EE 3120
Term Project - Spring 2006

A term **project** (not a term paper) counting for 10% of your grade is due in week 14. The project can be an engineering design project, a technical briefing paper that investigates and explains how a technology works, a lab project, a computer simulation/study, or some other project that is approved by your instructor. For ABET accreditation, this is to be an individual effort focused on "life-long learning and technical writing." It may be possible to work in pairs if you choose a larger scope project with clear delineation of each person's contribution. The report will follow these guidelines:

Format: Formal, prepared on word processor, and printed on laser printer. 1" margins on sides, top, and bottom. 11 point font, $1\frac{1}{2}$ line spacing, arial/helvetica or comic font (not Time Roman). Provide separate cover/title sheet, and attach a separate reference list sheet at the end. Staple in upper left corner.

Length: 6-8 pages of text, not including cover sheet, figures, equations, reference list, appendices. Longer if working as a pair.

Style: Use standard technical writing style - 3rd person impersonal, passive voice. Make effective use of figures, schematics, equations, tables, etc. to help explain your points. (Figures, tables, and equations do not apply toward page count). Write in your own words. Direct cut-and-paste from the web, word-for-word copying from books or articles, or copying of past term projects is not allowed – it is plagiarism. The MTU Academic Integrity policy will be enforced.

Resources: Use your text, the MTU library, WWW, etc. Also feel free to quiz your professor for leads or hints. He may have even have info in his office he could loan you. Stop by during his office hours for lots of free help. References must include: 2 texts, 2 journal/conference papers, 2 recent industry/trade magazine articles.

Topic/Content: The topic you choose should be something new to you, and preferably a new and interesting technology. **Get approval from your instructor before proceeding on the specific topic.** Topics related to energy conversion, generation, storage, transmission, and consumption of electrical energy should be good. Projects or reports previously submitted in EE3120 or other classes cannot be re-used.

Grading: Grading criteria are: organization, grammar/spelling, conciseness, not going over allowed length, mastery and explanation of the technical aspects of chosen topic, complete coverage (don't leave the reader hanging), content, and completeness of research/references.

One-paragraph summary of possible project idea(s) - due Mar 3rd 5pm, Box 34.

Detailed outline and reference list is due on Fri of Week 10 (Mar 24th, 5pm, Box 34).

Full project report is due on Wednesday of Week 14 (Apr 19th, 5pm, Box 34).

Some useful ideas and links are on our web page: http://www.ece.mtu.edu/faculty/bamork/ee3120/

To make it more fun and interesting, the topic could be on recent technical advances in energy conversion or power systems, giving you realistic practice in quickly researching and getting up to speed on a new technology. Be sure to include technical specifications and document the calculations needed for analysis and design related to this technology! I have some info to loan you, or some hints on where you can find info. Stop by during my office hour for a chat. Check our web page and table of contents of text for ideas.