

Major: Environmental Engineering (EnvE)

To be offered by the School of Civil and Environmental Engineering, pending final approval. A joint offering of this major in the Department of Biological and Environmental Engineering is planned.

221 Hollister Hall, 607 255-3412, www.cee.cornell.edu

Program objectives

We are dedicated to providing the highest-quality broad-based technical, scientific, and liberal education. We create and maintain an outstanding educational program in a climate that fosters diverse skills designed for professional success. Our objectives are to prepare our students for:

- excellence in engineering decision-making and design,
- leadership careers in engineering practice,
- graduate professional engineering education,
- advanced study and research in engineering, and
- diverse, alternative career choices.

Engineering Distributions

ENGRD 251 Engineering for a Sustainable Society is required
ENGRD 2XX ENGRD 202, 241 or CEE 304 are recommended

Required Major Courses

BIO G 10X Introductory Biology (BIO G 101, 103, BIO G 105, 107, 109 or 110)¹
ENGRD 202 Mechanics of Solids²
ENGRD 241 Engineering Computation¹
CEE 304 Uncertainty Analysis in Engineering¹
CEE 323 Engineering Economics and Management
CEE 331 Fluid Mechanics
CEE 341 Introduction to Geotechnical Engineering and Analysis
CEE 351 Environmental Quality Engineering
CEE 451 Microbiology for Environmental Engineering²
Lab Course CEE 453 (Fall), BEE 427 (Fall), or CEE 437 (every other Spring)
BEE 475 Environmental Systems Analysis

Electives

Technical communications course (ENGRD 335, 350, or COMM 260, 263, 252 CEE 453, or BEE 489)³

Three CEE design electives⁴

One Major-approved elective⁴

Two approved electives

¹Students electing to use this course as a second engineering distribution must take an additional major-approved elective. Note: BIO G 109 and 110 may not be used for the engineering distribution

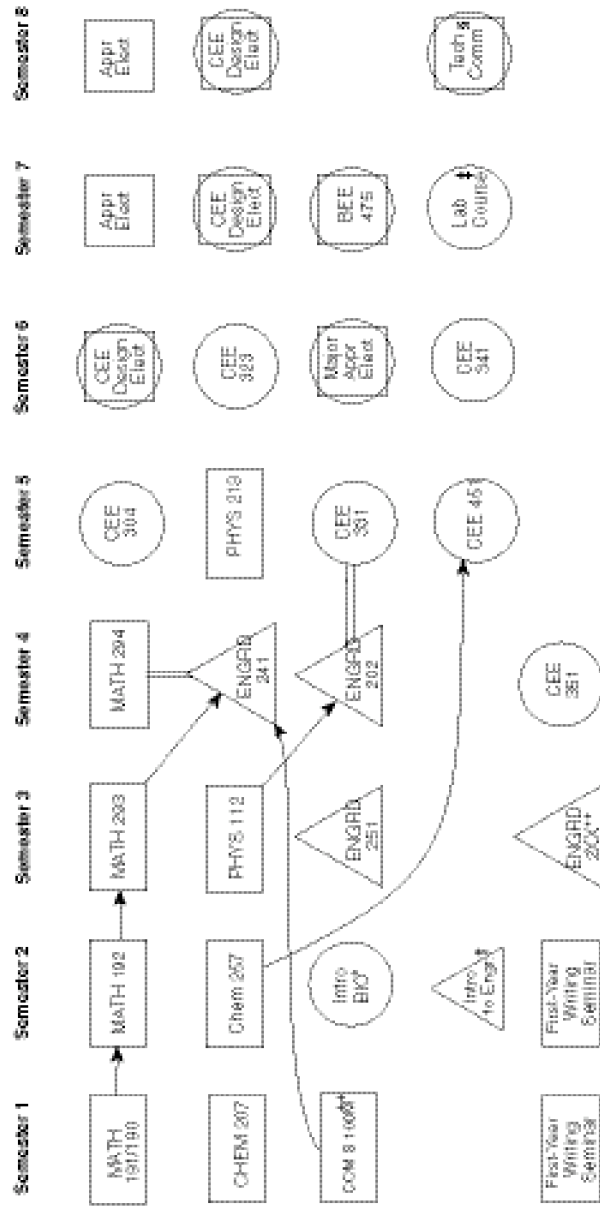
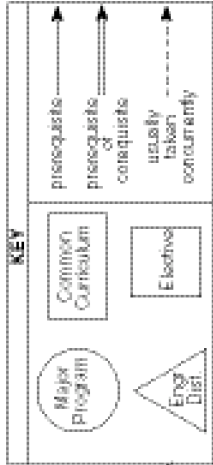
²Students planning graduate-level study in Environmental Engineering may take BIOMI 290, Introduction to Microbiology, in place of CEE 451

³If the course fulfilling the technical writing requirement also fulfills another requirement (e.g. liberal studies, Major-approved elective), then an additional approved elective must be substituted for this requirement

⁴To be chosen from lists available in the CE Major office, 221 Hollister. Lists of suggested courses cover the areas of environmental engineering, hydraulics/hydrology, environmental systems engineering, geotechnical engineering, remote sensing, air pollution, and agricultural and biological engineering

ENVIRONMENTAL ENGINEERING MAJOR (EnvE)

- †† Core 8 100 Min. recommended
- † Standards chosen from BIO-G 191/193, BIO-G 195, 397, 105, or 129
- ‡ ENG28 313 is recommended
- ††† ENG280 390, ENG280 241 and CEE 381 are required courses that may be used as a second distribution course. Students electing to count any of these courses as a second distribution course must take an additional Major-Approved Elective.
- # CEE 463 (Fall), BEE 477 (Fall) or CEE 437 (Every other Spring)
- \$ Students meeting technical/computational requirement with a course that fulfills another requirement must take another Advisor-Approved Elective.



* ENGRI 113 is recommended.

†ENGRD 201, 219, 221, BIO G 101/103, 105, and 107 are all recommended.

±In addition to the first-year writing seminars, a technical writing course must be taken. An approved COMM course, or BEE 489 will satisfy this requirement. Students meeting technical communications requirement with a course that fulfills another requirement (e.g. Liberal Studies, Lab, Design) must take another Advisor-approved elective.

#Approved courses must be chosen from at least three of the following six groups: (1) Cultural Analysis (CA), (2) Historical Analysis (HA), (3) Literature and the Arts (LA), (4) Knowledge, Cognition, and Moral Reasoning (KCM), (5) Social and Behavioral Analysis (SBA), (6) Foreign Languages (not literature courses). At least two courses must be from the first three groups (CA, HA, LA). At least two of the six courses must be at 200-level or higher.

9 credits of electives are determined by Major approval. To ensure breadth of engineering studies, Major programs also will include 9 hours of courses outside the Major. This group of courses may be comprised of ENGRD 202, ENGRD 203, one engineering distribution or elective, and/or a CE Major course outside the Major disciplinary area.

††Students electing to use this course as a second engineering distribution must take an additional Major-approved elective.

§Students planning graduate-level study in Environmental Engineering may take BIOMI 290, Introduction to Microbiology, in place of CEE 451.

**CEE 453 (Fall), BEE 427 (Fall), or CEE 437 (every other Spring).