

Guide to Yale Environmental Engineering Curriculum (2009-2010)

B.S. (Environmental Engineering)

Eighteen** credits beyond prerequisites are required. Fourteen of these credits are required classes and four of these credits are elective classes.

Prerequisites

- MATH 112a or b Single Variable Calc 1
- MATH 115a or b Single Variable Calc 2
- MATH 120a or b Multivariable Calculus **OR**
ENAS 151a Multivariable Calculus for Engineers
- CHEM 112a **OR** 114a and CHEM 113b **OR** 115b Comprehensive General Chemistry with CHEM 116La General Chemistry Lab **OR**
Chem 118a Quantitative Foundations of General Chemistry with CHEM 119La Chem. Lab **OR**
One term of Physical Chemistry (328a or 332a) with CHEM 330La Physical Chem. Lab.
- Physics 180a Advanced General Physics
- Physics 180b Advanced General Physics

Required Courses (14 credits)

- 1) ENVE 120 – Introduction to Environmental Engineering
- 2) ENAS 194 – Differential Equations
- 3) CHEM 102 – Introduction to Green Chemistry***
- 4) ENVE 210 Principles of Chemical Engineering
- 5) MCDB 290b – Microbiology
OR MCDB 120a – Principles of Molecular, Cellular, and Developmental Biology
- 6) ENVE 371 – Introduction to Hydrology and Water Resources
- 7) MENG 351a – Fluid Mechanics
- 8) F&ES 344a – Aquatic Chemistry
- 9) ENVE 360 – Green Engineering
- 10) ENVE 315 or ENVE 448 – Transport Processes
- 11) ENVE 373 – Air Pollution Control
- 12) ENVE 377 – Water Quality Control
- 13) CENG 300a – Chemical Engineering Thermodynamics
OR
MENG 211a – Mechanical Engineering Thermodynamics
OR One term of Physical Chemistry (328a or 332a)
- 14) ENVE 490 a or b Senior Project

Electives (4 credits)

Four courses that must contain an environmental component or be from a cores science (physics, chemistry, biology, math, earth sciences) that is associated with environmental engineering. The majority of these electives must be quantitative. All electives must be approved by the DUS. Also see Elective Tracks.

** If physical chemistry is taken as a prerequisite, then one of the required courses is also satisfied and the total credits required after prerequisites is seventeen.

***The instructor for this course is on leave. The course can be replaced with an engineering elective