CEE Track: Structural Engineering  
(ABET Accredited)  
Class of 2015

BSE Math & Science Requirements (8 Courses)
CHM 201 General Chemistry I  
MAT 103 Calculus  
MAT 104 Calculus  
MAT 201 Multivariable Calculus,  
or MAT 203 Adv. Multivariable Calculus  
MAT 202 Linear Algebra w/ Applications,  
or MAT 204 Adv. Linear Algebra w/ Applications  
PHY 103 General Physics, or PHY 105 Adv. Physics  
PHY 104 General Physics, or PHY 106 Adv. Physics  
COS 126 General Computer Science

Additional Math Requirements (2 courses)
This requirement may be waived for students who scored 5 on AP STAT.  
MAE 305 Mathematics in Engineering I

Additional Science Requirements (1 course)
GEO 203 Geology, or EEB 211 Biology of Organisms, or  
MOL 215 Quantitative Principles in Cell and Molecular Biology  
This requirement may be waived for students who scored 5 on AP BIO.

University Writing Seminar (1 Course)
Writing Seminar

Engineering Science Requirements (8 Courses)
CEE 205 Mechanics of Solids  
CEE 262A Structures and the Urban Environment  
CEE 312 Statics of Structures  
CEE 361 Structural Analysis & Finite Elements  
CEE 303 Intro to Environmental Engineering  
CEE 306 Hydrology,  
or CEE 307 Field Ecohydrology – Note (c)

Two of the following:  
CEE 364 Materials in Civil Eng., -Note (a)  
or CEE 365 Soil Mechanics, -Note (a)  
or CEE 308 Environmental Eng. Laboratory -- Note (b)

Additional Design Requirements (2 Courses)
CEE 366 Design of Reinforced Concrete Structures  
CEE 462 Design of Large Scale Structure: Bridges

Independent Work (2 Courses)
CEE 478 Senior Thesis (Counts as two courses)

Program Electives (3 or more) – See list.  
1. (engineering) ______  
2. _______________  
3. _______________  
4. _______________

Humanities Electives (7 or more)  
1. _______________  
2. _______________  
3. _______________  
4. _______________  
5. _______________  
6. _______________  
7. _______________  
8. _______________

Notes: (a) CEE 364 and CEE 365 are offered in alternating years. This calendar shows the correct sequence for students in the class of 2015. (b). CEE 308 is offered every other year; students in the class of 2015 may take it in spring of their junior year. (c) For students who take CEE 307 in Kenya, this counts as an engineering lab course. This satisfies the requirement for one of the two engineering lab courses (two of the following: CEE 308, CEE 364 or CEE 365). In consultation with the advisor, a student can substitute another engineering course to count as the remaining engineering science requirement.
Approved and Recommended Program Electives

A student’s program electives must provide a coherent sequence in the student’s area of interest. For the structural engineering track, at least one of the program electives must be an engineering course. No more than one program elective can be at the 200 level. The courses listed below are pre-approved. If a student would like to take a program elective not on the list, such as a one-time-only course or a graduate course, the student should make a compelling case for why this is consistent with the student’s educational objectives. Approval is based on agreement from the advisor and the departmental representative.

The bullet (●) indicates courses that are highly recommended for this program track.

Civil and Environmental Engineering

Courses in the CEE department that are not part of the current requirements.

In particular, the following are recommended for the structures track:

● CEE 362 Structural Dynamics in Earthquake Engineering
● CEE 477 Engineering Design for Sustainable Development
● CEE 567 Adv. Design and Behavior Steel Structures

Other Engineering and Science Departments

Courses in mechanical engineering, applied math (APC and ORF), and geology.