

-Reminder: on-time class attendance is absolutely required, if a member is late or missing a class, that member will get reassigned into a different team.

-Reminder: please check class-notes under e-syllabus for suggestions on what to write each day in the Engin 103 (two topics were suggested in the class notes for Meeting #2), and items due next class. Please also check electronic bulletin on the course web site for announcements.

-Reminder: maintenance of an active email account is **required** for the course. Especially all class-related email messages should be checked and replied. A great part of teamwork depends on team members' close communication using emails. Phone communication is also recommended when available.

-As an example of “multimedia presentation” using audio and visual components a five-minute presentation on what is engineering was shown.

-We discussed the Project Specifications for Project 0: goals, grading criteria, reports due, grading criteria for reports. In this project two reports will be due, the individual report on your team's two presentations, and the team report on the other teams' two presentations. Grading criteria for Project 0 presentations are listed in the Project 0 specifications, linked from the e-syllabus.

-**Strategies for searching the Internet:** using Search Engines (more tips from the e-syllabus), for example:

-Generic Search Engine: google.com

-Price-comparison Search Engines: nextag.com (you can get a good deal on the textbooks from here)

-Be specific by using and/or/+/-/quotes. Use multiple key words to narrow search results, if the keyword is not unique such as an ISBN (a number that identifies uniquely printed materials).

-If multiple keywords do not return expected results, such as for “kWh rate Boston, MA”, then use a top-to-bottom search starting from the electric company. For example: type in NSTAR in google.com, once on NSTAR, select “Rates and Tariffs”, select town, etc.

When assigned a search for the least expensive LabVIEW 7 Express Student Edition by R. Bishop, the teams returned the following after 3 minutes:

New	Used
\$40	\$45
\$44	
\$54	

-While looking at the **importance and history of an engineering field** you can look at their parents-child relationships as we discussed in the first meeting:

As responded by the class:

-Oldest field: Civil Engineering (CiE), a set of techniques in building and constructions worth to transmit to the next generation, evolves into a discipline.

-Daughter of CiE: Geological/Geophysical Engineering (GGE), as construction projects get sophisticated into skyscrapers, longer bridges, or the need to build on water, geological and geophysical techniques get sufficiently sophisticated they evolve into a separate body of knowledge.

-Next oldest: Mechanical Engineering (ME), after houses and buildings to live and work in, people need machines to help perform their work, gears and levers, etc. Then automobiles, locomotives, ships that contributed to the Industrial Revolution. Knowledge on how to build ships and navigate evolves into Naval and Marine Engineering (NME). As well as knowledge on how to build machines that can fly or travel to the outer space evolves into Aeronautical and Aerospace Engineering (AAE).

-Next oldest: Electrical Engineering (EE), with the discovery of electricity and implementation of electrical networks, Power Engineering evolves as a group of technologies to extract electricity from hydraulic power plants and deliver it to towns and cities. The other branch of EE, signal processing is more recent. Within EE a group of technologies related to computer hardware evolved into the discipline of Computer Engineering (CE).

-Next oldest: Chemical Engineering (ChE), needed for water and sewage treatment as the world population exploded. Daughters are Materials Science and Biomedical Engineering.

-You can find information about an engineering field by looking at its participation in the most important discoveries of the 20th century. **Most Important Discoveries in the Twentieth Century, as suggested by teams**

Team Number	Discovery	Engineering Field related.
1	Airplanes	AAE
2	Computers	EE
3	Tylenol	ChE
4	Atomic energy	NE
5	Capacitors for storing electric charge	EE
6	Internet	EE, physicists
7	Seismographs	GE
8	Computers	EE
9	Computers	EE
10	Computers	EE

For the “most important” discoveries in 3 minutes, brainstorming and common sense are the tools to use.

-Suggested conclusions to record in the Engin 103 logbook:

1) Explain in your own words what is a brainstorming process? Write in one paragraph the results of a brainstorming session of your own or with your team on what information to include in the 5 minute presentation on your assigned engineering field that would be of interest to the class.

2) Write the results of a brainstorming exercise of your own or with your team on what project as related to your assigned engineering field and what details about that project would be of interest to the class

Items due next class (Feb. 8, 2007)

-Presentation on the assigned Engineering field by each team, 5 minute maximum.

-In-progress work for Part II of project 0: having identified a project that engineers in your assigned field would perform, and knowing what details to present next Tuesday. Work from team members as coordinated by the group leader is required.

- Logbook entries as suggested above

-Getting textbooks from on-line providers