

## Notes:

a. Must register both courses concurrently.
b. Completion of CHEM $171 \& 172$ meets the req't of CHEM 101, 102, \& 103. Completion of CHEM 101 \& 171 meets the req't of CHEM 101 \& 102.
c. If satisfactorily completed CHEM 171 \& 172, take CIV ENV 201
d. May be substituted by MAT SCI 301.
e. May choose from Basic Engineering Probability, Statistics, and Quality Control list.
f. May choose from any course offered for credit by the University.
g. Courses must be selected to meet the Social Science-Humanities requirement.
h. Choose courses from the approved list: at least 3 must carry $100 \%$ engineering topics; CIV ENV 368 is recommended.

## Environmental Engineering Program 2015-2016

## Social Science-Humanities Requirement

Seven courses chosen according to either of the following two options:
Option A: At least two courses must be chosen in each of three areas:

- Social and Behavioral Science (SBS)
- Historical Studies and Values (HSV)
- Fine Arts, Language and Literature (FAL)

Of the seven courses, only three 100-level introductory courses may be presented and three courses must be thematically related to provide depth.
Option B: $\quad$ Five of the seven courses must clearly have a thematic relatedness. For breadth, no more than five courses may come from a single area.
The courses taken by for a student's Social Science-Humanities Requirement must be approved in advance by the McCormick Humanities Panel. Foreign language study can be incorporated into the program, but should be started as early as possible, preferably in the freshman year. Complete theme requirement information is available at the McCormick Undergraduate Engineering Office web site, http://www.mccormick.northwestern.edu/undergraduates/curriculum/theme/index.html.

## Technical Electives (TE) - choose four courses

At least two(2) courses must be from the list below. A minimum of three(3) of these electives must carry $100 \%$ engineering topics ${ }^{(1)}$, only one (1) CIV ENV 399 can be counted towards a technical elective.

| CHEM 210-2 | Organic Chemistry II |
| :--- | :--- |
| BIOL SCI 215, 216 | (2) |
| Genetics and Molecular Biochemistry, Cell Biology |  |
| CHEM ENG 367 | Quantitative Methods in Life Cycle Assessment - also as MECH ENG 367- |
| CIV ENV 303 |  |
| CIV ENV 314 | Environmental Law and Policy |
| CIV ENV 317 | Organic Geochemistry |
| CIV ENV 355 | Biogeochemistry |
| CIV ENV 361-2 | Engineering Aspects of Groundwater Flow |
| CIV ENV 368 | Sustic and Environmental Health |
| CIV ENV 370 | Environmental Organic Chemistry |
| CIV ENV 398-1,2 | Community-Based Design |
| CIV ENV 440 |  |
| CIV ENV 442 | Environmental Transport Processes |
| CIV ENV 443 | Processes in Environmental Biotechnology |
| CIV ENV 444 | Microbial Ecology for Resource Recovery |
| CIV ENV 468 | Physical/Chemical Processes in Environmental Control |

(1) Any engineering or WCAS (math or science) course 200-level and above not in curriculum requirement.
(2) Not classified as engineering courses
(3) Requires instructor permission and a permission number from the CIV ENV office.

