Students from departments outside of the Geological Engineering Program in the Department of Civil and Environmental Engineering can receive a Ph.D. minor in Geological Engineering. The requirements for an external minor in Geological Engineering are listed below. The minor must be approved by Geological Engineering faculty in the Department of Civil and Environmental Engineering. The minor approval form is available at the Civil and Environmental Engineering office. Completed forms can be returned to the Civil and Environmental Engineering office for review and approval.

**REQUIREMENTS**

1. A minimum of 9 formal course credits (not independent study or research credits) taken in the Geological Engineering curriculum.

2. Courses must be numbered 300 or above in Geological Engineering.

3. One of the courses must be numbered 600 or above in Geological Engineering.

4. Only one of the courses may be cross listed in the student's major department and cannot be used to satisfy the student's major requirements.

5. No examinations are required other than those given in each course.

**PEOPLE**

**Civil and Environmental Engineering Faculty:** Professors Likos (chair), Ahn, Bahia, Cramer, Hanna, Harrington, Hurley, Loheide, McMahon, Noguera, Noyce, Park, Parra-Montesinos, Ran, Russell, Schauer, Wu; Associate Professors Block, Fratta, Ginder-Vogel, Pincheira, Remucal, Tinjum; Assistant Professors Blum, Hampton, Hicks, Prabhakar, Pujara, Qin, Sone, Wang, Wei, Wright, Zhu; M.Eng Program Director Carlson. See also CEE faculty (http://directory.engr.wisc.edu/cee/faculty/).

**Geological Engineering Faculty:** Professors Tinjum (director) (Civil and Environmental Engineering), Feigl (Geoscience), Goodwin (Geoscience), Holloway (Nelson Institute), Likos (Civil and Environmental Engineering), Loheide (Civil and Environmental Engineering), Thurber (Geoscience), Tikoff (Geoscience), Wu (Civil and Environmental Engineering); Associate Professors Cardif (Geoscience), Fratta (Civil and Environmental Engineering), Ginder-Vogel (Civil and Environmental Engineering); Assistant Professors Hampton (Civil and Environmental Engineering), Hicks (Civil and Environmental Engineering), Sone (Civil and Environmental Engineering), Zoet (Geoscience); Professor of Practice Pakes (Grainger). See also GLE faculty (https://www.engr.wisc.edu/geological-engineering/people/).

**Environmental Chemistry and Technology:** Professors Hurley (director) (Civil and Environmental Engineering), Bertram (Chemistry), Bleam (Soil Science), Harrington (Civil and Environmental Engineering), Karthikeyan (Biological Systems Engineering), McMahon (Civil and Environmental Engineering/Bacteriology), Pedersen (Soil Science), Roden (Geoscience), Root (Chemical and Biological Engineering), Schauer (Civil and Environmental Engineering), Thompson (Biological Systems/Environmental Engineering); Associate Professors Ginder-Vogel (Civil and Environmental Engineering), Remucal (Civil and Environmental Engineering); Assistant Professors Anantharaman (Bacteriology), Majumder (Bacteriology), Qin (Civil and Environmental Engineering), Wei (Civil and Environmental Engineering), Whitman (Soil Science). See also ECT Faculty (https://www.engr.wisc.edu/academics/graduate-academics/environmental-chemistry-technology/).