Disciplinary Communication
Department of Electrical Engineering

Since our programs inception we have required that our students take CMPE 185 Technical Writing for Computer Engineers. As part of our program accreditation we must demonstrate as one of our program objectives "an ability to communicate effectively". Our program for the B.S degree is accredited by the Engineering Accreditation Commission (EAC) of ABET, Incorporated (www.abet.org). This communication objective is satisfied by a number of courses that include both writing in the traditional sense and communication skills necessary for a career in engineering such as design of presentations and public speaking . Below we present the main courses that have a strong emphasis on the needed communication skills and specifically what those skills are.

The Specific course objectives of CMPE 185 are:

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Required Skills to pass the course

1. Should be able to produce technical documentation for engineers,
   engineering managers, and other specialized audiences
2. Specific skills include
      a. ability to produce a document with correct grammar and
         punctuation with well-formed sentences in appropriate paragraph
         form.
      b. ability to produce a well-organized and readable document
      c. ability to use visuals, including graphs, tables, figures
      d. ability to produce a document for a specific audience or
         audiences

Core topics (must be taught)
1. Audience assessment
2. Writing letters
3. Writing memos
4. Writing for multiple audiences
5. Documenting programs
6. Proper citation/plagiarism
7. Using the library
8. Writing formal reports
9. Ethics
10. Oral presentations
11. Peer editing


Optional topics
1. Presenting a poster
2. Progress reports
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In our capstone senior design project, EE123A, Electrical Engineering Hardware Design I the following core topics are required to be taught.

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Basic professional documentation skills, including:
   a. keeping a good technical engineering notebook;
   b. interim reports of project work;
   c. final summary reporting.
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In the second quarter of this series EE123B, Electrical Engineering Hardware Design II student are required to demonstrate the following skills:

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Participate in peer-group design reviews of one's own work as
      well as others;
Keep technical engineering notes consistent with current
      industrial practice;
Deliver satisfactory interactive oral presentations before
      the class.
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In addition the following core topics are also taught in this course:

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Basic professional documentation skills, including:
   a. keeping a good technical engineering notebook;
   b. interim reports of project work;
   c. final summary reporting.
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These are the main required courses we have developed for the satisfaction of the communication requirements within our major and how they have been implemented. Much more detailed information is contained on our ABET web pages. Specifically **http://abet.soe.ucsc.edu/outcomeg.html** covers the communication in the major objective, including how we assess our ability to measure our effectiveness in achieving this outcome, a full list of the various courses that we offer that address various aspects of communication within the discipline and detailed links to the extended course descriptions that describe the core topics that must be taught and required skills to pass the classes.

Kenneth Pedrotti, Chair, October 16, 2008