

Civil and Environmental Practice EFA

Civil and Environmental Engineering Updated April 2017

Description

The *Civil and Environmental Practice EFA* is designed for students who wish to gain a broad technical background in civil and environmental engineering topics. BS graduates with this EFA can find positions as consulting engineers or city/county engineers, and do work in the many different areas of civil and environmental engineering. The EFA is also good preparation for students who wish to pursue graduate study (MS or PhD) in a specialty area of civil and environmental engineering.

CEE Design Electives (6 sh)

The Civil Program requires two CEE Design Electives. For the *Civil and Environmental Practice 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 *Civil and Environmental Practice EFA*, you must choose at least 5 (and a maximum of 7) 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 (3 sh)
- 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)

Any remaining EFA Electives (a maximum of 2) may be chosen from the following:

- Any other course(s) approved for EFA Elective credit. Other courses require written justification for relevance to the EFA. (Note that many 2000 level or below courses will not be approved for EFA Elective Credit).

EFA Submission

To submit your EFA, fill out the attached PDF form and email it to Kim Lebeck (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

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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: