4 credits)

Humanities and Social Sciences (H/SS):

- Up to twelve (12) credit hours at the lower division (100-200) level
 - o Six (6) credit hours the upper-division level typically taken at CU Boulder
- Please consult our CCCS humanities and social science list when selecting these classes

Suggested Five-Year Course Plan for Environmental Engineering

This is a suggested guide of coursework only and is subject to change. Always consult with your academic advisor for graduation planning purposes.

*denotes courses that do not apply directly to degree, other than as free electives

Community College of Denver (first two years)

Fall Semester 1

Course	Course Title	Credits
MAT 121	College Algebra*	4
CHE 101	Intro to Chemistry (with Lab)*	5
	Free Elective*	3
	<u>Humanities/Social Science</u>	3
	Total Credits	15

Spring Semester 1

Course	Course Title	Credits
MAT 166	Pre-Calculus*	5
CHE 111	College Chemistry 1 (with lab)	5
GEY 111	Physical Geology	4
	Total Credits	14

Fall Semester 2

Course	Course Title	Credits
MAT 201	Calculus 1	5
CHE 112	College Chemistry 2 (with lab)	5
	Humanities/Social Science	3
	Total Credits	15

Spring Semester 2

Course	Course Title	Credits
MAT 202	Calculus 2	5
PHY 211	Physics 1	5
CHE 211	Organic Chemistry 1	5
	Total Credits	13

CU-Boulder (last three years)

Fall Semester 3

Course	Course Title	Credits
APPM 2350	Calculus 3	4
PHYS 1120	Physics 2	4
PHYS 1140	Experimental Physics	1
CVEN 3227	Prob. Stats. And Decision	3
CVEN 2121	Analytical Mechanics 1	3
	Total Credits	15

Spring Semester 3

Course	Course Title	Credits
APPM 2360	Differential Eq./Lin. Algebra	4
CHEN 2120	Material & Energy Balances	3
CVEN 4834	Sustainability Principles	3
CVEN 3414	Fund. Of Environmental Engr.	3
	Humanities/Social Science	3
	Total Credits	15

CU-Boulder (last three years)...continued

Fall Semester 4

Course	Course Title	Credits
	Fluid Mechanics	3
CVEN 4404	Water Chemistry	3
CVEN 4414	Water Chemistry Lab	1
	Engineering Economics	3
	Thermodynamics	3
GEEN 3400	Engineering Projects	3
	Total Credits	16

Spring Semester 4

Course	Course Title	Credits
CVEN 4484	Environmental Microbiology	3
CVEN 4424	Environmental Org. Chemistry	3
	Heat Transfer	3
	Option Course 1	3
	Engineering Writing Course	3
	UD Humanities/Social Science	3
	Total Credits	16

Fall Semester 5

Course	Course Title	Credits
EVEN 4464	Environmental Eng. Processes	3
	Lab or Field Course	3
	Option Course 2	3
	Technical Elective	3
	Technical Elective	3
	Total Credits	15

Spring Semester 5

Course	Course Title	Credits
CVEN 4333	Engineering Hydrology	3
MCEN 4131	Air Pollution Control	3
CVEN 4434	Environmental Eng. Design	3
	Option Course 3	3
	UD Humanities/Social Science	3
	Total Credits	15