

CEE 506
Integrated Design III

Catalog data: 20-CEE-506. Integrated Design III. 2 ug. cr. Integrated Design is a 3 quarter, team driven, multi-disciplinary design experience. Students are guided by a panel of UC CEE faculty members and representatives from industry. Each student will be given a real-world design problem to complete in the 3 quarters allotted.

Prerequisites: 20-CEE-504 Integrated Design I
20-CEE-505 Integrated Design II

Textbook: None. Handout material provided through quarter.

References: None

Coordinator: Prof. John C. Niehaus, Adjunct Associate Professor of Civil Engineering; 556-3698, 788 Rhodes Hall, John.Niehaus@uc.edu

Goals: The first quarter of the Integrated Design Sequence (IDS) focused on the feasibility and preliminary design elements of the project. The second quarter of IDS concentrated on the design phase, or the creation of plans, specifications, and bid documents to carry out the necessary work. This final quarter of your IDS course focuses on three areas. The first is completion of the design phase of your project. The middle portion of the quarter will concentrate on the preconstruction phase and construction documents. The last part of the quarter focuses on your final plan/bid documents and the presentations.

Your final presentations will be the grand finale' to your senior year. They will be given in a two-hour period in the last week of classes in an appropriate setting before an audience consisting of the CEE faculty and industry mentors plus the CEE Department Head, Dean of Engineering, Provost, other faculty members and CEE students, guests and possibly the UC News Record. The presentations may be videotaped.

Three copies of the final plans and bid documents are required. Only one copy of the final report is required. However, if a team wants a review/marked copy of the report back, then it must submit two copies.

Lecture or lab topics:

1. Explanation of final design & construction phase (1 class)
2. Teams work on project in class. (6 classes)
3. Lecture: *What goes into a bid package?* (1 class)
4. Lecture: *Changed Conditions, Claims & Change Orders.* (1 class)
5. Teams work on project in class. (5 classes)
6. Groups work on Final Plans & Presentations. (4 classes)
7. Final presentations to industry/faculty mentors/invited guests. (1 class)

Computer usage: Varied

ABET criterion 3: a, c, d, e, f, g, h, i, j, k

ABET criterion 8: a, b, d, e

Date prepared: March 25, 2004 Last Update April 25, 2007