

# Student Tailored EFA

## Civil and Environmental Engineering Updated April 2017

### Description

The *Student Tailored EFA* allows students to customize an Elective Focus Area to meet their individual career objectives.

### CEE Design Electives (6 sh)

The Civil Program requires two CEE Design Electives. For the *Student Tailored EFA*, you must choose two CEE Design Electives from the following list:

- CEE:3136 Design of Concrete Structures (3 sh) **–or–** CEE:4535 Design of Steel Structure (3 sh)
- CEE:4157 Environmental Engineering Design (3 sh)
- CEE:4374 Water Resources Design (3 sh)
- CEE:4762 Design of Transportation System (3 sh)

Any course not chosen as a CEE Design Elective may be taken as an EFA Elective.

### EFA Electives (21 sh)

For the *Student Tailored EFA*, you must choose two 3000 level or above CEE courses. A complete list is available on the CEE website. Recommended courses for this EFA (because of their relevance and regular course offerings) are:

- Any of the five design courses not taken as a CEE Design Elective
- CEE:3783 Surveying & Remote Sensing (3 sh)
- CEE:4102 Groundwater (3 sh)
- CEE:4158 Solid and Hazardous Wastes (3 sh)
- CEE:4210 Foundations of Environmental Microbiology and Chemistry (3 sh)
- CEE:4119 Hydrology (3 sh)
- CEE:4371 Water Resources Engineering (3 sh)
- CEE:4371 Finite Element I (3 sh)
- CEE:3790 Resilient Infrastructure and Emergency Response (3 sh)
- CEE:4539 Foundations of Structures (3 sh)
- CEE:4763 Traffic Engineering (3 sh)

*Guidelines for Student Tailored 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 or as part of a certificate program, 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 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.

For the EFA submission, you will need to provide:

- A list of 5 additional courses (15 sh) that will count as EFA Elective courses.
- A list of any additional courses that must be completed (e.g., to satisfy the requirements of a minor or certificate program). These courses will not count as EFA Elective courses, but may be used to satisfy General Education Component (GEC) requirements.
- A career objective statement to justify the elective focus area.
- Information on the requirements of the minor field or the certificate program (e.g., a web link to current requirements).

### EFA Submission

To submit your EFA, fill out the attached PDF form and email it to Kim Lebeck ([kimberly-lebeck@uiowa.edu](mailto:kimberly-lebeck@uiowa.edu)) for approval by the CEE Curriculum Committee. Keep a copy to bring to Academic Advising with your CEE Advisor.

# Civil & Environmental Engineering EFA Form

## Civil and Environmental Engineering Updated April 2017

Student Name/Date: \_\_\_\_\_

Student ID #: \_\_\_\_\_

Expected Graduation Date: \_\_\_\_\_

Do you plan to take FE exam? \_\_\_\_\_

Subtrack Designation: \_\_\_\_\_ Civil \_\_\_\_\_ Environmental

**Indicate your chosen Elective Focus Area:**

Civil and Environmental Practice

Pre-Architecture

Environmental Engineering

Urban and Regional Planning

Hydraulics & Water Resources

Management

Structures, Mechanics and Materials

Student Tailored

Transportation

Session	Years	Course #	CEE Design Electives	S.H.	Pre-Requisites
<i>Enter your Choice of Two Required CEE Design Electives</i>					

Session	Years	Course #	EFA Electives	S.H.	Pre-Requisites
<i>Enter your Choice of Courses for the Seven Required EFA Electives</i>					

For the **Pre-Architecture, Urban and Regional Planning, Management, and Student Tailored EFAs**, list courses that are required but do not count as EFA Electives. These courses may be used to satisfy the General Education Component (GEC) requirements.

Session	Years	Course #	Additional Required Courses	S.H.	Pre-Requisites
<i>Enter any additional required courses for this EFA</i>					

For the **Student Tailored EFA**, include a career statement to justify the elective focus area. Provide information on the requirements of the minor field or the certificate program when the EFA form is submitted.

Career Objective(s) Statement: