

Civil and Environmental Engineering

Departmental Policy on CEE Elective Focus Areas (EFAs)

May 2015

The primary goal of the Elective Focus Area (EFA) course selection is for the student to achieve *exposure and depth of study* in an area that is complementary to their degree in Civil and Environmental Engineering. With this in mind, the following policy is supported by the CEE faculty and is enforced by each student's advisor and the CEE Curriculum Committee.

Eight EFA plans are offered. The *Civil and Environmental Practice EFA* offers a broad exposure to engineering practice. Four other plans are aligned with four technical focus areas of the department: the *Environmental Engineering EFA*, the *Hydraulics and Water Resources EFA*, the *Structures, Mechanics, and Materials EFA*, and the *Transportation EFA*. Business and management are the focus of the non-technical *Management EFA*. Drawing and design (by hand and computer-aided) are the focus of the *Pre-Architecture EFA*. Planning and policy are the focus of the *Urban and Regional Planning EFA*.

In addition, students can propose a custom EFA based on their specific interests. A custom EFA must meet the guidelines discussed below.

Guidelines for Custom EFAs: Any area of focus is available as an EFA. However, the following guidelines must be met:

1. The set of courses chosen must support the student's career or life plan (which the student must explain on the EFA form). The explanation must be acceptable to the advisor and the CEE Curriculum Committee.
2. A non-technical EFA must be completed as part of a minor in that field and therefore each course must be part of a sequence of an increasingly challenging curriculum.
3. The set of courses chosen must demonstrate depth of learning in a particular area. An assortment of introductory courses is unacceptable.

Note that a non-technical custom EFA may require that a student take additional courses (beyond the 131 required for graduation) to meet the requirements of a minor, or to show exposure and depth in a particular area.

Deadlines: Students must submit an EFA form for approval as part of *CEE:2000 CEE Sophomore Seminar*. Custom EFAs may need to be submitted earlier; students proposing a custom EFA should meet with their advisor *before* registering for their first proposed EFA course.

Revision of EFAs: It is common for students to make course changes to their EFA after it has been approved. Changes are made in one of two ways. Students must submit an EFA Revision Form to change up to two EFA courses. If more than two courses are changed on an approved EFA, students must submit a new EFA form. Students should meet with their advisor *before* registering for the changed EFA courses, and submit the paperwork at this time for approval.

Signatures: Students shall submit their completed EFA form to the student's advisor for signature, then to CEE office (4105 SC) for review and approval. An approved EFA will be signed by a CEE Curriculum Committee representative and the Departmental Executive Officer, and returned to the student. A copy will be retained by the department and kept on file. Approved custom EFA plans may be shared (anonymously) with other students and advisors as examples.