

Environmental Engineering (BESA Concentration)

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BESA Environmental Engineering Concentration

(95 units minimum)

Mathematics & Science Prerequisites

		Units
21-120	Differential and Integral Calculus -(Gen Ed; prerequisite: 21-090)	10
21-122	Integration and Approximation -(Gen Ed)	10
21-254	Linear Algebra and Vector Calculus for Engineers	11
21-260	Differential Equations	9
15-110	Principles of Computing -(Gen Ed)	10
or 15-112	Fundamentals of Programming and Computer Science	
33-141	Physics I for Engineering Students -(Gen Ed)	12
33-142	Physics II for Engineering and Physics Students	12
09-105	Introduction to Modern Chemistry I	10
or 09-111	Chemical Building Blocks	

Environmental Engineering Courses (10 courses, 77 units)

12-100	Exploring CEE: Infrastructure and Environment in a Changing World -First-year; co-req: 21-120, 33-141	12
xx-xxx	2nd Introduction to Engineering course, student's choice	12
12-200	CEE Challenges: Design in a Changing World - Fall, Sophomore year; prereq: 12-100	9
12-221	Environmental Chemistry and Thermodynamics - Spring, Sophomore year; prereq: 09-105/09-111	9
12-222	Environmental Chemistry Laboratory -Spring, Sophomore year; co-req: 09-101, 12-221	3
12-271	Computation and Data Science for Civil & Environmental Engineering -Spring, Sophomore year; prereq: 15-110/15-112, 21-120, 21-122, 33-141	9
12-351	Environmental Engineering -Fall, Sophomore year; prereq: 09-105/09-111; co-req: 21-260	9
12-352	Environmental Engineering Lab -Spring, Junior year; co-req: 12-351	3
12-355	Fluid Mechanics -Fall, Junior year; prereq: 21-260	9
12-356	Fluid Mechanics Lab -Fall, Junior year; co-req: 12-355	2

Electives (2 courses, 18 units minimum)

Choose 18 units from the following EE courses with prerequisites in consultation with the concentration advisor:

12-201	Geology -Sophomore year	9
12-301	CEE Projects: Integrating the Built, Natural and Information Environments -Fall, Junior year; prereq: 12-200 and 12-271	9
12-353	Environmental Biology and Ecology -Spring, Junior year	9
12-612	Intro to Sustainable Engineering -Fall, Senior year	9
12-657	Water Resource Systems Engineering -Fall, Senior year; prereq: 12-355; co-req: 12-351	9
03-121	Modern Biology	9